

Leader–Member Exchange and Affective Organizational Commitment: The Contribution of Supervisor’s Organizational Embodiment

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In order to account for wide variation in the relationship between leader–member exchange and employees’ affective organizational commitment, we propose a concept termed *supervisor’s organizational embodiment* (SOE), which involves the extent to which employees identify their supervisor with the organization. With samples of 251 social service employees in the United States (Study 1) and 346 employees in multiple Portuguese organizations (Study 2), we found that as SOE increased, the association between leader–member exchange and affective organizational commitment became greater. This interaction carried through to in-role and extra-role performance. With regard to antecedents, we found in Study 1 that supervisor’s self-reported identification with the organization increased supervisor’s expression of positive statements about the organization, which in turn increased subordinates’ SOE.

Keywords: supervisor, leader–member exchange, affective organizational commitment, performance, organizational identification

Leader–member exchange (LMX) refers to the quality of the exchange relationship that develops between employees and supervisors (Liden, Sparrowe, & Wayne, 1997). LMX theory holds that constraints on the supervisor’s time and resources limit the number of high-quality exchange associations the supervisor can

form with subordinates. The supervisor thus identifies a core group of subordinates with whom he or she reciprocates socioemotional resources, leading to enhanced mutual trust, liking, and respect. This social exchange relationship provides chosen subordinates with enhanced resources from the supervisor and affords the supervisor with increased performance and loyalty of promising employees. In contrast, low-quality relationships are limited to the exchange of specified contractual resources (Erdogan & Liden, 2002; Liden & Graen, 1980).

One of the most frequently studied outcomes of LMX involves employees’ affective commitment to the organization (Liden, Wayne, & Sparrowe, 2000; Wayne et al., 2009), an emotional attachment that fosters performance and lessens absenteeism and turnover (Klein, Becker, & Meyer, 2009; Meyer & Allen, 1997; Mowday, Porter, & Steers, 1982). Recent research, reviewed by Meyer (2009), has found organizational commitment to be related to employees’ physical and psychological well-being. Therefore, the relationship between LMX and affective organizational commitment has important implications for employees as well as their organizations.

A literature review of 23 studies found a general positive relationship between LMX and affective organizational commitment (Wayne et al., 2009); however, a meta-analysis reported large unexplained variation in its strength (Gerstner & Day, 1997). This

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variation may be related to interpretation by employees of the quality of their LMX relationship as indicative of their exchange relationship with the organization, with consequences for affective organizational commitment. Our purpose in the present studies was to present and evaluate a new concept, supervisor's organizational embodiment, that involves employee identification of the supervisor with the organization and helps explain variation in the strength of the relationship between LMX and affective organizational commitment.

Supervisor as Organizational Representative Versus Independent Agent

A promising start toward an explanation of variation in the strength of the LMX–affective organization commitment relationship is provided by the brief allusion in empirical studies to the relevance of the supervisor's role as a representative of the organization (e.g., Kinicki & Vecchio, 1994; Major, Kozlowski, Chao, & Gardner, 1995). Employees are particularly aware that the directive, evaluative, and coaching functions of the supervisor are carried out on behalf of the organization, leading employees to generalize their views concerning the favorableness of their exchange relationship from supervisor to organization (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Levinson, 1965). Thus, major theories concerning the employee–organization relationship hold that employees view supervisors as organizational agents. For example, psychological contract theory (Rousseau, 1989, 1998) assumes that employees consider promises from the supervisor to be promises from the organization. Similarly, organizational support theory assumes that employees pay attention to their treatment by supervisors, in part, because employees view their valuation by the supervisor as indicative of their valuation by the organization (Eisenberger, Aselage, Sucharski, & Jones, 2004; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Shore & Shore, 1995). According to these accounts, employees generalize their exchange relationships from their supervisor to the organization because they view the supervisor as a representative of the organization. However, no consideration is given by these theories to the possibility that employees might differ in the extent to which they view their supervisor as representing the organization.

Employees see supervisors not only as organizational agents but also as individuals in their own right, with characteristics that differ in degree of similarity with those of the organization. Based on the degree of this perceived similarity, an employee may view her supervisor as closely aligned with the organization or less so. This variation in perceived alignment may influence the extent to which employees generalize the favorableness of their exchange relationship from the supervisor to the organization and may help explain variation in the extent to which employees' LMX influences affective organizational commitment.

Supervisor's Organizational Embodiment

We propose that employees form a perception concerning the extent of their supervisor's shared identity with the organization: supervisor's organizational embodiment, or SOE. The greater the SOE, the more the employee perceives that the supervisor shares the organization's characteristics and the greater is the experience of treatment received from the supervisor (e.g., attention, encour-

agement, praise) as treatment by the organization. When SOE is high, for example, a compliment or criticism from the supervisor is heard as a compliment from the organization. Statements by the supervisor regarding goals and objectives of the organization are taken as accurate and definitive. Supervisor's directives and requests concerning employees' work performance are seen by subordinates as backed by the force of the organization.

In contrast, when SOE is low, the supervisor is viewed as acting more on his or her own behalf, and the employee's relationship with the supervisor is less of a guide to the exchange relationship with the organization. With low SOE, a compliment or criticism from the supervisor is experienced as coming primarily from the supervisor rather than the organization. Additionally, employees would be more likely to seek out other sources to verify information, particularly when the information is related to important issues concerning which the supervisor might lack either inside information or the desire to accurately convey the organization's viewpoint.

Mael and Tetrick (1992) conceptualized employee's identification with an organization as the perception of (a) shared characteristics with prototypical organization members and (b) shared experiences with the organization. In a manner paralleling in major respects the employee's own identification with the organization (Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Meyer, Becker, & van Dick, 2006), we propose that the employee identifies the supervisor with the organization (SOE) based on a comparison of the supervisor's characteristics with what the employee believes to be the defining characteristics of the organization (perception of shared characteristics) and the experience of treatment received from the supervisor as treatment received by the organization (perception of shared experiences).

Although SOE is a belief by the individual employee concerning the shared identity of the supervisor with the organization, it is also the case that employees with the same supervisor should show some degree of agreement concerning SOE. To the extent that employees share common social information processing experiences concerning the organization's treatment of the supervisor and the supervisor's behavior (cf. Salancik & Pfeffer, 1978), SOE should be similar for subordinates of a given supervisor.

We suggest that employees are motivated to determine the degree to which their social exchange relationship with the supervisor is indicative of their exchange relationship with the organization. This is because the employee's favorable exchange relationship with the organization fulfills socioemotional needs and indicates that increased efforts on the organization's behalf will be recognized and rewarded (Eisenberger et al., 1986; Rousseau, 1989, 1998).

SOE helps employees infer the extent to which their favorable or unfavorable exchange relationship with their supervisor is indicative of a similar exchange relationship with the organization. This is important because favorable exchange relationships with the organization have been found to have positive consequences for employees beyond their favorable exchange relationships with the supervisor (e.g., Rhoades, Eisenberger, & Armeli, 2001; Wayne et al., 2009). The organization's positive valuation of employees has been found to meet their needs for approval, esteem, affiliation, and emotional support (Armeli, Eisenberger, Fasolo, & Lynch, 1998) and to be associated with positive affect (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001), job

satisfaction (Rhoades & Eisenberger, 2002), organization-based self-esteem (Chen, Aryee, & Lee, 2005; Lee & Pecce, 2007), reduced stress (Rhoades & Eisenberger, 2002), work-family enhancement (Wadsworth & Owens, 2007), greater job involvement (Rhoades & Eisenberger, 2002), and work engagement (Kinnunen, Feldt, & Makikangas, 2008).

SOE has an important instrumental aspect, as well, in that it allows employees to decide whether to invest time and effort in strengthening the exchange relationship with the organization. A social exchange relationship with the organization conveys the instrumental value of increased organizational involvement beyond that involved in aiding the supervisor, such as volunteering for new projects and helping coworkers. When employees have a favorable exchange relationship with their supervisor, high SOE indicates the value to employees of increased organizational involvement. The organization's favorable valuation has been found to be associated with employees' increased performance-reward expectancy and employees' greater efforts on the organization's behalf (Eisenberger, Fasolo, & Davis-LaMastro, 1990). Further, a strong social exchange relationship with the organization leads to heightened performance (Shore, Tetrick, Lynch, & Barksdale, 2006). Employees in such a relationship also have greater assurance of a successful career with the organization in the event that their supervisor leaves or they are shifted to a new job. Thus, SOE in conjunction with a favorable exchange relationship with the supervisor can function to increase the fulfillment of socioemotional needs, increase subjective well-being, and increase instrumental involvement in the organization.

However, high SOE is not always beneficial for employees. Employees with an unfavorable social exchange relationship with their supervisor and high SOE may find their subjective well-being decreased by identifying the actions of the supervisor with the organization as well. Also, an employee with an exceptionally caring and capable supervisor in a dysfunctional organization may incorrectly generalize the favorable exchange relationship to the organization on the basis of inadequate information and develop unrealistic expectations concerning the benefits of increased organizational involvement. The employee may then be surprised and disappointed when the organization is unresponsive to efforts on its behalf. Only when the employee accurately judges the similarity of characteristics of the supervisor with those of the organization does SOE have practical utility for the employee.

In sum, to determine the extent to which their social relationship with the supervisor relates to the organization as well, employees form a perception, SOE, concerning the extent to which their supervisor shares the organization's identity. The greater the SOE, the more that employees experience treatment received from the supervisor as treatment by the organization. Although SOE is a perception of the individual employee, SOE should vary across supervisors on the basis of employees' social information processing about their supervisors. SOE has important socioemotional and instrumental consequences for employees.

Role of SOE in the LMX-Affective Organizational Commitment Relationship

When SOE is high, employees' perception of a favorable exchange relationship with the supervisor (LMX) is generalized to the organization. This should lead to enhanced affective organiza-

tional commitment in three ways. First, employees attribute favorable treatment by the supervisor to the organization and, as a result, feel obligated to the organization. Tsui, Pearce, Porter, and Tripoli (1997) suggested that actions by the organization indicating caring and positive regard for employees act to enhance affective commitment via the reciprocity norm. Thus, employees who interpret the supervisor's caring and positive regard as coming from the organization should feel an obligation to return the caring and positive regard that results in an increased affective organizational commitment. Eisenberger et al. (2001) found, consistent with this view, that the felt obligation resulting from favorable treatment led to increased affective commitment to the organization. The role of the reciprocity norm in this process is further supported by findings that the relationship between the employee's receipt of favorable treatment and felt obligation is greater among employees who strongly endorse the norm of reciprocity as applied to their relationship with the organization (Eisenberger et al., 1986).

Second, the belief that one has a stronger relationship with the organization serves to meet needs for approval, esteem, affiliation, and socioemotional support. Such fulfillment of socioemotional needs increases employees' identification with the organization and affective commitment. Armeli et al. (1998) found, consistent with the role of beneficial treatment by the organization in fulfilling socioemotional needs, that employees who were high in the needs for approval, esteem, affiliation, and emotional support responded to favorable treatment from the organization with increased extra-role performance on the organization's behalf. Employees whose socioemotional needs have been met by the organization should show an increased tendency to incorporate their organizational membership and roles in the organization into their social identity and become more affectively committed to the organization (cf. Eisenberger et al., 1986; Meyer, 2009).

Third, the generalization of a favorable exchange relationship from the supervisor to the organization, enhanced by SOE, increases organizational commitment by enhancing employees' positive mood at work. Eisenberger et al. (2001) found that positive mood partially mediated the positive relationship between favorable treatment by the organization and affective organizational commitment. The associative theory of attitude formation holds that persons, objects, or concepts paired with positive affect become classically conditioned elicitors of positive affect (Worchel, Cooper, & Goethals, 1988; Zimbardo & Leippe, 1991). When the employee has a favorable exchange relationship with the supervisor and when SOE is high, the favorable feelings conditioned to the supervisor might generalize strongly to the organization, resulting in a more positive mood at work and greater affective organizational commitment.

We hypothesized, on the basis of reciprocation for favorable treatment, fulfillment of socioemotional needs, and enhancement of positive mood, that employees with high SOE would respond to favorable LMX with enhanced affective commitment toward the organization. Figure 1 shows our conceptual model, the center portion of which incorporates this moderating influence of SOE on the relationship between LMX and affective organizational commitment.

Hypothesis 1: SOE moderates the relationship between LMX and affective organizational commitment such that as SOE

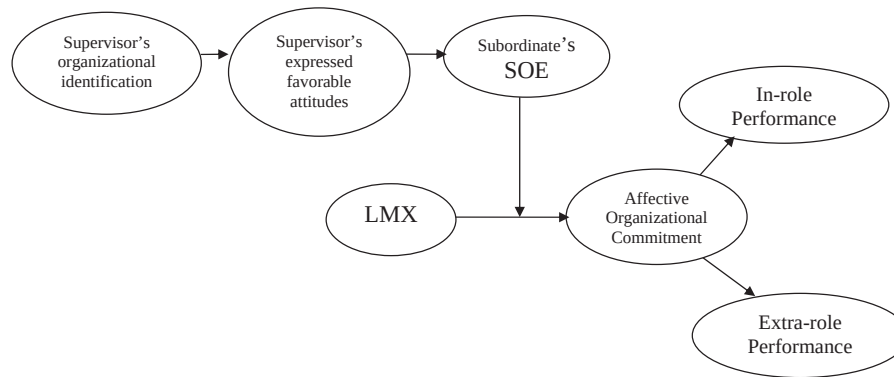


Figure 1. Conceptual model. Supervisor's organizational identification, in-role performance, and extra-role performance were assessed from the supervisor, and the other constructs were assessed from subordinates. SOE = supervisor's organizational embodiment; LMX = leader-member exchange.

increases, the relationship between LMX and affective organizational commitment increases.

Antecedents of SOE: Supervisor's Organizational Identification and Favorable Comments

Organizational identification accounts (e.g., Ashforth & Mael, 1989; Dutton et al., 1994; Meyer et al., 2006) do not specify the attributes that employees use to compare themselves with their organization and that serve as antecedents of identification. However, organizational support theory (Eisenberger et al., 1986) suggests characteristics that employees may find salient in identifying their supervisor with the organization. According to organizational support theory, employees tend to experience the organization as a powerful, lifelike entity to which they ascribe persisting values, goals, motives, and abilities (Eisenberger et al., 1986; Levinson, 1965). That is, employees personify the organization, viewing it as a powerful being with which they develop an exchange relationship. Contributing to this personification are the organizational culture, strategic objectives, and practices that outweigh the influence of individuals. Employees thus ascribe purposeful characteristics to their organization in an attempt to understand the treatment received from it. The consistent ways in which employees answer diverse questions about the organization's favorable or unfavorable orientation toward them and likely treatment of them in various scenarios (Eisenberger et al., 1986), as well as their view of the organization as an exchange partner (Eisenberger et al., 2001), reflect this personification of the organization.

Because the organization's power, goals, and strategic objectives are particularly salient for employees, these organizational characteristics are also likely to play a major role in determining SOE. Preliminary evidence for this was found by Eisenberger et al. (2002), who reported that the relationship between employees' perception of support from the supervisor and perceived support from the organization increased with the employees' belief that the supervisor was powerful and influential in the organization. Such influence involved the supervisor's effect on important decisions, job autonomy, and positive valuation by the organization. Employees might additionally infer such power and influence from their supervisor's position in the organization's social networks.

Because values and strategic objectives have a strong influence over daily work life, supervisors whose expressed values and objectives are perceived by subordinates to be similar to those of the organization would also be strongly identified with the organization (i.e., high SOE). Conversely, values or objectives that are perceived to differ from those of the organization would lead to low SOE. Agency theory (Eisenhardt, 1989) focuses on relationships in which a principal party (here, the organization) delegates responsibilities to an agent (here, the supervisor). One of the major contributions of agency theory is the recognition that the perceived self-interests of some supervisors may be out of alignment with the organization's strategic objectives (Agrawal & Knoeber, 1996). High-level managers frequently lack the detailed information necessary to deter shortsighted behaviors of supervisors, such as promoting unqualified favorite subordinates and hiding problems, that lead some supervisors to pursue personal objectives that are costly to the organization. Because of their usual proximity to supervisors, subordinates often have the ability to distinguish mismatches that may occur between values and objectives of supervisors and those of the organization.

Supervisors may also act in ways distinct from the organization's strategic objectives because they possess personality characteristics that promote independent or oppositional behavior or because they believe the organization's strategic objectives are misaligned with the long-term viability of the organization or community. For example, new technologies adopted by organizations often fail to be promoted by supervisors because the supervisors perceive the technologies to have little utility (cf. Davis, 1989) or because they believe implementation would involve a steep learning curve that is not worth the effort (cf. Magni & Pennarola, 2008).

The favorableness of the supervisor's comments to subordinates about the organization is likely to serve as an important cue concerning the supervisor's power and influence and endorsement of the organization's values, goals and objectives. Subordinates who hear their supervisor expressing positive views about upper management and the organization may infer that the supervisor approves of the organization because it has accorded her high power and influence or that the supervisor favors the values, goals,

and objectives of the organization. In contrast, a supervisor who complains about upper management and the organization tends to be marked by subordinates as resentful of his (or her) low status in the organization or as lacking the organization's values and goals. Of course, subordinates may attribute their supervisor's favorable or unfavorable remarks about the organization to other causes, such as temporary and long-term affective states. But favorable comments about the organization by the supervisor would frequently be taken as indications that the supervisor is pleased with his power and influence or shares the organization's values and strategic goals. Therefore, we propose that the supervisor's expression of favorable attitudes toward the organization increases subordinates' SOE (see Figure 1).

If this proposition is true, supervisor's own identification with the organization likely contributes to SOE through favorable statements about the organization (see Figure 1). This notion is supported by several streams of research. A recent meta-analysis found that organizational identification, involving a sense of unity with the organization (Ashforth & Mael, 1989), was positively associated with organizational satisfaction and affective organizational commitment (Riketta, 2005). Further, van Dick, Hirst, Grojean, and Wieseke (2007) suggested that supervisors who identify strongly with their organization are more likely to convey positive information about the organization (e.g., organization's capabilities, reputation, vision). We hypothesized that supervisor's identification with the organization would lead to an increased tendency for supervisors to express favorable attitudes toward the organization to subordinates, both as a spontaneous expression of their views and as a citizenship behavior carried out to aid the organization (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Expression of favorable attitudes toward the organization should, in turn, increase SOE among subordinates.

Hypothesis 2a: Supervisor's identification with the organization is positively related to subordinates' reports of supervisor's favorable attitudes about the organization.

Hypothesis 2b: Subordinates' reports of supervisor's favorable attitudes about the organization mediate the relationship between supervisor's organizational identification and SOE.

SOE and Performance

Employees with high affective commitment are motivated to help the organization reach its objectives via engagement in beneficial in-role and extra-role behaviors (Meyer & Allen, 1991; Mowday et al., 1982; Shore & Wayne, 1993; Siders, George, & Dharwadkar, 2001). Thus, in support of this argument, a meta-analysis by Riketta (2002) of 93 published studies found that affective commitment was related both to in-role and to extra-role performance, somewhat more so to the latter. As shown in Figure 1, LMX leads to affective organizational commitment, which, in turn, should lead to greater in-role and extra-role performance. Findings that LMX is related to affective organizational commitment and that affective organizational commitment is related to performance suggest that affective organizational commitment may mediate the relationship between LMX and performance. However, we have argued that SOE moderates the relationship between LMX and affective organizational commitment. There-

fore, in interaction with SOE, LMX will influence affective organizational commitment and, subsequently, performance. In other words, the interactive influence of LMX and SOE on affective organizational commitment should carry over to in-role and extra-role behaviors. When SOE is high, a high level of LMX should result in high affective organizational commitment, leading to high performance. But when SOE is low, a high level of LMX should fail to produce high affective organizational commitment and thus fail to produce high performance. Therefore, SOE may help explain why LMX's positive influence on affective organizational commitment and performance varies in intensity (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007). Here, we are describing mediated moderation, the interactive influence of two variables (here, LMX and SOE) on a mediator (affective organizational commitment), which, in turn, affects an outcome (performance) (Morgan-Lopez & MacKinnon, 2006). This case of mediated moderation indicates that SOE is relevant not only to commitment but also to performance.

Hypothesis 3a: Affective organizational commitment mediates the relationship between the LMX $\times$ SOE interaction and in-role performance.

Hypothesis 3b: Affective organizational commitment mediates the relationship between the LMX $\times$ SOE interaction and extra-role performance.

Studies 1 and 2

We carried out a pair of studies to evaluate SOE as an explanation for the variation in the strength of the relationship between LMX and affective organizational commitment. As shown in the conceptual model (Figure 1), using a sample of social service employees in Study 1, we examined the moderating influence of SOE on the relationship between LMX and affective organizational commitment (Hypothesis 1). We also examined the relationship between supervisor's organizational identification and SOE as mediated by supervisor's expressed attitudes toward the organization (Hypotheses 2a and 2b). Finally, we considered how the interaction between SOE and LMX carried over to in-role and extra-role performance (Hypotheses 3a and 3b). Because Study 1 involved employees drawn from a single organization in the United States, Study 2 was designed to assess the generalizability of findings regarding the influence of SOE on the LMX-affective organizational commitment relationship (Hypothesis 1) as well as the consequence of the LMX $\times$ SOE interaction on performance with employees drawn from a diverse sample of organizations outside the United States (Hypotheses 3a and 3b). In addition, Study 2 extended the first study through use of a different methodological design and data analytic approach.

Study 1: SOE Among Social Services Employees

Method

Sample and procedure. We administered a questionnaire to 265 employees of a social service agency located in the mid-Atlantic region of the United States. Respondents completed their surveys in groups of 12–20. The sample size was reduced to 251 employees

(95%), owing to deletion of participants who declined to participate or did not answer all questions. Seventy-nine supervisors provided evaluations for these subordinates. The sample size was further reduced to 195 subordinates for testing Hypotheses 2a and 2b, corresponding to the 60 of the 79 supervisors who answered a supplemental questionnaire about their organizational identification. The number of subordinates managed by each supervisor ranged from 1 to 10, with a mean of 3.2. With regard to subordinates, 72% were female, average age was 45 years, and average tenure was 7 years. Educational attainment for the subordinates was 33% high school and 67% college. For supervisors, 73% were female, average age was 49 years, and average tenure was 10 years. Educational attainment was 17% high school and 83% college.

Measures. For all but the control variables, respondents rated their agreement with each statement using a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). We present the source of the measures, supervisors or subordinates, in parentheses. All survey items concerning subordinates are presented with their confirmatory factor analysis (CFA) loadings in Table 1.

Control variables. We controlled for organizational tenure, age, education, and gender, both for employees and for supervisors, because they have sometimes been found to be related to employee commitment or performance (e.g., Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnysky, 2002).

Supervisor's organizational identification (supervisor measure; $\alpha = .81$). We used the five-item short form of the Organizational Identification Scale (Mael & Alderks, 1993; Tangirala & Ramanujam, 2008). The short form is composed of the highest loading items in the original scale (Mael & Ashforth, 1992; Mael & Tetrick, 1992).

Supervisor's expressed attitudes about the organization (subordinate measure; $\alpha = .74$). Employees responded to three items developed for this study to measure the favorableness of supervisor's attitudes about the organization as expressed to subordinates.

LMX (subordinate measure; $\alpha = .87$). Subordinates reported the quality of the exchange relationship between themselves and their supervisors using Liden and Maslyn's (1998) 12-item scale. This scale comprises four dimensions (affect, professional respect, contribution, and loyalty) that load on a second-order factor (Liden & Maslyn, 1998). Prior research suggests that the scale has good psychometric properties (Schriesheim, Castro, & Coglisier, 1999) and can be reliably used as a single-factor measure to tap the overall LMX quality (e.g., Bauer, Erdogan, Liden, & Wayne, 2006; Erdogan & Enders, 2007; Liden, Erdogan, Wayne, & Sparrowe, 2006). Because we were interested in measuring the overall quality of LMX, we created a composite averaging the 12 items.

SOE (subordinate measure; $\alpha = .87$). We developed a nine-item scale based on the conceptualization of SOE as employees' perception of the supervisor's shared characteristics with the organization and the experience of treatment received from the supervisor as treatment received from the organization. This comprehensive assessment of perceived identity and experience parallels the conceptualization and assessment of employee's own identification with the organization (Mael & Tetrick, 1992): perception of shared characteristics and shared experiences.

Subordinates' affective commitment to the organization (subordinate measure; $\alpha = .81$). We used Meyer and Allen's Affective Commitment Questionnaire (Meyer & Allen, 1997; Meyer,

Allen, & Smith, 1993) to assess employees' affective commitment to the organization. Researchers who have used the scale reported that it forms a single factor and has high reliability (Allen & Meyer, 1990; Hackett, Bycio, & Hausdorf, 1994; Meyer, Allen, & Gellatly, 1990).

Subordinates' in-role performance (supervisor measure; $\alpha = .92$). Supervisors evaluated their subordinates with Williams and Anderson's (1991) five in-role items. These items assess tasks that employees are expected to perform as a normal function of their job.

Subordinates' extra-role performance (supervisor measure; $\alpha = .94$). Supervisors evaluated their subordinates' extra-role performance in four categories of organizational spontaneity: making constructive suggestions, enhancing one's own knowledge and skills in ways that will help the organization, protecting the organization from potential problems, and helping coworkers. These categories were denoted by George and Brief (1992) as activities performed voluntarily that increase organizational effectiveness. One of the eight items was taken from Eisenberger et al. (2001), a second was taken from van Dyne, Graham, and Dienesch (1994), and six were specifically constructed for this study.

Results

Means, standard deviations, reliabilities, and the intercorrelations are shown in Table 2.

Discriminant validity. We conducted CFAs to examine the distinctiveness of the six constructs that assessed the subordinates' perceptions, attitudes, and performance: LMX, SOE, affective commitment, supervisor's expressed attitudes about the organization, in-role performance, and extra-role performance. Using chi-square difference tests (Bentler & Bonett, 1980; James, Mulaik, & Brett, 1982), we compared the fit of five nested models, ranging from the hypothesized six-factor model to a single-factor model. The hypothesized six-factor model treated the factors as distinct. In order to test the distinctiveness of in-role from extra-role performance, we compared the six-factor model with a five-factor model that combined in-role and extra-role performance. Because both SOE and supervisor's expressed attitudes about the organization involved employee perceptions concerning their supervisors, we next created a four-factor model that comprised LMX (Factor 1), affective commitment (Factor 2), the combination of SOE and supervisor's expressed attitudes (Factor 3), and the combination of in-role and extra-role performance (Factor 4). Next, we used a two-factor model to examine whether the attitudinal and perceptual constructs (LMX, affective commitment, SOE, and supervisor's expressed attitudes) were distinct from the performance constructs (in-role and extra-role performance). Finally, we created a one-factor model that incorporated all six constructs. As shown in Table 3, the chi-square difference tests demonstrated better fit with each more differentiated model. Further, the hypothesized six-factor model had the most acceptable values of root mean square error of approximation (RMSEA) and comparative fit index (CFI; Medsker, Williams, & Holahan, 1994). As shown in Table 1, with the exception of one LMX item measuring contribution subdimension (factor loading = .28), all the individual items loaded acceptably on their predicted factors.

Moreover, because LMX, SOE, and employee reports of supervisor's expressed favorable attitudes toward the organization con-

Table 1
CFA Loadings of Employee Level Items (Study 1)

Item no.	Items	Loading
Factor 1 (SOE)		
1	When my supervisor encourages me, I believe that (<i>name of organization</i>) is encouraging me.	.82
2	When my supervisor is pleased with my work, I feel that (<i>name of organization</i>) is pleased.	.81
3	When my supervisor compliments me, it is the same as (<i>name of organization</i>) complimenting me.	.81
4	When my supervisor pays attention to my efforts, I believe that (<i>name of organization</i>) is paying attention to my efforts.	.76
5	My supervisor is characteristic of (<i>name of organization</i>).	.61
6	My supervisor and (<i>name of organization</i>) have a lot in common.	.59
7	When I am evaluated by my supervisor, it is the same as being evaluated by (<i>name of organization</i>).	.55
8	My supervisor is representative of (<i>name of organization</i>).	.53
9	My supervisor is typical of (<i>name of organization</i>).	.35
Factor 2 (LMX)		
10	I like my supervisor very much as a person.	.90
11	I respect my supervisor's knowledge of and competence on the job.	.88
12	My supervisor would defend me to others in the organization if I made an honest mistake.	.87
13	I am impressed with my supervisor's knowledge of his/her job.	.85
14	My supervisor is the kind of person one would like to have as a friend.	.83
15	My supervisor is a lot of fun to work with.	.79
16	I do not mind working my hardest for my supervisor.	.78
17	I admire my supervisor's professional skills.	.77
18	My supervisor would come to my defense if I were "attacked" by others.	.69
19	I am willing to apply extra efforts, beyond those normally required to meet my supervisor's work goals.	.47
20	My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.	.35
21	I do work for my supervisor that goes beyond what is specified in my job description.	.28
Factor 3 (affective organizational commitment)		
22	(<i>Name of organization</i>) has a great deal of personal meaning for me.	.74
23	I do not feel emotionally attached to (<i>name of organization</i>). (R)	.68
24	I would be very happy to spend the rest of my career working for (<i>name of organization</i>).	.67
25	I do not feel like part of the family at (<i>name of organization</i>). (R)	.64
26	I really feel as if (<i>name of organization</i>)'s problems are my own.	.63
27	I do not feel a strong sense of belonging to (<i>name of organization</i>). (R)	.56
Factor 4 (supervisor's expressed favorable attitudes)		
28	My supervisor says achievement goes unnoticed by upper management. (R)	.77
29	My supervisor has a favorable impression of (<i>name of organization</i>).	.68
30	My supervisor complains about the ways the upper management handles things at (<i>name of organization</i>). (R)	.65
Factor 5 (extrarole performance)		
31	This employee looks for ways to make (<i>name of organization</i>) more successful.	.91
32	This employee takes action to protect (<i>name of organization</i>) from potential problems.	.89
33	This employee makes suggestions to help (<i>name of organization</i>).	.87
34	This employee keeps well-informed where his/her opinion might benefit (<i>name of organization</i>).	.85
35	This employee continues to look for new ways to improve the effectiveness of his/her work.	.82
36	This employee encourages coworkers to try new and more effective ways of doing their job.	.78
37	This employee speaks favorably of (<i>name of organization</i>) to other employees.	.74
38	This employee gains knowledge, skills, and abilities that will be of benefit to (<i>name of organization</i>).	.71
Factor 6 (in-role performance)		
39	This employee adequately completes assigned duties.	.95
40	This employee fulfills responsibilities specified in his/her job description.	.92
41	This employee meets formal performance requirements of the job.	.92
42	This employee completes tasks that are expected of him/her.	.89
43	This employee neglects aspects of the job he/she is obligated to perform. (R)	.52

Note. CFA = confirmatory factor analysis; SOE = supervisor's organizational embodiment; LMX = leader-member exchange; R = item reversed.

tained items with similar wording, we further tested the distinctiveness of these three measures with three nested CFA models. We first compared the hypothesized three-factor model with a two-factor model that comprised LMX and the combination of SOE and employee reports of their supervisor's expressed favor-

able attitudes. Then we compared this two-factor model with a one-factor model that combined all three measures. The chi-square difference tests demonstrated better fit with each more differentiated model, $\chi^2_{diff}(1) = 117$ and 226, respectively ($ps < .05$), and the hypothesized three-factor model had the most acceptable val-

Table 2
Descriptive Statistics and Intercorrelations (Study 1)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. LMX	5.56	0.98	(.87)													
2. SOE	4.79	1.20	.47**	(.87)												
3. Affective commitment	4.70	1.35	.33**	.61**	(.81)											
4. In-role performance	5.44	1.21	.23**	.11	.19**	(.92)										
5. Extra-role performance	4.91	1.29	.19**	.13*	.31**	.80**	(.94)									
6. Supervisor's favorable attitudes	5.54	1.17	.45**	.45**	.35**	.16**	.15*	(.74)								
7. Employee's tenure	81.0	81.5	.04	.01	.24**	.08	.21**	.05	—							
8. Employee's age	44.5	11.6	.04	.21**	.36**	.05	.19**	.22**	.41**	—						
9. Employee's gender			-.03	.06	.03	-.13*	-.01	-.02	.02	.06	—					
10. Employee's education	4.07	1.71	-.06	.13*	.14*	.16**	.23**	.07	.01	.08	.04	—				
11. Supervisor's identification	5.55	1.01											(.81)			
12. Supervisor's tenure	120.9	91.2											.02	—		
13. Supervisor's age	48.4	10.5											.17	.31**	—	
14. Supervisor's gender													.08	.03	.25*	—
15. Supervisor's education	4.86	1.48											.35**	-.10	-.03	-.18

Note. Cronbach's alphas are provided in parentheses on the diagonal. Mean age is in years; mean tenure is in months. Education was coded as the following: 1 = less than high school, 2 = high school, 3 = post high school, 4 = associate degree, 5 = bachelor's, 6 = master's, 7 = MD or doctoral degree. Gender was coded as 0 = female, 1 = male. The correlations among subordinate's variables are based on 251 subordinates ($N = 251$). The correlations among supervisor's variables 12 through 15 are based on 79 supervisors ($N = 79$). The correlations between supervisor's organizational identification and other supervisor's variables (variables 12–15) are based on the 60 supervisors who responded to the organizational identification survey ($N = 60$). Correlations are not reported for cases in which a single supervisor score is paired with scores for multiple subordinates. *SD* = standard deviation; LMX = leader-member exchange; SOE = supervisor's organizational embodiment.

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

ues of the RMSEA, CFI, and Tucker–Lewis index (TLI): .08, .88, and .88, respectively.

Based on the two sets of CFAs, the six constructs were treated separately in subsequent statistical tests of our hypotheses. The one low-loading LMX item was retained so that the findings would be comparable to those prior studies using the same scale.

Tests of hypotheses. Our data were best suited to multilevel statistical analysis, because some of our predictors were related to supervisors (Level 2 variables: supervisor's organizational identification and supervisor's control variables) whereas others were related to their subordinates who were nested within supervisors (Raudenbush & Bryk, 2002).¹ We used HLM 6.0 to test all our hypotheses and included as control variables supervisor's age, education, and organizational tenure and the employee's age, gender, education, and organizational tenure. Following Becker's (2005) recommendation to omit potential control variables that are uncorrelated with the dependent variable, we dropped supervisor gender as a control variable because it was uncorrelated with each of our five dependent variables. All predictors except employee gender were grand mean centered.

On the basis of recommendations of Shrout and Bolger (2002) and MacKinnon, Krull, and Lockwood (2000), we tested our hypotheses concerning mediation (Hypotheses 2b, 3a, and 3b) by examining the product of the indirect effects. We followed the practice of Schneider, Ehrhart, Mayer, Saltz, and Niles-Jolly (2005) and Henderson, Wayne, Shore, Bommer, and Tetrick (2008) of not considering the direct effect of the independent variable on the dependent variable as a prerequisite for mediation. Several statisticians and researchers have questioned the necessity of assessing the direct effect (Collins, Graham, & Flaherty, 1998; MacKinnon et al., 2000). Moreover, Shrout and Bolger (2002, pp. 429–430) showed that when the strength of the relationship between an antecedent and dependent variable is only moderate

because the causal process proceeds over a protracted period of time, the power to detect the indirect path, comprising more proximal associations, is greater than the power to detect the direct path. Shrout and Bolger (2002) noted that such distal mediation often occurs in field studies in which the use of the indirect effect as the criterion for mediation would help reduce Type II errors and increase the power of the mediation test.

In the current study, it is likely that the mediated relationships among the antecedent and dependent variables unfolded over considerable time. In Hypothesis 2b, we tested the mediating influence of employee reports of supervisor's favorable attitudes on the relationship between supervisor's organizational identification and employee perceptions of SOE. Because it may require a considerable time and active monitoring of supervisor behaviors for employees to form SOE based on supervisor's identification with the organization, the use of the indirect effect as the major criterion of mediation would be appropriate. Further, in Hypotheses 3a and 3b we argued that the relationship between our antecedent variable (LMX $\times$ SOE interaction) and dependent variables (in-role and extra-role performance) would be mediated by a global affective bond to the organization (affective organizational commitment). Here, some time would be expected before

¹ Our average number of subordinates per supervisor (3.2) is small but appears to be sufficiently high to produce accurate results. Several simulation studies have shown that with hierarchical linear modeling the absolute number of Level 2 units (i.e., the supervisors in the current study) is more important than the ratio of Level 2 to Level 1 units for the power and accuracy of fixed estimates (e.g., Bassiri, 1988; Browne and Draper, 2000; Kim, 1990; Mok, 1995). Maas and Hox (2004, 2005) found that Level 2 sample sizes greater than 30 provide an accurate estimate of standard errors of fixed effects. Thus, our sample of 79 supervisors had satisfactory power and accuracy.

Table 3
CFAs of Nested Models (Study 1)

Model	df	χ^2	χ^2_{diff}	RMSEA	CFI	TLI
Six-factor model	841	1,465.1		.05	.91	.90
Five-factor model	846	1,783.3	318.2*	.07*	.86	.85
Four-factor model	850	1,902.2	118.9*	.07*	.84	.84
Two-factor model	855	2,286.6	384.4*	.08*	.79	.78
One-factor model	856	3,763.6	1,477.0*	.12*	.57	.55

Note. $N = 251$. The results are described in the text. CFAs = confirmatory factor analyses; df = degrees of freedom; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index.

* $p < .05$.

commitment would be reflected in performance, making the indirect effect appropriate as the major criterion of mediation.

Moderating influence of SOE on the LMX–affective organizational commitment relationship. Using an unconditional means model in HLM, we found that affective organizational commitment by subordinates differed depending on who their supervisor was, $\tau_{00} = .20$, $\chi^2(78) = 110.40$, $p < .01$, $ICC(1) = .11$. We used HLM to test Hypothesis 1, which states that the relationship between LMX and affective organizational commitment increases with SOE. To test this hypothesis, we computed the interaction term as the product of LMX and SOE, both grand mean centered (Cohen, Cohen, West, & Aiken, 2003).

As shown in the left portion of Table 4, we found that LMX had a positive main effect on affective organizational commitment, $\gamma_{50} = .26$, $t(78) = 2.95$, $p < .01$. Further, as predicted by

Hypothesis 1, this effect was qualified by the interactive effect of LMX and SOE on affective organizational commitment, $\gamma_{70} = .16$, $t(78) = 2.52$, $p = .01$. Following Cohen et al. (2003), we plotted the relationships between LMX and affective commitment to the organization at one standard deviation above and one standard deviation below the mean of SOE. As shown in Figure 2, the relationship between LMX and affective organizational commitment was statistically significant at high SOE, $B = 0.45$, $t(78) = 3.40$, $p < .01$, but not at low SOE, $B = 0.07$, $t(78) = .70$, $p > .20$.

Antecedents of SOE. Hypotheses 2a and 2b involve a cross-level effect of supervisor organizational identification on two subordinate-level variables: employee reports of supervisor's expressed favorable attitudes toward the organization and SOE (see Figure 1). To assess whether these two subordinate measures differed from one supervisor to another, we calculated intraclass

Table 4
Hierarchical Linear Modeling Results for Hypotheses 1 and 3 (Study 1)

Predictor	Dependent variables								
	Affective commitment			Extra-role performance			In-role performance		
	Coefficient	SE	t ratio	Coefficient	SE	t ratio	Coefficient	SE	t ratio
Intercept (β_0)									
Intercept (γ_{00})	4.61	0.09	53.9**	4.89	0.12	41.8**	5.55	0.11	52.4**
Supervisor's tenure (γ_{01})	0.00	0.00	0.13	0.00	0.00	0.98	0.00	0.00	0.35
Supervisor's age (γ_{02})	0.00	0.01	−0.64	0.03	0.01	2.70**	0.03	0.01	3.77**
Supervisor's education (γ_{03})	0.00	0.05	−0.04	0.15	0.07	2.05*	0.14	0.06	2.24*
Subordinate's age (β_1)									
Intercept (γ_{10})	0.02	0.00	3.59**	0.01	0.01	0.98	0.00	0.01	−0.38
Subordinate's gender (β_2)									
Intercept (γ_{20})	−0.02	0.13	−0.17	−0.13	0.14	−0.92	−0.43	0.14	−2.98**
Subordinate's education (β_3)									
Intercept (γ_{30})	0.05	0.04	1.18	0.14	0.05	3.05**	0.10	0.05	2.12*
Subordinate's tenure (β_4)									
Intercept (γ_{40})	0.00	0.00	3.22**	0.00	0.00	1.00	0.00	0.00	−0.33
LMX (β_5)									
Intercept (γ_{50})	0.26	0.09	2.95**	0.24	0.11	2.14*	0.23	0.11	2.00*
SOE (β_6)									
Intercept (γ_{60})	0.56	0.07	8.30**	−0.13	0.08	−1.61	−0.09	0.08	−1.05
LMX $\times$ SOE (β_7)									
Intercept (γ_{70})	0.16	0.06	2.52**	0.02	0.06	0.36	−0.02	0.06	−0.29
Affective commitment (β_8)									
Intercept (γ_{80})				0.21	0.08	2.64**	0.16	0.08	2.00*

Note. Level 1 $N = 251$. Level 2 $N = 79$. SE = standard error; LMX = leader–member exchange; SOE = supervisor's organizational embodiment.

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

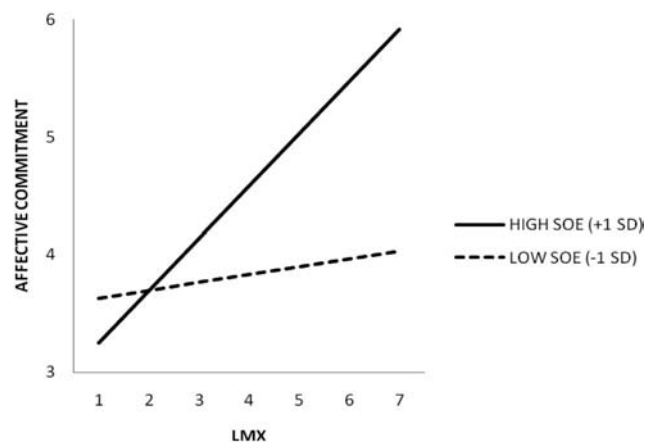


Figure 2. Affective organizational commitment as a function of leader-member exchange (LMX) at low (-1 SD) and high (1 SD) levels of supervisor's organizational embodiment (SOE) in Study 1. *SD* = standard deviation.

correlation coefficients, or ICC(1), using fully unconditional random intercept models. Employee reports of their supervisor's expressed favorable attitudes differed depending on who the supervisor was, $\tau_{00} = .41$, $\chi^2(78) = 143.35$, $p < .01$, ICC(1) = .30. In addition, although the differences across supervisors for SOE did not quite reach statistical significance, $B = 0.07$, $t(78) = 0.70$, $p = .10$, the size of the intraclass correlation appeared to be nontrivial, ICC(1) = .08. These results generally suggest that variance in these two variables (30% in the case of expressed favorable attitudes and 8% in the case of SOE) can be explained by Level 2 variables. It is therefore appropriate to study the cross-level effect of the supervisor-level variable supervisor's organizational identification on these two subordinate-level variables.

We first tested Hypothesis 2a, which states that supervisor's identification with the organization is positively related to subordinates' reports of supervisor's expression of favorable attitudes about the organization. Hypothesis 2b, holds that supervisor's expressed favorable attitudes toward the organization mediates the relationship between supervisor's organizational identification and subordinates' SOE (see Figure 1). We used Krull and MacKinnon's (2001) product of indirect effects method for testing individual and group level mediated effects in multilevel data where individuals are nested within a higher level unit. Krull and MacKinnon showed that the product of indirect effects method for single-level mediational analysis can be successfully applied to multilevel data and that the standard errors of mediated effects from the multilevel solutions are generally accurate.

Following the suggestion of Krull and MacKinnon (2001), in order to calculate the indirect effect of supervisor's organizational identification on SOE through supervisor's expressed favorable attitudes about the organization, we multiplied (a) the effect of supervisor's organizational identification on supervisor's expression of favorable attitudes about the organization and (b) the effect of supervisor's expression of favorable attitudes about the organization on SOE, controlling for supervisor's organizational identification. We used the *z*-prime statistic to assess the significance of the mediation effect. MacKinnon, Lockwood, Hoffman, West, and Sheets (2002) demonstrated that the *z*-prime method of testing mediation provides superior power and a lower Type I error rate than other methods.

Accordingly, we ran two HLM models, one with supervisor's expressed favorable attitudes about the organization as the dependent variable and supervisor's organizational identification as the predictor and the other with SOE as the dependent variable and supervisor's organizational identification and supervisor's expressed favorable attitudes as the predictors. As shown in Table 5, supervisor's organizational identification had a significant positive effect on the

Table 5
Hierarchical Linear Modeling Results for Hypotheses 2a and 2b (Study 1)

Predictor	Dependent variables					
	Supervisor's expressed favorable attitudes			SOE		
	Coefficient	SE	<i>t</i> ratio	Coefficient	SE	<i>t</i> ratio
Intercept (β_0)						
Intercept (γ_{00})	5.37	0.11	46.99**	4.68	0.10	48.97**
Supervisor's tenure (γ_{01})	0.00	0.00	-2.96**	0.00	0.00	0.98
Supervisor's age (γ_{02})	-0.02	0.01	-2.24*	0.00	0.01	0.11
Supervisor's education (γ_{03})	-0.07	0.08	-0.88	0.02	0.07	0.36
Supervisor's organizational identification (γ_{04})	0.24	0.12	2.11*	.04	0.09	0.47
Subordinate's age (β_1)						
Intercept (γ_{10})	0.02	0.01	2.75**	0.01	0.01	1.88
Subordinate's gender (β_2)						
Intercept (γ_{20})	0.06	0.16	0.39	0.07	0.17	0.39
Subordinate's education (β_3)						
Intercept (γ_{30})	0.05	0.05	0.85	0.02	0.05	0.46
Subordinate's tenure (β_4)						
Intercept (γ_{40})	0.00	0.00	-0.70	0.00	0.00	-2.19*
Supervisor's expressed favorable attitudes (β_5)						
Intercept (γ_{50})				0.35	0.07	4.84**

Note. Level 1 $N = 195$. Level 2 $N = 60$. SOE = supervisor's organizational identification; SE = standard error.

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

favorableness of supervisor's expressed attitudes about the organization, $\gamma_{04} = .24$, $t(55) = 2.11$, $p < .05$, supporting Hypothesis 2a. When we controlled for the effect of supervisor's organizational identification on SOE, the favorableness of supervisor's expressed attitudes about the organization had a significant and positive impact on employee perceptions of SOE, $\gamma_{50} = .35$, $t(59) = 4.84$, $p < .01$. The Sobel test, using the z-prime distribution, indicated that supervisor's expressed favorable attitudes about the organization mediated the influence of supervisor's organizational identification on SOE ($z' = 1.86$, $p < .05$; critical z' value for statistical significance = 0.97), supporting Hypothesis 2b. These results are consistent with the view that supervisor's organizational identification leads to expressed positive attitudes toward the organization, which in turn leads to SOE among subordinates.

Performance consequences. Hypotheses 3a and 3b state that the positive influence of LMX $\times$ SOE interaction on in-role and extra-role performance is mediated by affective commitment to the organization (mediated moderation; Baron & Kenny, 1986; Morgan-Lopez & MacKinnon, 2006). In other words, we predicted that the heightened influence of LMX on affective organizational commitment at high SOE would carry over to performance. Subordinates' in-role and extra-role performance differed depending on who their supervisor was: $\tau_{00} = .27$, $\chi^2(78) = 141.04$, $p < .01$, ICC(1) = .18; $\tau_{00} = .57$, $\chi^2(78) = 200.43$, $p < .01$, ICC(1) = .33, respectively. As in the test of Hypothesis 2b, we used Krull and MacKinnon's (2001) product of indirect effects method for testing mediated effects in multilevel data and followed the procedures outlined by Morgan-Lopez and MacKinnon (2006) for testing mediated moderation using the product of indirect effects. As shown in Table 4, we ran two more HLM models with in-role and extra-role performance as dependent variables and the control variables (LMX, SOE, LMX $\times$ SOE interaction, and affective organizational commitment) as the predictors.

To calculate the indirect effect for in-role performance (Hypothesis 3a), we multiplied the effect of the LMX $\times$ SOE interaction on affective organizational commitment, $\gamma_{70} = .16$, $t(78) = 2.52$, $p = .01$, times the effect of affective organizational commitment on in-role performance, $\gamma_{80} = .16$, $t(78) = 2.00$, $p < .05$, controlling for the direct effects of LMX, SOE, and the LMX $\times$ SOE interaction. A Sobel test, using the z-prime distribution, indicated that affective commitment to the organization mediated the influence of the LMX $\times$ SOE interaction on in-role performance ($z' = 1.63$, $p < .05$; critical z' value for statistical significance = 0.97). This result supported Hypothesis 3a.

We carried out a comparable mediational analysis with extra-role performance in place of in-role performance as the outcome. The moderating influence of the LMX $\times$ SOE interaction on affective organizational commitment, $\gamma_{70} = .16$, $t(78) = 2.52$, $p = .01$, was multiplied by the effect of affective organizational commitment on extra-role performance, $\gamma_{80} = .21$, $t(78) = 2.64$, $p < .01$, controlling for the direct effects of LMX, SOE, and the LMX $\times$ SOE interaction. The Sobel test indicated that affective organizational commitment mediated the influence of LMX $\times$ SOE interaction on extra-role performance ($z' = 1.93$, $p < .05$), supporting Hypothesis 3b.

Study 1 supported our hypotheses. We found that among subordinates, LMX was positively related to affective commitment to the organization only when SOE was high (Hypothesis 1). Further,

the results indicated that supervisors who identified highly with the organization expressed more favorable attitudes about the organization to subordinates, leading to higher subordinate SOE (Hypotheses 2a and 2b). Finally, with regard to the performance consequences of LMX $\times$ SOE interaction, we found that the moderating influence of SOE on the LMX–affective organizational commitment relationship carried through to in-role and extra-role performance (Hypotheses 3a and 3b).

Study 2: Replication of Hypotheses 1 and 3 Across Organizations

The second study investigated whether findings similar to the first would be obtained with a more diverse sample of employees drawn from a wide variety of organizations outside the United States. Our sample was not meant to be representative of any single organization but to involve a variety of employees in keeping with our goal of assessing the generality of findings of the first study. We investigated the moderating influence of SOE on the relationship between LMX and affective commitment to the organization (Hypothesis 1) and its subsequent effect on in-role performance (Hypothesis 3a) and extra-role performance (Hypothesis 3b). Because of space restrictions on the survey, we were unable to test the hypotheses concerning antecedents of SOE.

Method

Sample and procedure. With the help of undergraduate students in an organizational psychology class in Portugal, we collected data on 474 employee–supervisor dyads drawn from a broad range of Portuguese organizations. The students participated for class credit, and all had had experience with data collection in several required classes. Students were told that data collection would be monitored based on contact information from respondents. Each student was asked to contact a subordinate–supervisor dyad from each of five different organizations. The student contacted the subordinate first. If the subordinate agreed to participate, the student asked the supervisor if he or she were willing to participate. If both were willing to participate, the student administered the subordinate survey and the supervisor evaluation form in person in order to guarantee confidentiality. Of the dyads, 378 (79.7% of the total number of individual contacted) agreed to participate and returned the surveys, and 32 were dropped due to lack of completion of a questionnaire by one or the other participant. Thus, our final sample consisted of 346 dyads, a usable response rate of 73% of those originally contacted. To ensure the veracity of student reports, we collected contact information for the respondents from participants. A random sample of 10% of the surveyed employees ($N = 37$) and 10% of the supervisors ($N = 37$) contacted by the researchers provided no instance in which students falsely claimed to have enlisted participants into the study.

The dyads came from a variety of organizational settings, including clerical (17%), the travel and restaurant industry (10%), customer service (8%), sales/marketing (8%), health care (7%), and education (6%). With respect to organizational size, 39.9% came from organizations with fewer than 10 employees, 40.4% from organizations with between 10 and 100 employees, and 19.7% from organizations with more than 100 employees. The

subordinates sample was 63.9% female and had an average age of 34.5 years. Almost half of these subordinates (47.7%) had worked in the same organization for more than 5 years. With regard to education, 36.7% of subordinates had less than a high school degree, 46.5% had a terminal high school diploma, and 16.8% had university degrees. Among the supervisors, 46.5% were female and average age was 41.1 years. The majority of supervisors had worked in the same organization for more than 5 years (73.7%), 23.7% had less than a high school degree, 43.6% had a terminal high school diploma, and 32.7% had university degrees.

Measures. The items and response scales for LMX, SOE, affective organizational commitment, and in-role and extra-role performance were the same as those used in Study 1. We created Portuguese versions of all measures by following the commonly used translation/back translation procedures (Brislin, 1980). The measures were translated from English to Portuguese by a bilingual, native-born Portuguese individual and then translated back to English by a second native-born bilingual speaker who was not familiar with the original version of the measures. Differences in the original and the back-translated versions were discussed and resolved by joint agreement of the translators. We controlled for organization size and subordinates' and supervisor's tenure, age, gender, and education.

Results

Descriptive statistics are given in Table 6. In this study, unlike in Study 1, no supervisor was asked to evaluate more than a single subordinate. Thus, the employee-supervisor dyads provided independent observations, and multilevel modeling techniques were unnecessary. Further, we chose to use structural equation modeling (SEM) rather than regression to test our hypotheses because of its advantages of incorporating measurement error and providing an assessment of overall model fit (Jöreskog & Sörbom, 2001; Kaplan, 2000). By taking into account measurement error associ-

ated with the predictor variables, SEM provides more accurate estimates than moderated regression of the magnitude of interaction effects (Marsh, Wen, & Hau, 2004; Moulder & Algina, 2002). Because our sample size was fairly small when compared to the total number of indicators ($k = 40$), we used a partial disaggregation technique (Bagozzi & Edwards, 1998), which consists of combining two or more items into one single indicator, thus reducing the number of indicators for each construct. For LMX, we aggregated the items according to its secondary factor structure (LMX subdimensions). Hall, Snell, and Foust (1999) found with a simulation study that such parceling has the advantage over other parceling strategies of better representing the true factor structure and reducing the likelihood of biased estimates of parameters and inflation of fit indices. For all other variables, we spread high- and low-loading items through the parcels following the procedure recommended by Little, Cunningham, Shahar, and Widaman (2002). The first parcel had the highest loading item together with the lowest loading item, the second parcel had the next highest loading item together with the next lowest loading item, and so on. When more items were available, the procedure was repeated. The number of indicators was thereby reduced to 17: LMX and SOE had four indicators each, and affective commitment, in-role performance, and extra-role performance had three indicators each.

Discriminant validity. As in Study 1 we conducted CFAs to examine the distinctiveness of LMX, SOE, affective commitment, and in-role and extra-role performance. We used chi-square difference tests (Bentler & Bonett, 1980; James et al., 1982) to compare the most differentiated (five-factor) model to three nested models. A four-factor model contrasted a combined in-role and extra-role factor with the remaining three constructs. The performance variables were combined, as they were both obtained from the same supervisors. A two-factor model contrasted the combined performance variable with a combination of the attitudinal and perceptual constructs obtained from subordinates (LMX, SOE, and

Table 6
Descriptive Statistics (Study 2)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LMX	5.43	0.90	(.84)												
2. SOE	5.30	1.10	.51**	(.89)											
3. Affective commitment	5.24	1.24	.56**	.66**	(.83)										
4. In-role performance	5.86	0.98	.28**	.12**	.24**	(.81)									
5. Extra-role performance	5.49	1.02	.35**	.19**	.31**	.72**	(.91)								
6. Organizational size	2.24	1.26	-.07	-.32**	-.21**	.01	-.09								
7. Subordinate's tenure	3.53	1.39	-.02	-.05	.08	.11*	.10	.14*	—						
8. Subordinate's age	34.5	9.95	.02	.07	.16*	.06	.07	.08	.60**	—					
9. Subordinate's gender			-.15**	-.06	-.02	.05	.02	-.07	-.10	-.02	—				
10. Subordinate's education	2.77	0.87	-.10	-.13*	-.10	.08	.09	.10	-.26**	-.33**	.15**	—			
11. Supervisor's tenure	4.38	1.21	.00	-.06	-.01	.06	.07	.18**	.39**	.24**	-.05	-.02	—		
12. Supervisor's age	41.1	9.76	-.01	.02	.05	.01	.15**	-.01	.27**	.26**	.08	.00	.54**	—	
13. Supervisor's gender			-.08	-.03	-.02	.01	.08	.01	.01	.06	.30**	.03	-.06	-.04	—
14. Supervisor's education	3.10	0.93	.03	-.06	.06	.10	-.02	.09	-.05	.01	.15**	.26**	-.19**	-.20**	.16**

Note. $N = 346$. Cronbach's alphas are provided in parentheses on the diagonal. Gender was coded as 0 = female; 1 = male. Education was coded as 1 = fourth grade (primary education); 2 = ninth grade (secondary education); 3 = 12th grade (high school); 4 = undergraduate; 5 = graduate. Organizational tenure for both supervisor and subordinate was coded as 1 = less than 6 months; 2 = ≥ 6 months and < 1 year; 3 = ≥ 1 year and < 5 years; 4 = ≥ 5 years and < 10 years; 5 = ≥ 10 years and < 20 years; 6 = 20 years or more. Organizational size was coded as 1 = fewer than 10 employees; 2 = 10–50 employees; 3 = 51–100 employees; 4 = 101–200 employees; 5 = more than 200 employees. SD = standard deviation; LMX = leader-member exchange; SOE = supervisor's organizational embodiment.

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

affective organizational commitment). Here, all the measures obtained from the subordinates were combined. Finally, we examined a one-factor model that combined all five constructs.

The difference in fit between the hypothesized five-factor model and each of the other models was statistically significant: respectively, $\chi^2_{diff}(1) = 118, 456, \text{ and } 1,091, p < .05$. Only the five-factor model showed acceptable fit on all the fit indices (RMSEA = .07, CFI = .95, TLI = .94). In the five-factor model all the individual indicators loaded acceptably, with standardized coefficients ranging from .47 to .86 for LMX, .81 to .86 for SOE, .79 to .85 for affective commitment, .66 to .92 for in-role performance, and .82 to .91 for extra-role performance. Consequently, we treated the five constructs separately in subsequent statistical tests of our hypotheses.

Tests of hypotheses. We tested a structural equation model in which LMX, SOE, and their interaction led to affective organizational commitment, which in turn led to in-role and extra-role performance. In order to reduce model complexity, we included in our structural equation model only the control variables that had significant zero-order correlations with at least one of the outcome variables. Hence, our models included the effects of organizational size, subordinates' age and organizational tenure, and supervisor's age. The model showed acceptable fit, $\chi^2(258) = 649.09, p < .01$, CFI = .91, TLI = .89, RMSEA = .07.

We used the approach of Marsh et al. (2004) to test the moderating influence of SOE on the relationship between LMX and affective organizational commitment (Hypothesis 1) in a SEM. As in regression, interactions in SEM require simultaneous assessment of main effects (here, LMX and SOE) and their multiplicative composite (see Figure 3). Because we are dealing with latent constructs, indicators are needed for the interaction term as well as the main effects. Following Marsh et al.'s method to lessen multicollinearity, we first centered the indicators of each latent variable included in the interaction (i.e., the indicators LMX and SOE). We then paired these indicators such that the highest loading indicator of LMX was multiplied by the highest loading indicator of SOE to form the first indicator of the latent interaction term, and this procedure was followed for each subsequent pair of indicators. Then, employing AMOS 6.0, we used SEM to estimate the effects of LMX, SOE, and their latent product on affective organizational commitment to the organization.² In this model, the loadings and error values associated with the indicators of the

latent product term were freely estimated, as recommended by Marsh et al.

As shown in Figure 3, LMX and SOE had significant positive relationships with affective commitment to the organization ($\beta = .40, p < .01$, and $\beta = .46, p < .01$, respectively), which was significantly related both to in-role performance ($\beta = .26, p < .01$) and to extra-role performance ($\beta = .37, p < .01$). As predicted, the moderating influence of LMX and SOE on affective commitment was also significant ($\beta = .10, p < .05$). As shown in Figure 4, the relationship between LMX and affective organizational commitment was statistically significant both when SOE was high, $B = 0.61, t(343) = 6.59, p < .01$, and when SOE was low, $B = 0.39, t(343) = 5.94, p < .01$. However, the slope was greater at high SOE than low SOE, $t(343) = 2.30, p < .05$, and this supported Hypothesis 1.

Using the Sobel test, we examined whether the influence of LMX and SOE on affective organizational commitment would extend to in-role performance (Hypothesis 3a) and extra-role performance (Hypothesis 3b). These mediating effects were significant both for in-role performance ($z' = 1.74, p < .05$; critical z' value for statistical significance = 0.97) and for extra-role performance ($z' = 1.84, p < .05$; critical z' value = 0.97). We also compared this fully mediated model (see Figure 3) with two partially mediated models. The model for in-role performance incorporated a direct path from the LMX $\times$ SOE interaction to in-role performance, and the model for extra-role performance included a path from the LMX $\times$ SOE interaction to extra-role performance. Because we were examining the influence of an interaction, we included the main effects of LMX and SOE on both in-role and extra-role performance. The fit indices were unchanged by these additional paths (RMSEA = .07, CFI = .91, TLI = .89), and the new alternative models did not differ significantly from the fully mediated model, $\chi^2_{diff}(1) = 4.6$ and 2.9 , respectively. Thus, the fully mediated model for in-role and extra-role performance, as presented in Figure 3, was retained.

With a varied sample of employees obtained from a range of organizations outside the United States, Study 2 supported the findings of Study 1 that SOE moderates the relationship between LMX and affective organizational commitment (Hypothesis 1) and

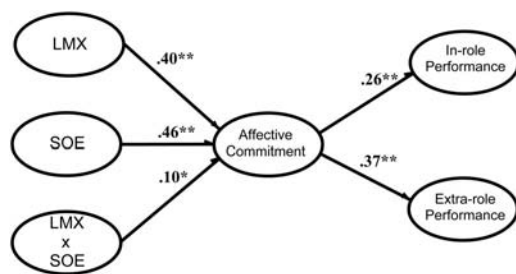


Figure 3. Results of the structural equation analysis concerning affective organizational commitment as a mediator of the relationship between the LMX $\times$ SOE interaction and in-role and extra-role performance in Study 2. The path coefficients are standardized. $N = 346$. LMX = leader-member exchange; SOE = supervisor's organizational embodiment.

² Standard errors calculated with the maximum-likelihood estimation in SEM (SEM-ML) may underestimate the true standard errors of the estimators, especially with small sample sizes (Schermelele-Engel, Klein, & Moosbrugger, 1998). We used SEM-ML because our sample size was substantial and this method provides conventional fit statistics. To be conservative, we also tested mediated moderation using two alternative methods, moderated regression analysis and latent moderated structural equations using full-information maximum-likelihood estimation, that do not underestimate the true standard errors of the estimators (Klein & Moosbrugger, 2000; Muthén & Muthén, 2004). Both methods yielded results similar to those of the original SEM-ML analysis. The moderating influence of LMX and SOE on affective commitment was significant using latent moderated structural equations ($B = .12, p < .01$) and moderated regression ($\beta = .12, p < .01$). The indirect effects test using the z -prime method was significant for both in-role and extra-role performance, when using latent moderated structural equations ($z' = 2.01, p < .05$, for in-role performance; $z' = 2.17, p < .05$, for extra-role performance) and moderated regression analyses ($z' = 1.75, p < .05$, for in-role performance; $z' = 1.95, p < .05$, for extra-role performance).

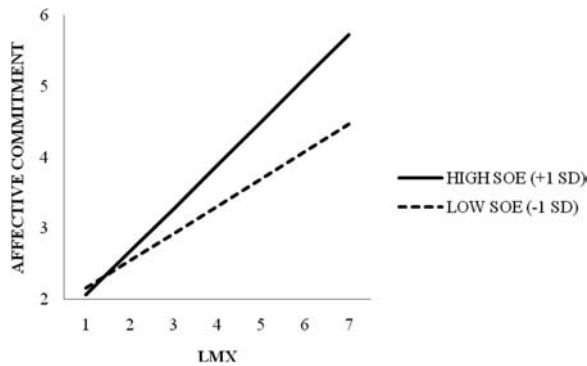


Figure 4. Affective organizational commitment as a function of leader-member exchange (LMX) at low (-1 SD) and high ($+1$ SD) levels of supervisor's organizational embodiment (SOE) in Study 2. *SD* = standard deviation.

that this effect carries over to in-role and extra-role performance (Hypotheses 3a and 3b). Unlike in Study 1, the relationship between LMX and affective organizational commitment remained statistically significant at low SOE although, as hypothesized, weaker than at high SOE.

Discussion

We found in two studies that the relationship between LMX and affective organizational commitment increased as a function of SOE. Study 1 also demonstrated that supervisor's own identification with the organization was associated with the supervisor's expression of positive attitudes toward the organization, enhancing SOE. Both studies found that the moderating influence of SOE on the relationship between LMX and affective organizational commitment carried over to in-role and extra-role performance.

The present results begin to address the lack of explanation in the research literature for the large variation across studies in the strength of the relationship between LMX and affective organizational commitment (Gerstner & Day, 1997). Our results support the view that this variation is related to employee perception concerning the extent of the supervisor's shared identity with the organization. The more employees perceive their supervisor to share a common identity with the organization, the more employees attribute their supervisor's treatment of them to the organization. When SOE is high, a favorable (or unfavorable) exchange relationship with the supervisor is perceived to incorporate a favorable (or unfavorable) exchange relationship with the organization. Employees are motivated to assess the overlap in identity between their supervisor and the organization because being viewed favorably by the organization fulfills socioemotional needs (Armeli et al., 1998), increases subjective well-being (see Supervisor's Organizational Embodiment section), and suggests the personal benefits of investing time and effort on behalf of the organization (Eisenberger et al., 2001).

We hypothesized, on the basis of reciprocity for favorable treatment, fulfillment of socioemotional needs, and enhancement of positive mood, that employees with high SOE would respond to favorable LMX with enhanced affective commitment toward the organization. We found, consistent with this account, that SOE

moderated the relationship of LMX with affective organizational commitment. In the first study, involving social service employees, LMX was strongly related to affective organizational commitment when SOE was high but not when SOE was low. In Study 2, with a diverse sample of employees from multiple European organizations, LMX was positively related to affective organizational commitment even at low SOE, although at a reduced level relative to high SOE. The findings suggest that SOE does not eliminate the association between LMX and affective organizational commitment in all cases. Perhaps supervisor's basic tasks of directing and evaluating subordinates are, to some extent, viewed by subordinates as inherently representing the organization. Further, the organization selects and has power over its supervisors and thus may be seen as bearing some degree of responsibility for supervisor's actions (Levinson, 1965).

This difference in results between the two studies merits further investigation. It is possible that organizations differ in the distribution of power and authority they provide supervisors. Some organizations may allow low-level supervisors little influence and authority, so that their subordinates identify them to a very limited extent with the organization. This would likely yield little or no relationship between LMX and affective organizational commitment at low SOE. Other organizations may provide enough power and authority to all supervisors that LMX and affective commitment are positively related even at low SOE.

We found in Study 1 that supervisors who identified strongly with the organization were more likely to express positive attitudes about the organization to subordinates, leading to greater SOE among subordinates. Van Dick et al. (2007) suggested that supervisors who identify strongly with the organization are likely to convey positive views about it. Among the attributions subordinates would make for such views by their supervisors are the supervisor's shared values and beliefs with the organization and the supervisor's gratitude for the power and influence accorded by the organization, both of which contribute to SOE.

Future research might also examine variables that cause supervisors to express negative views regarding their organization and thereby lessen SOE, such as the extent of (a) supervisor's general fear of being victimized in social exchange relationships (reciprocity wariness; Lynch, Eisenberger, & Armeli, 1999); (b) supervisor's view that the organization is governed more by a concern for politics than for merit and fairness (organizational politics; Byrne, Kacmar, Stoner & Hochwarter, 2005; Kacmar & Carlson, 1997); and (c) supervisor's perception that the organization lacks integrity (Andersson, 1996; Becker, 1998).

Organization's values and strategic objectives have a broad and durable influence on organizational activities that are often salient for employees. Thus, the extent to which supervisors share these characteristics with the organization exerts an important influence on SOE. Moreover, because employees personify the organization as a powerful being, able to exert substantial influence over their lives, the organization's provision of high power and influence to the supervisor contributes greatly to SOE. This view is consistent with findings that the relationship between perceived support from the supervisor and the organization increased with subordinates' belief that the supervisor was influential in the organization (Eisenberger et al., 2002). Future research might explicitly assess the contributions to SOE of (a) the similarity of the supervisor's

values and to those widely shared in the organization and (b) the supervisor's influence and power within the organization.

We found, as hypothesized, that the moderating influence of SOE on the relationship between LMX and affective organizational commitment extended to extra-role performance. The more employees identified their supervisor with the organization, the greater was the relationship of LMX with affective organizational commitment and the greater was the degree of extra-role performance directed toward organizational objectives. We assessed *organizational spontaneity*, which involves extra-role behaviors that promote organizational effectiveness (George & Brief, 1992). Past research suggests that subordinates' favorable relationships with supervisors tend to be focused on extra-role behaviors that are oriented toward aiding the supervisor (e.g., consulting with the supervisor when he or she might be affected and avoiding actions that could cause problems for the supervisor), whereas favorable exchange relationships with the organization tend to be most strongly related to extra-role behaviors that are directed toward helping the organization (Malatesta, 1995; Masterson, Lewis, Goldman, & Taylor, 2000). Future research might examine extra-role behaviors directed primarily toward the supervisor as well as extra-role behaviors aimed at aiding the organization. At high SOE, employees might focus more on extra-role behaviors directed at aiding the organization at a cost to extra-role behaviors aimed at aiding supervisors.

We originally conceived of SOE to address the issue of employees' generalization of local exchange relationships to organizational exchange relationships. It thus seemed a reasonable application of our view to consider the moderating influence of SOE on the relationship between LMX and affective organizational commitment. Of additional interest, however, are possible direct associations of SOE with employee exchange relationships and affective bonds with the organization. In both studies, SOE was positively related to LMX and affective commitment to the organization. These associations suggest that, in addition to the propositions discussed previously, LMX might lead to SOE. A basic assumption of LMX theory is that when supervisors form high-quality relationships with subordinates, supervisors aid subordinates in a variety of ways, including provision of resources that subordinates usually identify with the organization. These include pay raises, training to promote career prospects, and promotions (Erdogan & Liden, 2002; Liden & Graen, 1980). Seeing themselves the beneficiaries of organizational resources may suggest to high-LMX subordinates that their supervisor has substantial power and influence in the organization, leading to greater SOE. Also, SOE may be directly related to affective organizational commitment. By being strongly identified with the organization, supervisors might appear to have high degrees of knowledge and influence in the organization and be sought out by the employee for needed advice and resources, which would often lead to a stronger social-exchange relationship. Future research should examine these direct associations of SOE with LMX and affective organizational commitment in more detail, possibly with longitudinal designs that allow pinpointing the direction of these relationships.

Future research might extend the concept of organizational embodiment to other organizational entities besides supervisors. Affective commitment can generalize from embedded organizational units to larger units. For example, employees' commitment to the work group contributes to affective organizational commit-

ment (Hunt & Morgan, 1994; Maertz, Mosley, & Alford, 2002), and soldiers' commitment to Special Forces units contributes to military affective commitment (Heffner & Gade, 2003). Such generalization may be enhanced, as in the case of SOE, when the lower order unit is perceived to have characteristics similar to the higher order unit in which it is embedded.

We noted the similarity between SOE and employees' self-identification with the organization. In both cases, employees compare defining characteristics of an organizational representative (oneself or the supervisor) with those attributed to the organization. However, the nature of the identification is fundamentally different in the two cases. Self-identification is accomplished in part by introspection and involves a person's self-concept while SOE is accomplished by observing someone else's behavior. Judging the degree to which the supervisor shares certain characteristics of the organization has nothing to do with the employee's self-concept.

The motivation for the two kinds of identification is also somewhat different. The need for esteem has been suggested as a primary motive for self-identification with the organization (Ashforth & Mael, 1989; Dutton et al., 1994; Meyer et al., 2006). We have suggested that the motivational basis for SOE is the desire of employees to determine the strength of their social exchange relationship with their organization. Finding out that one is highly valued by the organization has been found to fulfill a broad spectrum of socioemotional needs, including the needs for esteem, affiliation, emotional support, and approval (Armeli et al., 1998). Additionally, employees are motivated to determine the strength of their exchange relationship with the organization as an indication of the organization's readiness to pay attention to and reward efforts on the organization's behalf (Eisenberger et al., 1990).

The methodological limitations of the present research should be acknowledged. First, our cross-sectional design prevents us from making strong causal inferences regarding the relationships among variables. Future studies using panel designs would be helpful. This stated, the confirmation of a set of interrelated hypotheses, derived from our conceptualization, adds credence to the findings. Second, common method variance might have inflated relationships among variables measured from the same source. However, employees themselves were in the best position to judge LMX, SOE, and affective commitment to the organization, and thus it was appropriate to assess these constructs from the same source (Spector, 2006). Possible inflation of relationships among these variables due to common methodology would not be expected to influence the key prediction of an interactive effect of LMX and SOE on affective organizational commitment. Moreover, we assessed antecedents of SOE and consequences of affective organizational commitment with measures obtained from supervisors, thus providing a mixed measurement design. Third, we assumed that employees generalized their favorable exchange relationship from the supervisor to the organization but did not directly assess social exchange at the organizational level. Researchers could use a scale such as that provided by Shore et al. (2006) to empirically examine this issue.

The present findings have important practical implications related to our better understanding of the variability in the strength of the relationship between LMX and affective organizational commitment. Our results suggest that when employees identify their supervisors with the organization to only a small degree,

LMX makes only a limited contribution to affective organizational commitment. When an employee with low SOE believes she has a favorable LMX relationship, she may develop a strong affective commitment to the supervisor at the expense of commitment to the organization (e.g., Becker, 1992; Becker & Kernan, 2003; Heffner & Gade 2003; Heffner & Rentsch, 2001). Under these circumstances, the organization will forgo many positive consequences that result from affective organizational commitment. These include such employee extra-role behaviors as taking actions to protect the organization from risk, acquiring information useful to the organization, and promoting the organization to outsiders (Becker & Kernan, 2003; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mowday et al., 1982; Organ & Ryan, 1995). Also, when employees develop a strong commitment to the supervisor but not to the organization, performance problems and turnover may be more likely following the departure of the supervisor. The organization's promotion of high SOE has the potential for producing a strong relationship between LMX and affective organizational commitment and realizing the positive consequences for the organization. Moreover, the belief of employees that they are engaged in a favorable exchange relationship with the organization has been found to be associated with beneficial outcomes for their subjective well-being (e.g., Eisenberger et al., 2001).

The first study's findings suggest that increasing supervisor's identification with the organization enhances supervisor's expression of favorable attitudes about the organization to subordinates, increasing SOE. Supervisor's identification with the organization might be strengthened by institutionalized organizational socialization tactics that emphasize common in-group identity (Ashforth & Saks, 1996; Jones, 1986) and by favorable human resource management policies (Reade, 2001). In addition to increasing supervisor's organizational identification, favorable human resource policies should increase supervisor's desire to reciprocate through more effective supervision of employees (Shanock & Eisenberger, 2006; Tepper & Taylor, 2003). Thus, favorable treatment of supervisors should enhance both LMX and SOE, increasing subordinates' affective organizational commitment and performance.

In conclusion, the present studies increase our understanding of employees' generalization of the social exchange relationship from the supervisor to the organization. The findings are consistent with our concept of SOE, the extent to which employees identify their supervisor with the organization. Supervisors who themselves identify strongly with the organization convey their positive views to subordinates, increasing the subordinates' perceptions of the supervisors as embodying the organization. SOE is thus a key moderator of the degree to which the quality of LMX relationships is transformed into employee commitment and performance.

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