

Journal of Organizational Behavior, J. Organiz. Behav. **35**, 635–656 (2014) Published online 20 June 2013 in Wiley Online Library (wileyonlinelibrary.com) **DOI**: 10.1002/job.1877

The supervisor POS-LMX-subordinate POS chain: Moderation by reciprocation wariness and supervisor's organizational embodiment

ROBERT EISENBERGER^{1,2*}, MINDY KRISCHER SHOSS³, GÖKHAN KARAGONLAR⁴, M. GLORIA GONZALEZ-MORALES⁵, ROBERT E. WICKHAM⁶ AND LOUIS C. BUFFARDI⁷

Summary

We present three studies providing an increased understanding of the interdependence between perceived organizational support (POS) and leader–member exchange (LMX). Using employees from a social service agency and new hires from a variety of organizations, we report evidence for a relational chain leading from supervisors' perceptions of support by the organization (supervisor POS) to the formation of high-quality LMX relationships with their subordinates (first link), who interpret high-quality LMX as support from the organization (subordinate POS, second link) and, ultimately, repay the organization with increased dedication and effort (examined here in terms of reduced withdrawal behavior). The relationship between supervisor POS and LMX with subordinates was strongly moderated by supervisor fear of exploitation in exchange relationships (reciprocation wariness), holding only for supervisors with low reciprocation wariness. Consistent with the view that employees perceive the organization as partly responsible for treatment received from supervisors, LMX was found to be more strongly related to POS when employees highly identified their supervisors with the organization (supervisor's organizational embodiment), and this interaction extended to reduced withdrawal behavior. Copyright © 2013 John Wiley & Sons, Ltd.

Keywords: perceived organizational support; leader-member exchange; reciprocity

Social exchange accounts of employee–organization relationships hold that, on the basis of the reciprocity norm, employees receiving favorable treatment from their organization and its agents respond with high commitment and effort. Leader–member exchange (LMX) theory (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Graen & Scandura, 1987) focuses on the exchange relationship between the subordinate and *the supervisor*. According to LMX theory, supervisors identify subordinates they consider promising and treat them favorably. Subordinates who are treated favorably by their supervisors reciprocate by working harder and providing more help to supervisors, leading to high-quality LMX relationships. By comparison, organizational support theory (Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002; Shore & Shore, 1995) considers subordinates' and supervisors' favorable relationships with *the organization*. Organizational support theory holds that, in order to meet socio-emotional needs and to determine the organization's readiness to reward increased efforts, employees develop a general perception concerning the extent to which the organization values their contributions and cares about their well-being (*perceived organizational support* or POS; Eisenberger, Huntington, Hutchison, & Sowa, 1986). This

¹College of Liberal Arts & Social Sciences, University of Houston, Houston, Texas, U.S.A.

²C. T. Bauer College of Business, University of Houston, Houston, Texas, U.S.A.

³Saint Louis University, St. Louis, Missouri, U.S.A.

⁴Dokuz Eylul University, Izmir, Turkey ⁵University of Guelph, Guelph, Ontario, Canada

⁶Palo Alto University, Palo Alto, California, U.S.A.

⁷George Mason University, Fairfax, Virginia, U.S.A.

^{*}Correspondence to: Robert Eisenberger, College of Liberal Arts & Social Sciences, University of Houston, Houston, Texas, U.S.A. E-mail: reisenberger2@uh.edu

article examines a multilevel chain of relationships between LMX and POS, moderators of these associations, and consequences for employee withdrawal behavior.

Because the LMX and organizational support theories propose similar social exchange processes, researchers have become increasingly interested in relationships between LMX and POS. For example, Wayne, Shore, and Liden (1997) found that managers' liking of subordinates, their expectations regarding subordinates' advancement, and their tenure with subordinates were more strongly related to LMX than to POS, whereas developmental experiences, promotions, and organizational tenure were more strongly related to POS than LMX. In terms of consequences of LMX and POS, carrying out favors for the supervisor was more strongly related to LMX than to POS, whereas distinguishing the antecedents and consequences of LMX and POS is important, less attention has been paid to investigating the nature of the interdependence between POS and LMX.

As shown in Figure 1, we suggest that the interdependence between POS and LMX involves a relational chain leading from supervisors' perceptions of support by the organization (supervisor's POS or SPOS) to the formation of high-quality LMX relationships with their subordinates (first link), who interpret high-quality LMX as support from the organization (subordinate POS, second link) and, ultimately, repay the organization with increased dedication and effort (examined here in terms of reduced withdrawal behavior). Following organizational support theory (Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002), we propose that, on the basis of the reciprocity norm (Blau, 1964; Gouldner, 1960), supervisors feel an obligation to repay the organization for their POS and believe that they will be rewarded for doing so. Supervisors can reciprocate their SPOS by developing more favorable LMX relationships with their subordinates (i.e., providing them with socio-emotional and tangible resources) with the objective of managing them more effectively to obtain better organizational outcomes (i.e., through subordinate performance) for which supervisors can be credited by the organization. Subordinates, in turn, respond favorably to greater resources provided by the supervisor, strengthening LMX and completing the first link in the chain. Because subordinates view their supervisor as an organizational agent, they attribute this high-quality relationship not only to the individual actions of the supervisor but also to the high regard for them by the organization (high POS), completing the second link in the chain. Again, on the basis of the reciprocity norm and commitment to the organization, subordinates' POS results in employee behaviors aimed at helping the organization meet its objectives, here operationalized as reduced withdrawal behavior.

We also consider moderating factors that may influence the strength of this relational chain (i.e., SPOS–LMX–subordinate POS). First, supervisors are more likely to choose the development of high-quality relationships with subordinates as a way of reciprocating perceptions of organizational support (SPOS) when they believe that their subordinates can be trusted to reciprocate such favored treatment with greater dedication to their jobs and performance. Supervisors may differ systematically in their belief that subordinates will comply with the reciprocity norm. Individuals high in reciprocation wariness (Cotterell, Eisenberger, & Speicher, 1992; Lynch, Eisenberger, & Armeli, 1999), including those in supervisory positions, have a decreased disposition to accept resources or provide them to others because they are suspicious of others' willingness to adhere to the reciprocity norm. Therefore, we examine the possible moderating influence of supervisors' reciprocation wariness on the link between SPOS and LMX.

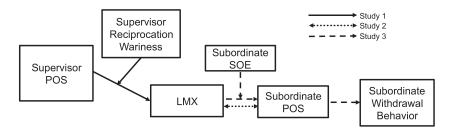


Figure 1. Conceptual figure. LMX, leader-member exchange; POS, perceived organizational support; SOE, supervisor's organizational embodiment

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. **35**, 635–656 (2014) DOI: 10.1002/job

Second, organizational support theory assumes that subordinates respond to favorable treatment from their supervisors (e.g., indicated by high LMX) with high POS and greater organizational involvement because they view their supervisor as an organizational agent whose behaviors toward them reflect the organization's intentions (Eisenberger & Stinglhamber, 2011). However, supervisors differ in the extent to which they display characteristics that employees identify strongly with the organization. As a result, employees identify some supervisors more than others with the organization: *supervisor's organizational embodiment* (SOE; Eisenberger et al., 2010). This suggests that the relationship of LMX with subordinate's POS (second link) with such outcomes as reduced withdrawal behavior will be moderated by SOE.

We examine the hypothesized SPOS-LMX-POS chain in three studies. As shown in Figure 1, Study 1 examines the relationship of SPOS with LMX, as moderated by supervisor reciprocation wariness. Study 2 provides a multi-wave design to examine the direction of the relationship between LMX and subordinate POS. Study 3 considers SOE as a moderator of the relationship between LMX and POS, where POS influences the outcome of withdrawal behavior.

These studies make several important basic and applied contributions. First, the relational chain, as examined across the three studies, provides a clearer understanding of the interrelationships of LMX and POS. Second, the moderating influences of reciprocation wariness and SOE provide information concerning the processes influencing the magnitude of these relationships. Third, identifying this chain is important in light of evidence that favorable organizational practices such as recognition and fairness are positively associated with SPOS (Wayne, Shore, Bommer, & Tetrick, 2002) and thus can be used to initiate the SPOS–LMX–subordinate POS chain. As a result, upper management may be able to take practical steps to enhance lower level employees' experiences of favorable exchange relationships with supervisors and perceived favorable treatment from the organization that, in turn, increase employee behaviors helpful to the organization.

Supervisor's perceived organizational support and leader-member exchange: Moderating role of reciprocation wariness

The first link in our relational chain involves the connection between SPOS and LMX (Figure 1). Organizational support theory suggests that a SPOS leads to a felt obligation, based on the norm of reciprocity, to help the organization reach its objectives through enacting more effective role-related behaviors, including helping other employees (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger et al., 1986). Wayne et al. (1997) found a positive relationship between managers' POS and behaviors helpful to the organization, including giving aid to other employees who had been absent, orienting new employees to their jobs or aiding others whose workload had increased, and assisting others with their duties.

Tepper and Taylor (2003) suggested that supervisors may view supportive treatment of subordinates, such as mentoring, as a way to repay the organization for high POS. Shanock and Eisenberger (2006) found that SPOS was positively related to subordinates' perceived supervisor support, which, in turn, was associated with subordinates' POS and performance. We suggest that supervisors with high POS may be motivated to develop high-quality LMX relationships with their subordinates in order to reciprocate their own supportive treatment from the organization (Wayne et al., 2002). Given that a major part of supervisors' jobs includes directing, evaluating, and coaching subordinates, supervisors could fulfill their reciprocation obligation, in part, by engaging in extra efforts to help subordinates to perform their regular job responsibilities and encouraging them to become more dedicated to the organization's objectives. Supervisors may anticipate that the resultant high performance by subordinates would be positively seen by the organization as reciprocal behavior and, therefore, rewarded. Further, supervisors who report high POS may have access to greater resources to provide to subordinates, thereby enhancing their LMX relationship with subordinates (Tangirala, Green, & Ramanujam, 2007). Thus, supervisors with high POS are likely motivated to establish high-quality LMX relationships with their subordinates.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

Hypothesis 1: Supervisor's perceived organizational support is positively related to LMX.

Supervisors' readiness to repay their POS by developing favorable LMX relationships with subordinates may depend on the expectation that subordinates will reciprocate this positive treatment. The development of social exchange relationships is facilitated by the expectation that others will reciprocate generous treatment (Blau, 1964; Gouldner, 1960). Indeed, Uhl-Bien and Maslyn (2003) found that employees' concern with the mutual interests of themselves and their supervisors promoted both high-quality LMX relationships and POS. This suggests that supervisors who perceive that their subordinates can be counted on as good exchange partners may be more willing to repay their own SPOS with favorable treatment toward subordinates.

People differ in general expectations that others will meet their exchange obligations. *Reciprocation-wary* individuals have a general fear of exploitation, developed from unsuccessful exchange relationships, that leads them to believe that others use the norm of reciprocity as a trap (Cotterell et al., 1992; Lynch et al., 1999). Highly wary individuals believe that accepting resources leads to inequitable demands for repayment, and providing resources leads to insufficient repayment. In experimental games, those high in reciprocation wariness were found to be hesitant to aid others or to accept cooperative overtures (Cotterell et al., 1992). Reciprocation wariness was reported to constrain employees' incorporation of loyal boosterism as part of their job (Kamdar, McAllister, & Turban, 2006) and to reduce social exchange with supervisors (Shore, Bommer, Rao, & Seo, 2009). Reciprocation-wary individuals also appear to be unsupportive when acting in supervisory roles. For example, Cotterell et al. (1992) found that students supervised by highly wary resident assistants rated these resident assistants as relatively unapproachable, hesitant to develop close relationships, and unresponsive to student needs. In contrast, resident assistants who were low in reciprocation wariness were viewed as proactive and responsive in their relationships with the students.

Highly wary supervisors may be resistant to repay the organization for high POS by establishing high-quality LMX relationships with subordinates. Highly wary supervisors may believe that such favorable treatment is likely to go unreciprocated by subordinates. Rather, these supervisors may choose to reciprocate POS through increased efforts on the organization's behalf involving activities that do not depend on reciprocation from subordinates. Therefore, reciprocation wariness may lessen the positive influence of POS on supervisors' provision of tangible resources, advice, and rewards to subordinates. As a result, among wary supervisors, high POS may have a reduced impact on subordinate's LMX.

Hypothesis 2: The relationship between SPOS and LMX weakens when supervisor reciprocation wariness is high.

Relationship between subordinate's leader-member exchange and perceived organizational support

The second hypothesized link in the SPOS-LMX-subordinate POS chain holds that employees view the supervisor as an agent of the organization and that, therefore, they attribute their favorable relationship with the supervisor partly to the organization (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Several factors contribute to employees' identification of supervisors as organizational agents (Eisenberger et al., 1986; Levinson, 1965). Employees understand that supervisors are charged with accomplishing frontline goals and objectives of the organization and, to do so, are provided with the authority to direct, monitor, and coach subordinates' performance and with discretion over the distribution of resources that employees need to do their jobs effectively. Further, the organization is commonly viewed as morally and legally responsible for the actions of its agents, including actions directed by supervisors toward subordinates (Eisenberger et al., 1986; Levinson, 1965).

When a supervisor establishes a high-quality LMX relationship with a subordinate, the subordinate should view the supervisor as acting at least partly on behalf of the organization, leading to high POS. In a cross-lagged study,

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

Eisenberger et al. (2002) found that employees' perceptions that their supervisors valued their contributions and cared about their welfare (perceived supervisor support) led to POS. The view that employees attribute their favorable exchange relationship with the supervisor to the organization, because they identify their supervisor as an organizational agent, suggests that subordinate's LMX leads to POS.

However, an argument could be made that subordinates' POS also increases their LMX (Wayne et al., 2002). Organizational support theory holds that POS creates a felt obligation to repay the organization with greater efforts to help fulfill its objectives (Eisenberger et al., 1986). Employees can reciprocate high POS both by increasing their performance generally and by being more helpful to their supervisors in their status as the organization's agents. Supervisors, in turn, tend to develop higher quality exchange relationships with employees who exert high work effort (Maslyn & Uhl-Bien, 2001). Indeed, the relationship between subordinate's LMX and POS might well be bidirectional. All studies to date specifically examining the direction of the LMX–POS relationship have assessed the constructs simultaneously, with the direction of the relationship being equivocal. Thus, we aimed to obtain evidence concerning the causal direction of this key link in the SPOS–LMX–subordinate POS chain.

Hypothesis 3a: Leader-member exchange is positively related to temporal change in subordinate POS.

Hypothesis 3b: Subordinate POS is positively related to temporal change in LMX.

Leader-member exchange and subordinates' perceived organizational support: Moderating role of supervisor's organizational embodiment

The second link in our model reflects the proposition that LMX relates to POS because employees identify their supervisors as organizational agents. The extent of this identification should influence the relationship of LMX with POS (Eisenberger et al., 2010) and subsequent outcomes such as lessened withdrawal behavior. Employees view their supervisor as having values, motives, and objectives that may vary in similarity with those of the organization. Accordingly, Eisenberger et al. found that employees formed a perception concerning the degree of the supervisor's shared identity with the organization: SOE. Eisenberger and colleagues viewed SOE as similar to Ashforth and Mael's (1989) concept of organizational identification, involving employees' belief that they share the characteristics of the organization (e.g., values and goals). However, self-identification and SOE differ in several ways, most notably (i) self-identification with the organization is accomplished in part by introspection and involves a person's self-concept, whereas SOE is established by observing the supervisor's behavior and has little to do with the self-concept; (ii) SOE can sometimes involve highly negative judgments of the supervisor, which tend not to occur with personal identification with the organization; and (iii) supervisor's favorable orientation toward the organization, as well as power and influence, may contribute to SOE. Eisenberger et al. found that supervisor's identification with the organization was positively associated with supervisor's favorable comments to subordinates regarding the organization, leading to high SOE. SOE, in turn, increased the relationship between LMX and employees' affective commitment to the organization. Shoss, Eisenberger, Restubog, and Zagenczyk (2013) found that the negative relationship between abusive supervision and POS also depended on SOE.

This variation in perceived alignment of the supervisor with the organization may influence employees' generalization of the favorableness of their exchange relationship from the supervisor to the organization. That is, based on high SOE, employees may view their supervisor as closely aligned with the organization and strongly generalize LMX to the organization. In contrast, employees may show weak generalization of LMX to the organization when SOE is low. In other words, when SOE is high, employees would view a favorable LMX relationship with their supervisor as indicating that they are greatly valued by the organization (i.e., high POS) and would view an unfavorable LMX relationship as indicating low valuation by the organization (i.e., low POS).

J. Organiz. Behav. 35, 635–656 (2014)

Hypothesis 4: The LMX-subordinate POS relationship is stronger when SOE is high compared with when SOE is low.

Perceived organizational support, resulting from LMX, should elicit the reciprocity norm and therefore facilitate behaviors to repay the organization (Eisenberger et al., 2002). We focus here on employees' withdrawal behavior as an outcome of POS that provides a way for employees to return positive treatment. Withdrawal behavior, such as lateness and absenteeism, has high potential financial costs for organizations (Birati & Tziner, 1996; Martocchio, 1992) and was considered especially problematic in the social services agency that we investigated in Studies 1 and 3. Specifically, low rates of withdrawal behavior were considered critically important for the benefit of clients in the social service agency. However, employees stated that they engaged in these behaviors to escape the strain associated with their high workload. Although withdrawal behavior has many antecedents, including revenge against an organization (Spector et al., 2006), lowered withdrawal behavior can also indicate a positive response to favorable treatment received from the organization. If employees believe that their efforts are valued and the organization cares about their well-being (high POS), they are more likely to experience more positive subjective well-being at work (Rhoades & Eisenberger, 2002), lessening their use of withdrawal behavior as an escape from work. Additionally, reduced withdrawal behavior may be seen by employees as a positive way to repay the organization for POS. In fact, metaanalytic findings indicate that POS is related to reduced withdrawal behavior as well as increased performance (Rhoades & Eisenberger, 2002).

Accordingly, we view POS as a mechanism through which LMX influences withdrawal, depending on SOE. That is, especially for those who perceive their supervisor as embodying the organization, LMX influences withdrawal behavior via POS. Stated otherwise, when SOE is high, LMX should more strongly relate to POS and lessen withdrawal behavior. Thus, we propose mediated moderation involving the interactive influence of two variables (LMX and SOE) on a mediating variable (POS) that subsequently affects an outcome (withdrawal behavior; Morgan-Lopez & MacKinnon, 2006). In terms of Edwards and Lambert's (2007) typology of mediation models, our model corresponds to first stage moderation in which the moderating effect applies to the first stage of the indirect effect of LMX on withdrawal behavior through POS.

Hypothesis 5: Subordinate POS mediates the relationship between the $LMX \times SOE$ interaction and reduced withdrawal behavior.

Study 1: Supervisor's Perceived Organizational Support and Subordinate's Leader–Member Exchange—Moderating Role of Reciprocation Wariness

We examined the relationship between SPOS and the exchange relationship with subordinates (Hypothesis 1) as moderated by the supervisor's reciprocation wariness or fear of exploitation in interpersonal relationships (Hypothesis 2).

Method

Sample and procedure

We administered a survey to 216 employees and 65 supervisors of a social service agency located in the mid-Atlantic region of the United States. Subordinates completed their surveys in groups of 12–20, whereas their supervisors responded to their surveys individually. After matching supervisor and employee responses and removing those who had missing data on the variables of interest, we had data from 145 subordinates and 55 supervisors. In our final dataset, the number of the subordinates evaluated by each supervisor ranged from 1 to 5, with a mean of 2.64. The subordinates were 69.0 per cent female, with an average age was 44.7 years,

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

and average tenure was 7.4 years; 29.4 per cent of subordinates had a high school degree, and 61.5 per cent had college or higher level degrees. The supervisors were 84.8 per cent female, with an average age of 48.2 years and an average tenure of 11.5 years. The educational attainment of the supervisors was 9.6 per cent high school and 78.6 per cent college or higher.

Measures

For all but the control variables, respondents rated their agreement with each statement using a 7-point Likert-type scale $(1 = strongly \ disagree; 7 = strongly \ agree)$.

Perceived organizational support of supervisors (α =.90). Supervisors' perceptions of organizational support were assessed using eight items that loaded highly on the Survey of Perceived Organizational Support (Eisenberger et al., 1986). Sample items were "[Name of the organization] really cares about me" and "[Name of the organization] shows very little concern for me (Reversed scored)." Prior research has consistently reported unidimensionality and high construct and predictive validity of versions of the survey of this length (Eisenberger & Stinglhamber, 2011; Hellman, Fuqua, & Worley, 2006; Rhoades & Eisenberger, 2002).

Leader–member exchange of subordinates (α =.88). Subordinates reported their perceptions concerning the quality of the exchange relationship between themselves and their supervisors, using Liden and Maslyn's (1998) 12-item multidimensional scale. This scale consists of 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, & Cogliser, 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). Because we were interested in measuring the overall quality of LMX, we created a composite averaging the 12 items.

Supervisor's reciprocation wariness (α = .73). We measured each supervisor's general fear of exploitation in interpersonal relationships using the eight highest loading positively worded items as reported by Eisenberger, Cotterell, and Marvel (1987). Sample items are "I feel used when people ask favors of me" and "You shouldn't offer to help someone if they don't ask for your help." The measure has been shown to have strong predictive validity related to a hesitance to initiate or return favorable treatment in interpersonal relationships in non-work and work settings (e.g., Cotterell et al., 1992; Kamdar et al., 2006; Lynch et al., 1999).

Control variables. Because supervisors may more strongly favor those subordinates with whom they have worked longer, we controlled for dyad tenure. Further, because demographic similarity among subordinates and their supervisors may influence LMX, we considered similarities on age, gender, education, and organizational tenure as control variables (Erdogan & Liden, 2002). We followed Liden, Wayne, and Stilwell's (1993) method to compute these similarity measures. For instance, gender similarity was coded as 1 (same gender) or 0 (different gender). We also examined workgroup size (as indicated by the number of subordinates rated by each supervisor) as a potential control variable. Given that none of these variables had a significant bivariate relationship with LMX (Table 1), we did not include them in the regression analyses (Becker, 2005).

Results

Descriptive statistics and variable correlations

The correlation matrix is provided in Table 1. We caution that the correlations may be biased because they do not take into account the nested structure of the data. Consistent with Hypothesis 1, SPOS was positively related to subordinate's LMX (r = .17, p < .05).

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635-656 (2014)

Table 1. Descriptive statistics and variable intercorrelations (Study 1).

	M	QS	1	2	3	4	5	9	7	8	6	10	11
1. Group size	3.37	1.28											
2. Age ^a	44.73	11.81	90.—										
3. Age similarity			.03	.21**									
4. Education similarity	1		.02	05	03	I							
5. Gender ^b	0.31	0.46	15	.14	05	.02							
6. Gender similarity			11.	12	.05	08	65**						
7. Tenure similarity	1		08	.07	11.	02	.01	– .07	I				
8. Dyad tenure ^c	3.36	1.54	.14	.37**	.16	90:	.01	04	9.				
9. SPOS	4.95	1.29	00:	00:	01	08	03	90:	01	.05	(06.)		
10. Supervisor's wariness	1.77	0.72	11.	01	03	60:	02	05	11	11.	36**	(.73)	
11. Subordinate's LMX	5.47	1.04	00.	.02	01	04	00.	.01	05	60:	.17*	.07	(.88)

Note: Cronbach's alphas are provided in parentheses on the diagonal. LMX, leader-member exchange; POS, perceived organizational support; SPOS, supervisor's organizational

Age and gender correlations provided for subordinates. Gender was coded 0 = female; 1 = male.

^cDyad tenure was coded as the following: 1 = less than 6 months, 2 = between 6 months and 1 year, 3 = more than 1 year but less than 3 years, 4 = between 3 and 6 years, 5 = more than 6 years but less than or equal to 10 years, 6 = over 10 years.

*p < .05; **p < .05.

Hypothesis tests

Because employees were nested within supervisors and because our predictor variables were measured at more than one level (i.e., SPOS and reciprocation wariness at the supervisor level; LMX at the subordinate level), we used multilevel modeling to analyze our data. We used SAS Proc Mixed to test the hypotheses (Singer, 1998). As a test of the necessity of using multilevel analyses, we estimated a null random-intercept model using maximum likelihood estimation to assess if there were significant between-group differences in LMX (our outcome variable). As the between-group variance was significant ($\tau^2 = 0.17$, SE = 0.10, ICC (1)=0.16, p < .05), we used multilevel modeling. We grand-mean-centered the predictors.

We conducted a single multilevel regression analysis with SPOS, supervisor's reciprocation wariness, and their interaction as predictors of subordinate's LMX. As expected, our multilevel regression results revealed a significant main effect of SPOS predicting LMX ($\gamma = 0.16$, SE = 0.07, p < .05). The main effect of supervisor's wariness was not significant ($\gamma = 0.05$, SE = 0.15, ns).

Recall that Hypothesis 2 states that the relationship between SPOS and LMX perceived by subordinates is moderated by supervisor's reciprocation wariness, such that high supervisor wariness weakens or eliminates the expected positive relationship. As expected, the coefficient reflecting the interaction between SPOS and supervisor's wariness was significantly related to LMX ($\gamma = -0.20$, SE = 0.09, p < .05). To explore the interaction, we plotted the relationship between SPOS and LMX at one standard deviation above and one standard deviation below the mean of supervisor's wariness. The graph of the interaction is displayed in Figure 2. As expected, SPOS was positively associated with LMX when supervisor's wariness was low (B = 0.31, SE = 0.09, p < .01), but not when supervisor's wariness was high (B = 0.01, SE = 0.10, ns). Thus, Hypothesis 2 was supported. To obtain an estimate of the variance explained by this model, we used the pseudo- R^2 calculation recommended by Snijders and Bosker (1999), which reflects the proportion of reduction in mean square prediction error (estimates for between- and within-group residual variance in this model, $\tau^2 = 0.08$, ns; $\sigma^2 = .89$, p < .01; pseudo- $R^2 = .09$).

In sum, consistent with the first link of the hypothesized SPOS-LMX-subordinate POS chain, SPOS was positively associated with LMX. Notably, this relationship was strongly influenced by supervisors' reciprocation wariness. Only supervisors who generally trusted others to reciprocate favorable treatment showed a positive relationship between their POS and LMX.

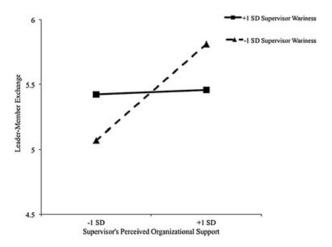


Figure 2. Supervisor's organizational support by supervisor wariness interaction predicting leader—member exchange (Study 1)

J. Organiz. Behav. **35**, 635–656 (2014) DOI: 10.1002/job

Study 2: Relationship between Subordinate's Leader–Member Exchange and Perceived Organizational Support

In Study 2, we examined the direction of the relationship between LMX and POS by measuring both variables at two points in time.

Method

A relationship between the initial value of one variable and changes in a second variable over time provides stronger causal evidence than is provided by the simultaneous measurement of both variables (Finkel, 1995). Panel designs are widely used to obtain better evidence of causal direction in field studies than is possible from the simultaneous measurement of variables (Riketta, 2008; Zapf, Dormann, & Frese, 1996). We therefore used a panel design in Study 2 to examine the relationship of LMX to temporal change in POS and the relationship of POS to temporal change in LMX. Moreover, because LMX develops early during an employee's job tenure (Liden et al., 1993), we examined the changes of LMX and POS in a diverse sample of new hires over a 5-month interval.

Sample and procedure

We mailed surveys to 332 graduating college seniors at two large mid-Atlantic universities, who agreed to take part in a larger unpublished study of the first year of work life, 3 weeks following the beginning of their employment and 5 months later. A total of 265 employees responded to the first survey and 209 to the second survey (63 per cent of the initial sample). These 209 were included in the final analysis.

Measures

For all scales, respondents rated their agreement with each statement using a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*).

Perceived organizational support (Time 1: α = .89; Time 2: α = .92). Employee's perceptions of organizational support were assessed using the same measure used in Study 1. We used the term "my organization" in place of the specific organization name used in Study 1.

Leader-member exchange (Time 1: α = .81; Time 2: α = .90). Because we sought to maximize the return rate over the repeated presentations on which this mail-in survey was administered, we attempted to keep the length of the survey brief. Therefore, rather than Liden and Maslyn's (1998) longer multidimensional scale used in Study 1, for Study 2, we used the seven-item LMX scale described by Scandura and Graen (1984), as modified for the 7-point agreement scale (Liden et al., 1993). A sample item is "My supervisor understands my problems and needs." The scale has been found to have high internal reliability and to be positively related to a variety of predicted correlates (Dulebohn et al., 2012).

Control variables. There are a small number of studies suggesting that more highly paid employees report higher POS (Rhoades & Eisenberger, 2002). Also, larger organizations may be able to provide greater resources to employees, which could increase POS. Therefore, we examined employees' salary and organizational size as potential control variables. Because these variables were not significantly related to POS or LMX, we followed Becker's (2005) recommendation to omit them from subsequent analyses.

Analytic strategy

To provide evidence of the distinctiveness of POS and LMX, we carried out a confirmatory factor analysis, using MPlus version 6 (Muthén & Muthén, 2010). Then we employed a structural equation model to examine the

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635-656 (2014)

relationships of POS and LMX over time, with factor loadings and manifest intercepts constrained to equality across time in order to satisfy the assumption of measurement invariance (Bollen, 1989). As recommended by Finkel (1995), residual covariances were estimated between the same items across time points (e.g., residual for POS item 1 at Time 1 was correlated with the residual for POS item 1 at Time 2).

Results

Descriptive statistics and correlations

Means, standard deviations, reliabilities, and the intercorrelations among variables at Times 1 and 2 are displayed in Table 2. As predicted, LMX at Time 1 was positively related to POS at Time 2. Also, as predicted, POS at Time 1 was positively related to LMX at time 2.

Confirmatory factor analyses

A series of nested confirmatory factor analysis models was estimated to provide discriminant validity evidence for POS and LMX. For all models, covariance parameters were estimated among the residuals of parallel items over time (e.g., Time 1 POS item 1 with Time 2 POS item 1). We began by estimating a simple structure model in which all POS and LMX indicators across both time points were set to load on a single latent factor. This fully restricted model fit the data poorly ($\chi^2(390) = 1861$; RMSEA = 0.11; SRMR = 0.13). Next, a model with correlated latent factors at Times 1 and 2 was specified with POS and LMX items loading on the same factor at each time point. This partially restricted temporal model fit the data better than the fully restricted model ($\chi^2_{\text{Diff}}(1) = 554$, p < .01; RMSEA = 0.09; SRMR = 0.08). Finally, a minimally restricted, four-factor model was specified having separate, correlated latent factors for POS and LMX at each time point. This minimally restricted temporal model fit the data significantly better than the two-factor model ($\chi^2_{\text{Diff}}(5) = 377, p < .01$), and the overall fit of the model was better than the two-factor model (RMSEA = 0.07; SRMR = 0.06) and acceptable (Kline, 2010; MacCallum, Browne, & Sugawara, 1996).

Cross-lagged model

Figure 3 presents a path diagram describing the model and estimated parameters. Primary analyses revealed strong stability coefficients for both LMX ($\beta = .72$, p < .01) and POS ($\beta = .52$, p < .01), suggesting that individuals' perceptions of organizational support and supervisor exchange relationships shortly after beginning work (Time 1) were strongly reflective of their relative standing on these constructs over 5 months later (Time 2). Additionally, a significant positive association emerged between LMX measured at Time 1 and POS at Time 2 (β = .20, p < .05), whereas the path between POS at Time 1 and LMX at Time 2 was not significant ($\beta = -.01$, p = .91). The values of the fit indices were acceptable: $\chi^2(410, n = 209) = 1009.2$; RMSEA = 0.07 (90% CI: 0.066, 0.077); SRMR = 0.07. The results support the view that LMX leads to POS.

 	Corretations a	na aesempur	· · · · · · · · · · · · · · · · · · ·		
		M	SD	1	

Table 2. Correlations and descriptive statistics (Study 2)

	M	SD	1	2	3	4	5	6
1. Time 1 POS	5.77	0.89	(.89)					
2. Time 2 POS	5.27	1.06	.56**	(.92)				
3. Time 1 LMX	5.30	0.82	.58**	.42**	(.81)			
4. Time 2 LMX	5.23	1.05	.41**	.68**	.64**	(.90)		
5. Salary	4.17	1.35	12	09	05	06		
6. Organization size	2.25	0.87	04	06	02	.00	.49**	_

Note: N = 209. Cronbach's alphas are provided in parentheses on the diagonal. LMX, leader-member exchange; POS, perceived organizational support.

J. Organiz. Behav. 35, 635–656 (2014)

DOI: 10.1002/job

Copyright © 2013 John Wiley & Sons, Ltd.

^{**}p < .01.

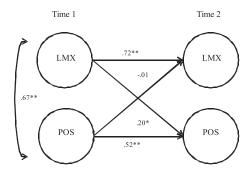


Figure 3. Path diagram for cross-lagged panel analysis of perceived organizational support (POS) and leader–member exchange (LMX; Study 2)

In sum, consistent with Hypothesis 3a that LMX leads to POS, LMX was positively related to the temporal change in POS. Contrary to Hypothesis 3b, the relationship between POS and the temporal change in LMX was not statistically significant. These results are consistent with the view that employees view supervisors as agents of the organization and therefore attribute their favorable exchange relationships with the supervisor, in part, to the organization.

Study 3: Supervisor's Organizational Embodiment as a Moderator of the Relationship between Leader–Member Exchange and Perceived Organizational Support

We hypothesized that the relationship between LMX and POS should be stronger among employees who strongly identify their supervisor with the organization (Hypothesis 4). This interactive relationship should carry over to withdrawal behavior such that POS mediates the association between the LMX \times SOE interaction and lessened withdrawal (Hypothesis 5).

Method

Sample and procedure

We administered a survey to a different sample of 260 subordinates and 89 supervisors of the same social service agency examined in Study 1. Subordinates completed their surveys in groups of 12–20. When matching supervisor and employee responses and removing those that had missing data on the variables of interest, we had data from 211 subordinates and 80 supervisors. In our final dataset, the number of the subordinates evaluated by each supervisor ranged from 1 to 10, with a mean of 2.6. The subordinates were 70.3 per cent female, with an average age of 43.5 years and an average tenure of 5.0 years; 33.0 per cent had a high school degree, and 64.1 per cent had a college degree or higher. Concerning ethnic identification, 61.7 per cent were African–American, 33.5 per cent were Caucasian, 2.4 per cent were Hispanic/Latino, and 1.9 per cent were Asian.

Measures

For all scales except withdrawal behavior, respondents rated their agreement with each statement using a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*).

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635-656 (2014)

Leader-member exchange (α =.92). Subordinates reported their perceptions concerning the quality of the exchange relationship between themselves and their supervisors using Liden and Maslyn's (1998) 12-item multidimensional scale.

Perceived organizational support (α = .92). Subordinates responded to eight items loading highly on the Survey of Perceived Organizational Support (Eisenberger et al., 1986).

Supervisor's organizational embodiment (α =.86). We used five items to assess the extent to which employees identify their supervisor with the organization (Eisenberger et al., 2010). We took four items from the original scale, examples of which are, "My supervisor is characteristic of [name of organization]" and "My supervisor and [name of organization] have a lot in common." In view of the small number of original items, we added a fifth similar item, "My supervisor and [name of organization] are alike," to increase potential scale reliability (Hellman et al., 2006). Consistent with the use of these five items by Shoss et al. (2013), we viewed them as more central to the construct of employees' identification of the supervisor with the organization than the additional items in the original scale, which involved the experience of supervisor's treatment as organization's treatment and may best be considered an outcome of employees' identification of the supervisor with the organization.

Withdrawal behavior (α =.66). Our measure of withdrawal behavior was composed of three items from the withdrawal scale of the Counterproductive Work Behavior Checklist (CWB-C; Spector et al., 2006). Using a 1 (never) to 5 (every day) scale, supervisors indicated the extent to which each employee came to work later, took longer breaks, and left work earlier than he or she was supposed to. The CWB-C has a fourth item for withdrawal behavior regarding calling in sick when not actually ill. However, we omitted this item because of the supervisors' expressed lack of evidence concerning whether absences reflected actual illness and emergency as opposed to motivational deficit. Whereas the three-item scale demonstrated a reliability similar to that reported in Spector et al. (2006), we note that behavior checklists, as other formative measures where indicators are viewed as distinct rather than reflecting an underlying construct, are not expected to have high internal reliability (e.g., Spector & Jex, 1998). Thus, employees may vary in (i) the preference for different types of withdrawal, (ii) the expectancy of being observed and punished for different types of withdrawal, and/or (iii) their ability to enact different types of withdrawal.

Control variables. We considered dyad tenure between subordinate and supervisor as well as workgroup size (as indicated by the number of subordinates rated by each supervisor) as potential control variables. As dyad tenure had a significant bivariate relationship with POS, we included it as a control variable in the equation predicting POS. As workgroup size was not significantly related to the outcome variables (POS and withdrawal behavior) and dyad tenure was not significantly related with withdrawal, we followed Becker's (2005) recommendation to omit them from the respective models. We also considered age, gender, and race as control variables and included them as predictors if they had significant bivariate correlations with the outcome variables.

Results

Descriptive statistics and variable correlations

Means, standard deviations, reliabilities, and the intercorrelations among variables are displayed in Table 3. Of greatest interest, LMX was positively related to POS, and both were associated with decreased withdrawal behavior. However, we caution that the correlations with withdrawal behavior may be biased because they do not take into account the nested structure of the data.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

Table 3. Descriptive statistics and intercorrelations (Study 3).

	M	SD	1	2	3	4	5	6	7	8	9
1. Age	43.47	13.03	_								
2. Gender ^a	0.30	0.46	.02	_							
3. Race ^b	0.34	0.47	.01	.11							
4. Dyad tenure ^c	3.16	1.29	.34**	12	.02						
5. Group size	4.01	2.49	.10	.10	.17*	.15*					
6. LMX	5.42	1.20	.19**	.01	02	.16*	01	(.92)			
7. POS	4.91	1.36	.26**	04	02	.10	.08	.64**	(.92)		
8. SOE	4.89	1.39	.08	04	02	.17*	.06	.48**	.49**	(.86)	
9. Withdrawal behavior	1.50	0.59	05	.00	19**	.07	.02	16*	17*	.03	(.66)

Note: Ns = 201–211. Cronbach's alphas are provided in parentheses on the diagonal. LMX, leader–member exchange; POS, perceived organizational support; SOE, supervisor's organizational embodiment.

Tests of hypotheses

As in Study 1, because employees were nested within supervisors and supervisors provided withdrawal ratings, we used multilevel modeling to analyze our data. Doing so was required by the significant between-group variance in withdrawal behavior ($\tau^2 = 0.16$, SE = 0.05, ICC(1) = 0.42, p < .01). Results from our multilevel analyses are presented in Table 4.

Recall that Hypothesis 4 stated that SOE moderates the relationship between LMX and POS. As shown in the first data column of Table 4, our multilevel regression analysis indicated that the LMX × SOE interaction term was significantly associated with POS ($\gamma = 0.08$, SE = 0.03, p < .05). To explore the nature of this interaction, we

Table 4. Results of multilevel analyses (Study 3).

	Depe	ndent variable
	POS	Withdrawal behavior ^a
Covariance parameters		
$ au^2$	0.05	0.15**
σ^2	0.90**	0.19**
Fixed effects		
Intercept	4.26	2.11
	0.01 (0.01)*	
Age Race ^b	,	-0.22 (0.08)**
POS		-0.11 (0.04)**
LMX	0.63 (0.07)**	-0.04(0.04)
SOE	0.22 (0.06)**	0.03 (0.03)
LMX * SOE	0.08 (0.03)*	0.00 (0.02)
Pseudo- R^2	0.48	0.10

Note: Standard errors are displayed in parentheses. τ^2 and σ^2 respectively reflect between-group (level 2) and within-group (level 1) residual variance. We used the pseudo- R^2 calculation recommended by Snijders and Bosker (1999), which reflects the proportion of reduction in mean square prediction error. LMX, leader–member exchange; POS, perceived organizational support; SOE, supervisor's organizational embodiment. ^aBecause of missing withdrawal ratings or demographic information, N for withdrawal behavior as dependent variable was 201.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. **35**, 635–656 (2014) DOI: 10.1002/job

^aGender was coded 0 = female, 1 = male.

^bRace was coded 0 = minority, 1 = Caucasian.

^cDyad tenure was coded as the following: 1=less than 6 months, 2=between 6 months and 1 year, 3=more than 1 year but less than 3 years, 4=between 3 and 6 years, 5=more than 6 years but less than or equal to 10 years, 6=over 10 years.

^{*}p < .05; **p < .01.

^bRace was coded 0 = minority, 1 = Caucasian.

^{*}p < .05; **p < .01.

plotted the relationship between LMX and POS at one standard deviation above and one standard deviation below the mean of SOE. The relationship between LMX and POS was statistically significant both for those who perceived high levels of SOE (B=0.74, SE=0.09, p<.01) and for those who perceived low levels of SOE (B=0.51, SE=0.07, p<.01) although, as indicated by the significant interaction effect (Figure 4), the relationship was stronger for employees with high SOE. Thus, Hypothesis 4 was supported.

Hypothesis 5 stated that the POS mediates the relationship between the LMX × SOE interaction and withdrawal behavior. We used Preacher, Rucker, and Hayes' (2007) regression-based approach to test this moderated mediation model. The first step involved establishing the moderating impact of SOE on the LMX-POS relationship; support for this effect was reported in the previous paragraph. The second step involved calculating the conditional indirect effects of LMX through POS on withdrawal behavior at low SOE and high SOE. Consistent with Hypothesis 5, the conditional indirect effect of LMX on withdrawal behavior was significant at high SOE (+1 SD, point estimate: -0.08, SE=0.03, p<.01) and low SOE (-1 SD, point estimate: -0.06, SE=0.02, p<.01). In order to assess whether the relationship between LMX and reduced withdrawal behavior was greater at high SOE than at low SOE, we replicated our model using multilevel path analysis in MPlus with the "model constraint" feature to calculate the difference between the estimates of the two conditional indirect effects (cf. Preacher & Hayes, 2008). This revealed that slope of the conditional indirect effect between LMX and reduced withdrawal behavior was significantly greater at high SOE than at low SOE (Z=0.03; SE=0.01, p<.05).

In sum, in accord with the hypothesized second link in the SPOS-LMX-subordinate POS chain, LMX was positively related to subordinate POS. Consistent with the explanation that employees view the supervisor as an organizational agent and therefore attribute LMX partly to the organization, the association between LMX and POS was greater among employees with high SOE, and this relationship extended to reduced employee withdrawal behavior.

Discussion

The present findings provide an increased understanding of the interdependence between POS and LMX, involving a relational chain in which SPOS is associated with the development of a high-quality relationship with subordinates

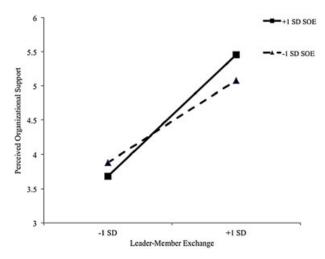


Figure 4. Leader–member exchange by supervisor's organizational embodiment interaction predicting perceived organizational support (Study 3)

J. Organiz. Behav. 35, 635–656 (2014)

(first link: SPOS-LMX) who, in turn, view LMX as indicative of POS (second link: LMX-subordinate POS) and repay the organization with increased dedication and effort (examined in terms of reduced withdrawal behavior). These interdependencies between POS and LMX follow from organizational support theory (Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002), which holds, in the case of the first link, that POS elicits supervisors' felt obligation to repay the organization and produces an increased expectancy that their efforts will be rewarded. Supervisors are therefore motivated to enhance their role-related behaviors that help subordinates carry out their responsibilities and encourage them to become more dedicated to the organization. In the second link, subordinates generalize their perceived favorable treatment from the supervisor to the organization, leading to increased POS and, ultimately, reduced withdrawal behavior.

The strength of these relationships was influenced by reciprocation wariness and SOE. In the first link (SPOS–LMX), highly wary supervisors, who have little expectation that their subordinates will return favored treatment, failed to reciprocate high POS as they did not develop high-quality relationships with subordinates. In the second link, subordinates who strongly identified their supervisor with the organization showed a greater relationship between LMX and POS. The findings that supervisor's wariness and SOE, respectively, moderated links in the SPOS–LMX–subordinate POS chain provide additional support for the theoretical rationales argued here—namely (i) supervisors establish high-quality relationships with subordinates in order to repay the organization for high SPOS and (ii) LMX leads to POS because employees view their supervisors as representatives of the organization and therefore attribute their favorable LMX relationship partly to the organization.

First link: Relationship between supervisor's perceived organizational support and leader-member exchange

The finding that SPOS was positively related to LMX only among low reciprocation-wary supervisors suggests an instrumental purpose of supervisors' enhancing their LMX relationship with subordinates. On the basis of the reciprocity norm, supervisors with high POS may wish to fulfill their felt obligation to the organization for high POS through concrete demonstrations of improved performance among subordinates. Improved performance by subordinates would also have the benefit of enhancing prospects of their own rewards.

The results are consistent with related findings concerning the reluctance of highly wary individuals to form social exchange relationships (Cotterell et al., 1992). A degree of vigilance in trying to develop exchange relationships with others, including subordinates, is judicious given that some individuals do, in fact, use the reciprocity norm to gain more than they receive. For example, some subordinates in high-quality LMX relationships may take advantage of their in-group status by lessening their work effort or engaging in increased withdrawal behaviors of various kinds. Yet suspicions regarding the selfish intentions of others lead wary individuals, including supervisors, to reject relationship development. Thus, highly wary individuals have been found to reject overtures for cooperation to contribute to common goals. Even those who know wary individuals well view them as relatively selfish and aloof (Cotterell et al., 1992; Eisenberger et al., 1987).

Wary supervisors may believe that attempts to establish stronger working relationships with subordinates are likely to go unreciprocated. Rather, wary supervisors may choose to reciprocate POS through increased efforts on the organization's behalf involving activities that do not depend on reciprocation from subordinates. Lynch et al. (1999) found that when POS was low, highly wary nonsupervisory employees performed more poorly than less-wary employees. However, when POS was high, the highly wary employees performed as well or better than low wary employees. Thus, highly wary supervisors may attempt to repay POS by increasing their efforts in tasks that require little social interaction, depending on themselves alone to achieve their objectives. Future research might examine ways in which highly wary supervisors reciprocate high POS.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

Second link: Relationship between leader-member exchange and perceived organizational support

Our finding of a positive relationship between LMX and temporal change in POS (Study 2) provides stronger evidence that LMX leads to POS than that obtained in prior studies that assessed these variables simultaneously on a single occasion. Moreover, the result is consistent with the finding of Eisenberger et al. (2002) that perceived support from the supervisor was related to change in POS. A high-quality LMX relationship appears to indicate to employees that they are positively valued by the organization as well as by the supervisor. Our use of individual scale items as indicators of LMX and POS at both times in a structural model has the benefit of taking into account autocorrelated error variances between successive measurements of the same latent variables over time (Maruyama, 1998). However, even advanced cross-lagged designs, such as the present one, leave open the possibility that the observed association could be due to variables other than those for which we controlled (Finkel, 1995).

The LMX-subordinate POS cross-lagged relationship is consistent with the assumption of organizational support theory that the subordinate sees the supervisor as an organizational agent and therefore holds the organization, as well as the supervisor, responsible for many of the supervisor's actions. According to organizational support theory, this attribution of responsibility to the organization for the supervisor's actions is enhanced by (i) the supervisor's part in furthering the organization's goals and objectives; (ii) the supervisor's roles in directing, monitoring, and coaching the subordinate's performance at the behest of the organization; and (iii) the supervisor's allocation of organizational resources needed by the subordinate to carry out his or her job more effectively (Eisenberger et al., 1986; Levinson, 1965).

Our finding of a lack of a cross-lagged relationship between POS and temporal change in LMX is less definitive than the positive finding of a relationship between LMX and temporal change in POS. We cannot assume that the duration required for LMX to influence POS is the same as that required for POS to influence LMX (Maruyama, 1998). Our study examined POS and LMX over a 5-month interval among new hires, which may have been too short to observe the influence of employees' POS on LMX that may develop among more tenured employees. One might argue that the relationship between LMX and POS should be bidirectional. Wayne et al. (2002), for example, suggested that high POS subordinates may be more supportive of the supervisor, encouraging the formation of a high-quality LMX relationship. Future research might assess longer term relationships by examining LMX and POS several times and using longer intervals between observations (Maruyama, 1998).

Study 3 found that the relationship between subordinate's LMX and POS was greater for employees who more closely identified their supervisor with the organization (high SOE). This suggests that employees differ in the extent to which they view their supervisor as incorporating the characteristics of the organization, affecting the strength of the relationship between LMX and POS. Employees who strongly identify their supervisor with the organization appear to give the organization greater credit for a high-quality exchange relationship with the supervisor, thereby enhancing POS.

It might be argued that just as subordinates view the supervisor as an agent of the organization (the second link, LMX-subordinate POS), so too do supervisors view subordinates as agents of the organization and thus reciprocate POS by establishing high-quality LMX relationships with subordinates (the first link, SPOS-LMX). The reason we emphasize identification with the organization more for the second link than for the first link is that supervisors generally have higher status than subordinates in the organization. Accordingly, supervisor support has been found to be more closely related to POS than is coworker support (Ng & Sorensen, 2008). Thus, subordinates should have a relatively strong tendency to identify supervisors with the organization; supervisors should have a relatively weak tendency to identify subordinates with the organization.

Our findings suggest that employees recognize that supervisors differ in the extent to which their values and goals overlap with those of the organization. Employees identify some supervisors more than others with the organization, and employees' exchange relationships with those supervisors have a greater impact on POS. However, we found

J. Organiz. Behav. 35, 635–656 (2014)

that even when SOE was low, the relationship between LMX and POS was positive. Employees may believe that while supervisors act partly on the basis of their own motives and goals, the organization is still responsible for hiring the supervisors and condoning their actions toward subordinates.

We found that subordinate POS mediated the relationship between the LMX \times SOE interaction and withdrawal behavior. That is, LMX was more strongly associated with subordinate POS for those with high SOE, and this effect was associated with reduced withdrawal behavior. The finding is consistent with previous findings of POS being negatively associated with withdrawal behavior (Rhoades & Eisenberger, 2002). Thus, our results suggest that the beneficial outcomes of LMX for employees and the organization are enhanced when employees strongly identify their supervisor with the organization.

Methodological advantages and limitations

The methodological limitations, as well as advantages, of the present research should be acknowledged. Study 2 is the first cross-lagged study of which we are aware to examine the relationship between perceptions of exchange at the supervisory level (LMX) and the organizational level (POS), providing stronger causal inferences than past studies. However, our use of cross-sectional designs in Studies 1 and 3 prevents us from making robust causal inferences regarding the relationships among variables in these studies. Nonetheless, the confirmation of a set of interrelated hypotheses, derived from our conceptualization, adds credence to the findings.

We used different measures of LMX in Studies 2 and 3. Although these measures have been found to be highly correlated (Dulebohn et al., 2012), it would be prudent to replicate the results of each study with the alternative measure. Also, common method variance might have inflated relationships among variables measured from the same source, although Spector's (2006) review provides evidence suggesting that this source of bias occurs less frequently than is commonly supposed. In addition, employees themselves were best able to judge LMX and POS in Study 2 and additionally SOE in Study 3, and therefore it was appropriate to assess these constructs from the same source. In Study 2, the temporal interval between the successive assessments of the variables would tend to reduce possible inflation of relationships because of common method variance. Also, in Study 3, common method variance would not be expected to influence the central prediction of an interactive effect of LMX and SOE on POS (Evans, 1985). Moreover, in Study 3, we assessed subordinates' withdrawal behavior from supervisors. Although it is important to extend the findings from refraining from negative behavior to performing positive behaviors, there is an ample literature relating both LMX and POS to employee behaviors helpful to the organization (Dulebohn et al., 2012; Rhoades & Eisenberger, 2002).

Suggestions for future research and practical implications

We found that subordinate POS was related to a reduced level of withdrawal behaviors. POS has also been found to be associated with various other outcomes related to employees' well-being, including positive mood at work (Eisenberger et al., 2001), job satisfaction (Eisenberger, Cummings, Armeli, & Lynch, 1997), organization-based self-esteem (Lee & Peccei, 2007), and reduced psychological strain (Cropanzano, Howes, Grandey, & Toth, 1997). POS is additionally associated with positive consequences for the organization, including increased in-role and extra-role performance, creativity and innovation, safety-related behavior, and reduced workplace deviance (Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002). Therefore, initiating the SPOS–LMX–subordinate POS chain is likely to have benefits for employees and the organization.

Organizational practices such as fairness and recognition have been found to be positively related to SPOS (Wayne et al., 2002) and therefore could be used to facilitate the SPOS–LMX–subordinate POS chain. Other work experiences found important for the development of POS of lower level employees, such as integration into the social network at work (Zagenczyk, Scott, Gibney, Murrell, & Thatcher, 2010) and supportive human resource

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

practices (Rhoades & Eisenberger, 2002), may also contribute to SPOS. Thus, increasing supervisor perceptions of fairness (e.g., by giving them input in important decisions), integrating them into supportive social networks, and providing them supportive human resource practices may foster SPOS which, in turn, enhances the quality of supervisors' exchange relationship with subordinates.

We found that SPOS enhanced LMX relationships with subordinates only when the supervisor had low reciprocation wariness. Thus, organizations might assess this suspicion of the intentions of others when making decisions concerning leadership placements that require the development of strong, trusting supervisor—subordinate relationships. Initial evidence that highly wary employees perform well when POS is high suggests they might function best in nonsupervisory positions (Lynch et al., 1999). Thus, employers should not necessarily forgo the talents of those untrusting of others if a proper niche can be found for them.

Given the moderating role of SOE in the relationship of LMX with POS and reduced withdrawal behavior, practical interventions might focus on increasing SOE for supervisors who have high-quality relationships with their subordinates. Prior research has found that explicitly training supervisors to identify their favorable treatment of subordinates with the organization appears to enhance SOE (Gonzalez-Morales, Kernan, Becker, & Eisenberger, 2012). Additionally, SOE was found to be positively associated with supervisors' favorable comments about the organization (Eisenberger et al., 2010). These favorable comments were associated with supervisor identification with the organization, suggesting a possible area for intervention. That is, favorable treatment of supervisors, leading to their greater identification with the organization, should increase supervisors' favorable statements about the organization and contribute to subordinates' POS (Wayne & Ferris, 1990).

Conclusions

The present findings suggest that LMX and POS are linked by interdependent relationships leading from the supervisor's perceptions of support from the organization (SPOS) to the formation of high-quality exchange relationships with subordinates (LMX) and then to subordinates' POS and reduced withdrawal behavior. Further, the strength of the link between SPOS and LMX was strongly dependent on the supervisor's low level of fear of exploitation by others (reciprocation wariness). Consistent with the view that employees perceive the organization as partly responsible for treatment received from supervisors, LMX was found more strongly related to POS when employees strongly identified their supervisors with the organization (SOE). These interdependencies between POS and LMX suggest that they are related in multiple ways, with important practical implications for the workplace.

Author biographies

Robert Eisenberger is a professor of psychology and management at the University of Houston. His main research interests are employee—organization relationships, employee motivation, and creativity.

Mindy Krischer Shoss is an assistant professor of psychology at Saint Louis University. Her research interests include employee stress and coping, functional and dysfunctional workplace relationships, counterproductive work behavior, and adaptive performance.

Gökhan Karagonlar is an assistant professor in the Management and Psychology Departments at Dokuz Eylul University. He received his PhD in Social Psychology from the University of Delaware. His research interests include social exchange theories of the employee–organization relationship, leadership and motivation, and cooperation in social dilemmas.

M. Gloria González-Morales is an assistant professor of psychology at University of Guelph, Canada. Her research involves the disciplines of occupational health psychology and positive organizational psychology and focuses on stress, work–life issues, victimization, and positive organizational interventions to enhance well-being and performance.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

Robert E. Wickham is an assistant professor of clinical psychology at Palo Alto University. His research focuses on substantive and methodological topics in interpersonal relationships and small groups.

Lou Buffardi is an associate professor of psychology at George Mason University where he was instrumental in founding both MA and PhD programs in I/O psychology. His research interests focus on the antecedents and consequences of work attitudes and their relationships with quality of work life.

References

- Ashforth, B. E., & Mael, F. A. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20–39. Bauer, T. N., Erdogan, B., Liden, R. C., & Wayne, S. J. (2006). A longitudinal study of the moderating role of extraversion: Leader–member exchange, performance, and turnover during new executive development. *Journal of Applied Psychology*, 91, 298–310. doi: 10.1037/0021-9010.91.2.298
- Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods*, 8, 274–289. doi: 10.1177/1094428105278021
- Birati, A., & Tziner, A. (1996). Withdrawal behavior and withholding efforts at work (WBWEW): Assessing the financial cost. *Human Resource Management Review*, 6, 305–314. doi: 10.1016/S1053-4822(96)90021-2
- Blau, P. A. (1964). Exchange and power in social life. New York, NY: Wiley
- Bollen, K. A. (1989). Structural equations with latent variables. Wiley series in probability and mathematical statistics. New York, NY: Wiley Bollen.
- Cotterell, N., Eisenberger, R., & Speicher, H. (1992). Inhibiting effects of reciprocation wariness on interpersonal relationships. *Journal of Personality and Social Psychology*, 62, 658–668. doi: 10.1037/0022-3514.62.4.658
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18, 159–180. doi: 1379(199703)18:2<159:: AID-JOB795>3.0.CO;2-D
- Dulebohn, J. H., Bommer, W. H. Liden, R. C. Brouer, R. L. & Ferris, G. R. (2012). A meta-analysis of leader–member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38, 1715–1759. doi: 10.1177/0149206311415280
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12, 1–22. doi: 10.1037/1082-989X.12.1.1
- Eisenberger, R., & Stinglhamber, F. (2011). Perceived organizational support: Fostering enthusiastic and productive employees. Washington, DC: American Psychological Association Books. doi: 10.1037/12318-000
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86, 42–51. doi: 10.1037/0021-9010.86.1.42
- Eisenberger, R., Cotterell, N., & Marvel, J. (1987). Reciprocation ideology. *Journal of Personality and Social Psychology*, 53, 743–750. doi: 10.1037/0022-3514.53.4.743
- Eisenberger, R., Cummings, J., Armeli, S., Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82, 812–820. doi: 10.1037/0021-9010.82.5.812
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500–507. doi: 10.1037/0021-9010.71.3.500
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology*, 95, 1085–1103. doi: 10.1037/a0020858
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87, 565–573. doi: 10.1037/0021-9010.87.3.565
- Erdogan, B., & Enders, J. (2007). Support from the top: Supervisors' perceived organizational support as a moderator of leader–member exchange to satisfaction and performance relationships. *Journal of Applied Psychology*, 92, 321–330. doi: 10.1037/0021-9010.92.2.321
- Erdogan, B., & Liden, R. C. (2002). Social exchanges in the workplace: A review of recent developments and future research directions in leader–member exchange theory. In L. L. Neider, & C. A. Schriesheim (Eds.), *Leadership* (pp. 65–114). Greenwich, CT: Information Age.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, *36*, 305–323.
- Finkel, S. E. (1995). Causal analysis with panel data. Thousand Oaks, CA: Sage.

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

- Gonzalez-Morales, M. G., Kernan, M., Becker, T., & Eisenberger, R. (2012, April). Managerial training to increase perceived organizational support. Society for Industrial and Organizational Psychology, San Diego, CA.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25, 161–178.
- Graen, G., & Scandura, T. (1987). Towards a psychology of dyadic organizing. *Research in Organizational Behavior*, 9, 175–208.
- Hellman, C. M., Fuqua, D. R., Worley, J. A. (2006). A reliability generalization study on the survey of perceived organizational support: The effects of mean age and number of items on score reliability. *Educational and Psychological Measurement*, 66, 631–642. doi: 10.1177/0013164406288158
- Kamdar, D., McAllister, D. M., & Turban, D. B. (2006). 'All in a day's work': How follower individual differences and justice perceptions predict OCB role definitions and behavior. *Journal of Applied Psychology*, 91, 841–855. doi: 10.1037/0021-9010.91.4.841
- Kline, R. B. (2010). Principles and practice of structural equation modeling (3rd ed.). New York, NY: Guilford Press.
- Lee, J., & Peccei, R. (2007). Perceived organizational support and affective commitment: The mediating role of organization-based self-esteem in the context of job insecurity. *Journal of Organizational Behavior*, 28, 661–685. doi: 10.1002/job.431
- Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, 9, 370–390. doi: 10.1037/11848-002
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader–member exchange: An empirical assessment through scale development. *Journal of Management*, 24, 43–72. doi: 10.1016/S0149-2063(99)80053-1
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader–member exchanges. *Journal of Applied Psychology*, 78, 662–674. doi: 10.1037/0021-9010.78.4.662
- Lynch, P. D., Eisenberger, R., & Armeli, S. (1999). Perceived organizational support: Inferior-versus-superior performance by wary employees. *Journal of Applied Psychology*, 84: 467–483. doi: 10.1037/0021-9010.84.4.467
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*, 130–149.
- Martocchio, J. J. (1992). The financial cost of absence decisions. *Journal of Management*, 18, 133–152. doi: 10.1177/014920639201800109
- Maruyama, G. M. (1998). Basics of structural equation modeling. Thousand Oaks, CA: Sage.
- Maslyn, J. M., & Uhl-Bien, M. (2001). Leader–member exchange and its dimensions: Effects of self-effort and other's effort on relationship quality. *Journal of Applied Psychology*, 86, 697–708. doi: 10.1037/0021-9010.86.4.697
- Morgan-Lopez, A. A., & MacKinnon, D. P. (2006). Demonstration and evaluation of a method for assessing mediated moderation. *Behavior Research Methods*, 38, 77–87. doi: 10.3758/BF03192752
- Muthén, L. K., & Muthén, B. (2010). MPlus user's guide (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Ng, T. W. H., & Sorensen, K. L. (2008). Toward a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. *Group & Organization Management*, *33*, 243–268. doi: 10.1177/1059601107313307
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. doi: 10.3758/BRM.40.3.879
- Preacher, K. J., Rucker, D. D., Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227. doi: 10.1080/00273170701341316
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698–714. doi: 10.2307/1556364
- Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. *Journal of Applied Psychology*, 93, 472–481. doi: 10.1037/0021-9010.93.2
- Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. *Journal of Applied Psychology*, 69, 428–436. doi: 10.1037/0021-9010.69.3.428
- Schriesheim, C. A., Castro, S. L., & Cogliser, C. C. (1999). Leader–member exchange (LMX) research: A comprehensive review of theory, measurement, and data-analytic practices. *The Leadership Quarterly*, 10, 63–113. doi: 10.1016/S1048-9843(99)80009
- Shanock, S., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support and performance. *Journal of Applied Psychology*, 91, 689–695. doi: 10.1037/0021-9010.91.3.689
- Shore, L. M., & Shore, T. H. (1995). Perceived organizational support and organizational justice. In R. S. Cropanzano, & K. M. Kacmar (Eds.), *Organizational politics, justice, and support: Managing the social climate of the workplace* (pp. 149–164). Westport, CT: Quorum.
- Shore, L. M., Bommer, W. H., Rao, A., & Seo, J. (2009). Reciprocation wariness as a moderator of employee–organization exchanges and employee outcomes. *Journal of Managerial Psychology*, 24, 710–721. doi: 10.1108/02683940910996752
- Shoss, M. K., Eisenberger, R., Restubog, S. L. D., Zagenczyk, T. J. (2013). Blaming the organization for abusive supervision: The roles of perceived organizational support and supervisor's organizational embodiment. *Journal of Applied Psychology*, 98, 158–168. doi: 10.1037/a0030687

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. 35, 635–656 (2014)

- Singer, J. (1998). Using SAS PROC MIXED to fit multilevel models, hierarchical models, and individual growth models. *Journal of Educational and Behavioral Statistics*, 24, 323–355.
- Snijders, T., & Bosker, R. (1999). Multilevel analysis: An introduction to basic and advanced multilevel modeling. London: Sage. Spector, P. E. (2006). Method variance in organizational research: Truth of urban legend? Organizational Research Methods, 9, 221–232. doi: 10.1177/1094428105284955
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3, 356–367.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68, 446–460. doi: 10.1016/j. jvb.2005.10.005
- Tangirala, S., Green, S., & Ramanujam, R. (2007). In the shadow of the boss's boss: Effects of supervisors' upward exchange relationships on employees. *Journal of Applied Psychology*, 92, 309–320. doi: 10.1037/0021-9010.92.2.309
- Tepper, B. J., & Taylor, E. C. (2003). Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behaviors. *Academy of Management Journal*, 46, 97–105.
- Uhl-Bien, M., & Maslyn, J. M. (2003). Reciprocity in manager–subordinate relationships: Components, configurations, and outcomes. *Journal of Management*, 29, 511–532. doi: 10.1016/S0149-2063_03_00023-0
- Wayne, S. J., & Ferris, G. R. (1990). Influence tactics, affect, and exchange quality in supervisor–subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology*, 75, 487–499. doi: 10.1037/0021-9010.75.5.487
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader–member exchange. *Journal of Applied Psychology*, 87, 590–598. doi: 10.1037//0021-9010.87.3.590
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader–member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111. doi: 10.2307/257021
- Zagenczyk, T. J., Scott, K. D., Gibney, R., Murrell, A. J., & Thatcher, J. B. (2010). Social influence and perceived organizational support: A social networks approach. *Organizational Behavior and Human Decision Processes*, 111, 127–138. doi: 10.1016/j. obhdp.2009.11.004
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1, 145–169. doi: 10.1037/1076-8998.1.2.145

Copyright © 2013 John Wiley & Sons, Ltd.

J. Organiz. Behav. **35**, 635–656 (2014) DOI: 10.1002/job