

When Supervisors Feel Supported: Relationships With Subordinates' Perceived Supervisor Support, Perceived Organizational Support, and Performance

Linda Rhoades Shanock
University at Albany, State University of New York

Robert Eisenberger
University of Delaware

The authors surveyed full-time retail employees and their supervisors to investigate relationships of supervisors' perceived organizational support (POS) with subordinates' perceptions of support from their supervisors (perceived supervisor support [PSS]), POS, and in-role and extra-role performance. The authors found that supervisors' POS was positively related to their subordinates' perceptions of supervisor support. Subordinates' PSS, in turn, was positively associated with their POS, in-role performance, and extra-role performance. Beyond these bivariate relationships, subordinates' perceptions of support from the supervisor mediated positive relationships of the supervisors' POS with the subordinates' POS and performance. These findings suggest that supervisors who feel supported by the organization reciprocate with more supportive treatment for subordinates.

Keywords: perceived organizational support, perceived supervisor support, supervisors, job performance

Employees have been found to develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being (perceived organizational support [POS]; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002). Employees' view that the organization has a favorable or unfavorable orientation toward them is fostered by their assignment of humanlike characteristics to the organization (Eisenberger et al., 1986). Levinson (1965) noted that employees tend to see the organization as a living entity because it has responsibility for the actions of its agents, enacts policies and norms that provide continuity and prescribe role behaviors, and exerts power on individual employees through its agents.

Organizational support theory considers the development, nature, and outcomes of POS (e.g., Aselage & Eisenberger, 2003; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Rhoades & Eisenberger, 2002; Rhoades, Eisenberger, & Armeli, 2001; Shore & Shore, 1995). According to organizational support theory, employees develop POS to meet socioemotional needs and to determine the organization's readiness to reward increased efforts made on its behalf (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002; Shore & Shore, 1995). This social exchange approach maintains that on the basis of the norm of reciprocity, workers trade effort and dedication to their organization for such tangible incentives as pay and fringe benefits and such socioemotional benefits as esteem, approval, and caring (Blau, 1964; Eisenberger et al., 1986).

Some resources contributing to POS are provided indiscriminately to groups of employees, for example, across-the-board pay

increases and sick leave policies (Rhoades & Eisenberger, 2002). Supervisors tend to play a larger role in other, more individualized treatments such as informal feedback concerning job performance and the determination of the amount of merit pay. Because supervisors act as agents of the organization in directing and evaluating employees, subordinates tend to attribute the supportiveness of such treatment, in part, to the organization rather than solely to the supervisor's personal inclinations. As a consequence, perceptions of supervisors' support have a strong influence on subordinates' POS. Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades (2002) found with a longitudinal panel design that retail employees' perception that their supervisor valued their contributions and cared about their well-being (perceived supervisor support [PSS]) was positively related to the employees' changes in POS over time (see also, e.g., Kottke & Sharafinski, 1988; Malatesta, 1995; Rhoades et al., 2001; Stinglhamber & Vandenberghe, 2003; Yoon, Han, & Seo, 1996; Yoon & Lim, 1999).

Despite perceived supervisor support's role as an important antecedent of subordinates' POS, there has been little theoretical or empirical consideration of factors leading supervisors to treat subordinates supportively. The present study considered the possibility that supervisors' perceptions that they are supported by the organization may lead them, in turn, to treat subordinates supportively, with positive consequences for subordinates' perceived supervisor support, POS, and performance.

Supervisors' POS and Subordinates' PSS

Perceptions of organizational support have been found to develop among managerial level employees as well as among lower level workers (e.g., Eisenberger, Fasolo, & Davis-LaMastro, 1990; Wayne, Shore, & Liden, 1997). According to organizational support theory, POS leads to a felt obligation to help the organization reach its objectives, including participation in extra-role behaviors such as helping other employees (Eisenberger et al., 2001). Accordingly, Eisenberger et al., (2001) found that postal employees'

Linda Rhoades Shanock, Department of Psychology, University at Albany, State University of New York; Robert Eisenberger, Department of Psychology, University of Delaware.

Correspondence concerning this article should be addressed to Linda Rhoades Shanock, Department of Psychology, University at Albany, State University of New York, Albany, NY 12222. E-mail: shanock@albany.edu

felt obligation to the organization mediated a positive relationship between POS and such extra-role behavior as helping coworkers and the supervisor. By helping other employees carry out their jobs more effectively, such efforts would aid the organization, as well as other employees, leading to greater productivity (Bell & Menguc, 2002; Lynch, Eisenberger, & Armeli, 1999; Rhoades & Eisenberger, 2002). Wayne et al. (1997) found a positive relationship between POS and extra-role behavior for managerial level employees as well as for lower level employees. Managers with high POS were more likely to help other employees who had been absent, orient new employees to their jobs, help others when their workload increased, and assist others with their duties. The study by Wayne et al. provides preliminary evidence that managerial level employees, as well as employees who hold lower level jobs, reciprocate POS with extra-role behaviors that benefit the organization by helping others to better carry out their jobs.

Consistent with organizational support theory, Masterson's (2001) analysis of social exchange in organizations emphasizes the obligation of employees to repay favorable treatment received from the organization. Masterson suggested that, in the case of service employees, their receipt of favorable treatment would have a trickle-down effect on their treatment of customers. Masterson found that service employees who perceived they were treated fairly responded by treating customers well. Similarly, Bell and Menguc (2002) reported that service employees with high POS were rated by their customers as more attentive, courteous, and concerned about customers' best interest than were employees with low POS. Tepper and Taylor (2003) extended this approach to the relationship between supervisors and their subordinates. Tepper and Taylor argued that supervisors who perceived they were treated fairly by the organization could reciprocate by treating subordinates more favorably. Accordingly, Tepper and Taylor reported that supervisors' perception that they had received fair treatment was positively related to their subordinates' ratings of extra-role behaviors exhibited by their supervisors, including help with difficult assignments, showing respect, and help in skill building.

These findings agree with the implication of organizational support theory that supervisors who experience POS would feel an obligation to repay the organization and suggest that such a felt obligation would result in increased support of other employees. However, organizational support theory has not considered provision of support to subordinates as a possible means for supervisors to reciprocate POS. Yet, the trickle-down models of Masterson (2001) and Tepper and Taylor (2003) suggest the need for an expanded view of perceived organizational support's consequences to include supportive actions toward others not previously considered relevant, such as subordinates.

Masterson (2001) and Tepper and Taylor (2003) focused on employees' reciprocation of favorable treatment as a basis for subordinates' and customers' perceptions of favorable treatment. Tepper and Taylor argued that supervisors view mentoring subordinates as a form of extra-role behavior that serves as a way to reciprocate favorable treatment from their employer, much like rank-and-file employees use extra-role behaviors such as supporting fellow employees to reciprocate the treatment they receive. Tepper and Taylor noted that supervisors' POS may be related to the support they give subordinates as a way to reciprocate POS.

Tepper and Taylor's (2003) findings suggest that supervisors may view their advantageous position for helping subordinates to

better carry out their jobs as an opportunity to repay the organization for its support. By aiding subordinates in better fulfilling their job responsibilities, high-POS supervisors meet their increased obligation to help the organization reach its objectives. As a result, supervisors having high POS should have subordinates with strengthened perceptions of supervisor support (see Figure 1).

Hypothesis 1: Supervisors' POS will be positively related to subordinates' perceived supervisor support.

Subordinates' PSS, POS, and Performance

Because subordinates view the perceived support they receive from supervisors as representative of the organization's favorable or unfavorable orientation toward them, subordinates' PSS should lead subordinates to have higher POS (Eisenberger et al., 2002; Levinson, 1965). The positive relationship between PSS and POS has been found in numerous studies (e.g., Eisenberger et al., 2002; Kottke & Sharafinski, 1988; Malatesta, 1995; Rhoades et al., 2001; Stinglhamber & Vandenberghe, 2003; Yoon et al., 1996; Yoon & Lim, 1999). That the relationship between PSS and subordinates' POS is based on the subordinate's identification of the supervisor with the organization is suggested by the finding of a stronger positive association when supervisors have high informal status in the organization (Eisenberger et al., 2002). Thus, PSS should be positively associated with subordinates' POS (see Figure 1).

Hypothesis 2: Subordinates' PSS will be positively related to their POS.

Research from the social and organizational support literature indicates that when supervisors are supportive of subordinates, this treatment leads to favorable outcomes for the employee and the organization such as reduced work stress and enhanced performance (see Rhoades & Eisenberger, 2002; and Viswesvaran, Sanchez, & Fisher, 1999, for reviews). PSS should produce a felt obligation to help supervisors reach their goals (Eisenberger et al., 2002; Stinglhamber & Vandenberghe, 2003). Such efforts would include enhanced performance of standard job activities, as well as helping behaviors that go beyond assigned responsibilities (Becker & Kernan, 2003; Bhanthumnavin, 2003; Malatesta, 1995). Accordingly, the organizational support and social support research

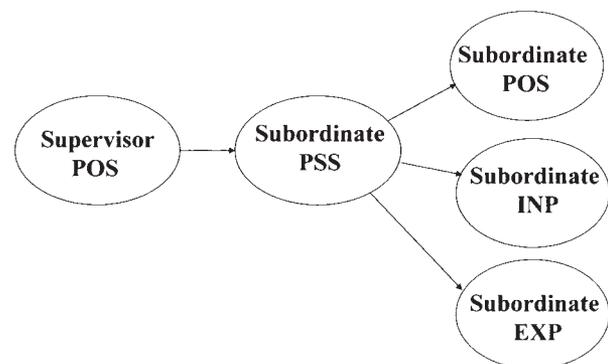


Figure 1. Hypothesized relationships between supervisors' perceived organizational support (POS) and subordinates' perceived supervisor support (PSS), POS, in-role performance (INP), and extra-role performance (EXP).

literature reports positive relationships between supportive supervision and employee in-role and extra-role performance (Bhanthumnavin, 2003; Malatesta, 1995; Olson & Borman, 1989; Schaefer & Moos, 1993). Thus, subordinates' PSS should enhance subordinates' in-role and extra-role performance (see Figure 1).

Hypothesis 3: PSS will be positively related to subordinates' in-role and extra-role performance.

In summary, because PSS has been found to be associated with favorable outcomes for employees and the organization, it is of interest to understand whether PSS is related to supervisors' perceptions of organizational support. Organizational support theory suggests that employees repay the organization's favorable treatment with supportive behaviors such as helping other employees with their jobs. In the case of supervisors, these behaviors could include providing help and resources to subordinates. We propose that supervisors who believe they are treated supportively by the organization will, in turn, have subordinates who believe they are treated supportively by their supervisor. Beyond the simple bivariate associations incorporated into the initial hypotheses, we examined the mediational influence of PSS on the relationship between the supervisors' perceptions of organizational support and subordinates' perceptions of organizational support and performance.

Hypothesis 4: PSS will mediate positive relationships of supervisors' POS with subordinates' POS, in-role performance, and extra-role performance.

Method

Sample and Procedure

Two hundred forty-eight full-time employees of a chain of large discount electronics and appliance stores located in the northeastern United States were surveyed for the subordinate portion of the sample. Employees voluntarily completed the survey during their regularly scheduled work hours in conference rooms at each site. To encourage candidness, we gave employees verbal and written assurances that their individual responses would be kept confidential and that only group data would be reported to the organization. Surveys were distributed and collected by the researchers in sealed envelopes. Participants were asked to provide their names on the outside of the envelope; names were needed to match their responses to their supervisor's responses. Ninety-three percent ($N = 231$) of participants returned questionnaires with their names.

Supervisors were provided performance rating forms for subordinates who returned questionnaires and were allotted time away from their work responsibilities to fill out the forms. All supervisors ($N = 71$) of the 231 participants filled out performance ratings for their subordinates. We made questionnaires regarding supervisors' own POS available for supervisors to fill out when they could free up time. Fifty-eight percent of supervisors returned the questionnaire about their own POS, resulting in a matched sample of 135 employees with 41 corresponding supervisors. The number of supervisors exceeds the criterion of 30 suggested by Hofmann (1997) for Level-2 units in hierarchical linear modeling (HLM). The average number of employee responses per supervisor was 3.29, ranging from 1 to 9 responses per supervisor.

The respondents were characteristic of the overall organization. Forty-four percent of the subordinate respondents were hourly paid sales-support employees (e.g., cashiers, clerks, stockers) as compared with 45% for the overall organization; 30% were salaried sales-support employees (e.g., accountants, human resource personnel; 35% for the organization overall); 22% were hourly paid sales people (16% for the organization overall); and 4% were salaried salespeople (4% for the organization overall). On aver-

age, these employees had been with the organization for 49.2 months ($SD = 40.2$), as compared with 42.0 months ($SD = 36.4$) for the organization overall. Sixty-four percent were men (66% for the organization overall); 36% were women (34% for the organization overall). Supervisors had been with the organization for 65.8 months ($SD = 47.1$), as compared with 65.2 months ($SD = 42.9$) for all supervisors in the organization. Seventy-three percent were men and 27% were women (78% and 22%, respectively, for all supervisors in the organization).

Measures

POS. Prior studies surveying many occupations and organizations provide evidence for the high internal reliability and unidimensionality of the Survey of Perceived Organizational Support (Eisenberger et al., 1986, 1990; Rhoades & Eisenberger, 2002; Shore & Tetrick, 1991; Shore & Wayne, 1993). Supervisors and subordinates rated their POS using six items from the short form of the Survey of Perceived Organizational Support (Items 1, 4, 9, 20, 23, and 27; factor loadings from .71 to .84; Eisenberger et al., 1986). We followed the recommendation of Rhoades and Eisenberger (2002) that items encompass the facets of the definition of POS (i.e., valuation of employees' contribution and care about employees' well-being). Sample items include "My work organization values my contribution to its well-being" and "My work organization strongly considers my goals and values." Respondents indicated the extent of agreement with each statement on a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*).

PSS. Consistent with Eisenberger et al. (2002), we measured PSS with the same six items used to assess POS, as modified by replacing the words *work organization* with the word *supervisor*. The same 7-point Likert scale was used as with the POS items.

Performance measures. Supervisors evaluated their subordinates' performance on a 5-point scale (1 = *disagree*; 5 = *very strongly agree*). To assess in-role performance, we used the same four items as Eisenberger et al. (2001). Sample items included "This employee meets formal performance requirements of the job" and "This employee adequately completes assigned duties." To assess extra-role performance, we used the same seven items as Lynch et al. (1999). Sample items included "This employee continues to look for new ways to improve the effectiveness of his or her work" and "This employee goes out of his or her way to help new employees."

Results

Discriminant Validity of the PSS and POS Constructs

Research provides evidence of the distinctiveness of perceived supervisor support and POS (Eisenberger et al., 2002). Nevertheless, because of the similarity of the wording of the items assessing the subordinates' ratings of the constructs, we conducted a confirmatory factor analysis to examine whether subordinate PSS and subordinate POS are distinct. We used AMOS software (Arbuckle & Wothke, 1999) to compare the fit of two nested models: (a) a one-factor model incorporating both constructs and (b) a two-factor model distinguishing perceived supervisor support and subordinate POS. On the basis of a sequential chi-square difference test (James, Mulaik, & Brett, 1982), the two-factor model, $\chi^2(53, N = 135) = 141.83$, fit the data significantly better than the one-factor model, $\chi^2(54, N = 135) = 344.54$; $\chi^2_{diff}(1, N = 135) = 202.71, p < .01$. The two-factor model also showed better fit to the data according to the comparative fit index (two-factor model = .90, one-factor model = .69), the goodness-of-fit index (two-factor model = .84, one-factor model = .61), and the Tucker-Lewis index (two-factor model = .88, one-factor model = .62). Therefore, we treated the two constructs separately in subsequent statistical analyses.

Table 1
Means, Standard Deviations, Alpha Reliabilities, and Intercorrelations Among Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Supervisor POS	3.67	1.13	(.87)				
2. Perceived supervisor support	4.29	1.30	.21*	(.89)			
3. Subordinate POS	3.45	1.41	.22**	.50**	(.87)		
4. In-role performance	3.83	0.79	.21*	.26**	.10	(.93)	
5. Extra-role performance	3.04	1.09	.19*	.33**	.09	.61**	(.90)

Note. $N = 135$. Alpha reliabilities are reported on the diagonal. Correlations between perceived organizational support (POS) and all other variables were computed using $N = 135$. Thus, for this table, supervisor POS scores ($N = 41$) were assigned to each of the individual employees in each supervisor's group.
* $p < .05$. ** $p < .01$.

Descriptive Statistics and Correlations

Means, standard deviations, internal reliabilities, and intercorrelations among the variables are reported in Table 1. All measures showed high internal reliabilities, with coefficient alphas ranging from .87 to .93. The pattern of correlations was consistent with the hypothesized relationships. That is, supervisor POS had a statistically significant positive relationship with the potential mediator, PSS, and with the outcome variables of subordinate POS, in-role performance, and extra-role performance. Also, PSS had a statistically significant positive relationship with each of the three outcome variables.

Relationships of Supervisor POS With Subordinate PSS, POS, and Performance

We used HLM (Version 5.0; Raudenbush, Bryk, Cheong, & Congdon, 2001) to assess the degree to which supervisors' POS was related to subordinates' PSS, POS, and in-role and extra-role performance, and whether PSS mediated the relationship between supervisors' POS and subordinates' POS and in-role and extra-role performance. HLM allowed the integration of hypothesized influences of one level of organizational hierarchy on another level (supervisors' POS on subordinates' PSS) with influences within a given level of the organizational hierarchy (subordinates' PSS on their POS, in-role performance, and extra-role performance; Hofmann, Griffin, & Gavin, 2000).

Table 2 shows the HLM models used to test our predictions.¹ Consistent with Hofmann, Morgeson, and Gerras (2003), we report a series of models representing the steps necessary to test cross-level mediation that correspond to the steps required to show mediation in standard hierarchical regression (Baron & Kenny, 1986). Consistent with Hypotheses 1, Model 1 showed that supervisors' POS had a significant positive relationship with perceived supervisor support, the potential mediator ($\gamma_{01} = .24, p < .05$). The regression coefficient for the relationship is designated by the parameter γ_{01} . The corresponding R^2 value was .67. Because we are dealing with a multilevel model, R^2 refers to the amount of between-supervisor variance in PSS that is accounted for by supervisors' POS.

Table 2 also shows that, consistent with Hypotheses 2 and 3, supervisor POS had a significant positive relationship with each outcome variable: subordinate POS (Model 2: $\gamma_{01} = .28, p < .05$); in-role performance (Model 4: $\gamma_{01} = .15, p < .05$); and extra-role performance (Model 6: $\gamma_{01} = .22, p < .05$). This step is akin to showing that the initial variable in a traditional regression-based mediational model has a significant relationship with the outcome

variable. The R^2 values were .57 for POS, .16 for in-role performance, and .13 for extra-role performance.

To test for PSS's potential mediation of the relationships of supervisor POS with subordinate POS and performance, we further needed to show that the mediator (i.e., PSS) predicted each outcome variable, controlling for supervisor POS. Thus, perceived supervisor support was added to the model in which supervisor POS predicted subordinate POS (see Models 2 and 3 in Table 2), to the model in which supervisor POS predicted in-role performance (see Models 4 and 5 in Table 2), and to the model in which supervisor POS predicted extra-role performance (see Models 6 and 7 in Table 2). When conducting such cross-level mediational analyses, Hofmann and Gavin (1998) recommend grand-mean centering the potential mediator (here, PSS) upon its inclusion in the model. Grand-mean centering the mediator allows an appropriate assessment of the relationship of the mediator with the outcome variable (Hofmann & Gavin, 1998). Therefore, PSS was grand-mean centered when added to each model. PSS significantly predicted subordinate POS, in-role performance, and extra-role performance, controlling for supervisors' POS (for POS, $\gamma_{10} = .55$; for in-role, $\gamma_{10} = .14$; for extra-role, $\gamma_{10} = .23$; $ps < .05$). The R^2 values for PSS as a predictor were .31 for POS, .13 for in-role performance, and .10 for extra-role performance.

The significance of each indirect effect of supervisor POS on each of the outcome variables, through PSS, was tested using the z-prime method, as recommended by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002).² Each indirect effect was significant ($z' = 2.17, 1.13, \text{ and } 1.58$ for POS, in-role performance, and extra-role performance, respectively; $ps < .05$),

¹ Adding occupation to our analyses did not change the findings. For simplicity of presentation, occupation is omitted from the analyses reported in Table 2.

² MacKinnon et al. (2002) demonstrated that the classic method for calculating indirect effects suggested by Baron and Kenny (1986) has low statistical power, and that the z-prime method provides more power and a lesser Type I error rate than the Baron and Kenny approach. The z-prime method and Baron and Kenny's (1986) procedure are similar in that both calculate an indirect (i.e., mediated) effect of the independent variable on the outcome variable through the mediator using an identical formula. They differ only in the statistical distribution used to determine whether the indirect effect is significant. Because the estimate of the indirect effect is not normally distributed, MacKinnon et al.'s z-prime method uses a modified critical value for the test of significance, such that the critical value is 0.97, as opposed to 1.96, for the z.

Table 2
Hierarchical Linear Models and Results

Model	Coefficient (CI)			Variance component		
	γ_{00}	γ_{01}	γ_{10}	σ^2	τ_{00}	τ_{11}
Model 1—Relationship of supervisor POS with subordinate PSS						
L1: $PSS_{ij} = \beta_{0j} + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	3.42** (2.66–4.18)	.24* (.05–.43)		1.58	.05	
Models 2 & 3—Mediation of supervisor POS–subordinate POS relationship by PSS						
L1: $POS_{ij} = \beta_{0j} + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	2.42** (1.64–3.20)	.28* (.06–.50)		1.35	.09	
L1: $POS_{ij} = \beta_{0j} + \beta_{1j}(PSS_{ij}) + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	3.07** (2.31–3.83)	.10 (–.09–.29)		1.24	.09	.09*
L2: $\beta_{1j} = \gamma_{10} + U_1$.55** (.36–.74)			
Models 4 & 5—Mediation of supervisor POS–subordinate INP relationship by PSS						
L1: $INP_{ij} = \beta_{0j} + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	3.24** (2.65–3.83)	.15* (.01–.29)		0.46	.16**	
L1: $INP_{ij} = \beta_{0j} + \beta_{0j}(PSS_{ij}) + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	3.37** (2.84–3.90)	.12 (–.02–.26)		0.40	.15*	.03
L2: $\beta_{1j} = \gamma_{10} + U_1$.14* (.02–.25)			
Models 6 & 7—Mediation of supervisor POS–subordinate EXP relationship by PSS						
L1: $EXP_{ij} = \beta_{0j} + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	2.23** (1.41–3.05)	.22* (.02–.40)		0.84	.33**	
L1: $EXP_{ij} = \beta_{0j} + \beta_{1j}(PSS_{ij}) + r_{ij}$						
L2: $\beta_{0j} = \gamma_{00} + \gamma_{01}(SPOS_j) + U_0$	2.27** (1.52–3.02)	.20* (.01–.39)		0.75	.28**	.02
L2: $\beta_{1j} = \gamma_{10} + U_1$.23** (.09–.37)			

Note. CI = 95% Confidence interval; L1 = Level 1; L2 = Level 2; PSS = perceived supervisor support; SPOS = supervisor perceived organizational support; POS = employee perceived organizational support; INP = in-role performance; EXP = extra-role performance; γ_{00} = intercept of Level 2 regression predicting β_{0j} ; γ_{01} = slope of Level 2 regression predicting β_{0j} ; γ_{10} = intercept of Level 2 regression predicting β_{1j} (pooled Level 1 slopes); σ^2 = variance in Level 1 residual (i.e., variance in r_{ij}); τ_{00} = variance in Level 2 residual for models predicting β_{0j} (i.e., variance in U_0); τ_{11} = variance in Level 2 residual for models predicting β_{1j} (i.e., variance in U_1).

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

thereby supporting Hypothesis 4 by demonstrating the mediating influence of PSS on the relationships of supervisor POS with subordinate POS, in-role performance, and extra-role performance.

Full mediation was demonstrated for the outcome variables POS and in-role performance because the relationships of supervisors' POS with subordinate POS and in-role performance, controlling for PSS, were not significantly above zero (for POS, $\gamma_{01} = .10$; for in-role performance, $\gamma_{01} = .12$; see Table 2, Models 3 and 5, respectively). Partial mediation was demonstrated for the outcome variable extra-role performance because the relationship of supervisors' POS with extra-role performance, controlling for PSS, was still significantly above zero ($\gamma_{01} = .20$; see Table 2, Model 7).

Discussion

To summarize the results, supervisors' POS was positively related to their subordinates' PSS. Subordinates' PSS, in turn, was positively associated with their POS, in-role performance, and extra-role performance. Beyond these simple associations, subordinates' perceptions of support from the supervisor mediated positive relationships of supervisors' POS with subordinates' POS and performance.

Our findings extend organizational support theory by including provision of support to subordinates as a means for supervisors to reciprocate favorable treatment received from the organization. Organizational support theory assumes that on the basis of the norm of reciprocity, POS results in a felt obligation to care about

the organization's welfare and help the organization reach its objectives (Eisenberger et al., 1986). Research shows that both lower-level employees and managers reciprocate POS with heightened extra-role performance, including aid for coworkers (Eisenberger et al., 2001; Wayne et al., 1997). By helping other employees carry out their jobs more effectively, employees' efforts aid the organization, as well as other employees, leading to greater productivity (Bell & Menguc, 2002; Lynch et al., 1999; Rhoades & Eisenberger, 2002). However, organizational support theory had not previously considered the unique implications of showing concern for and valuing the contributions of supervisors. The present findings demonstrate that supervisors' own POS has important implications for the perceptions and performance of their subordinates. On the basis of our findings, supportive treatment of subordinates and its positive consequences may originate, at least in part, from the supportive treatment that supervisors receive from the organization.

This interpretation of the transmission of POS down the organizational hierarchy is consistent with other trickle down accounts of employee–employer relationships that similarly emphasize social exchange theory (Masterson, 2001; Tepper & Taylor, 2003). That is, employees increase their efforts carried out on behalf of the organization to the degree that the organization is perceived to be willing and able to reciprocate with desirable impersonal and socioemotional resources (Aselage & Eisenberger, 2003). Masterson noted that trickle-down models broaden the range of forms of

reciprocation studied in response to favorable treatment by the organization to include actions toward others not previously considered relevant. Thus, Masterson (2001) extended the justice literature to employees' treatment of customers, Tepper and Taylor (2003) extended the justice literature to supervisors' relationship with subordinates, and the present findings extend the organizational support literature to the relationships between supervisors' POS and subordinates' PSS, POS, and performance.

Together with previous organizational support theory and justice research, our findings suggest that favorable exchange relationships between an employee and an organization may result in good treatment of supervisors, coworkers, subordinates, or customers, depending on the level of the employee in the organization and the type of job held by the employee. Employees at virtually any level of the organization may reciprocate POS by aiding coworkers (e.g., Lynch et al., 1999; Wayne et al., 1997) or supervisors (e.g., Lynch et al., 1999). Additionally, the present findings suggest that supervisors make use of the opportunity to reciprocate by providing supportive treatment to subordinates, with positive consequences for subordinates' POS and performance. Future research could include measures of supportive acts provided to subordinates (e.g., positive feedback, coaching, and inclusion in decision making) to examine exactly what behaviors the supervisor carries out in response to POS that lead subordinates to have enhanced perceptions of supervisor support.

The positive relationship between supervisors' POS and subordinates' POS and performance suggests that organizations may wish to cultivate supervisor POS. Previous research involving supervisors indicates that some of the antecedents of POS for lower-level employees and supervisors are the same, including supportive treatment from higher-level employees, favorable work experiences (e.g., training and promotion opportunities), and reward expectations (Wayne et al., 1997). Other work experiences found important to the POS of lower-level employees may also be important to supervisors. For example, having a voice, or the opportunity to give input to the decision making of the organization, and autonomy in carrying out one's job responsibilities were found to be two of the most highly related antecedents of POS (Rhoades & Eisenberger, 2002). Thus, organizations that treat supervisors in ways that afford them voice and autonomy may contribute substantially to supervisors' perceptions of organizational support.

Future research should also consider dispositional characteristics of the supervisor that affect the relationship between supervisors' POS and subordinates' PSS. For example, people vary in the strength of exchange ideology, concerning the appropriateness and utility of reciprocating favorable treatment received from the organization with a concern for the organization's welfare (Eisenberger et al., 1986, 2001). Accordingly, the relationship between POS and a felt obligation to repay the organization was found to be greater among employees with a high exchange ideology (Eisenberger et al., 2001). Thus, supervisors with a high exchange ideology may feel a stronger obligation to treat their subordinates supportively under conditions of high POS, with a corresponding influence on their treatment of employees.

A limitation of our study involves its cross-sectional nature. The relationship between supervisors' POS and their subordinates' POS and performance was found to be mediated by subordinates' perceptions of supervisor support. We cannot rule out the possibility, for example, that subordinates' POS and performance lead

to greater perceptions of supervisor support. Good performers may be more likely to be treated well by their supervisor. Subordinates with high POS might attribute the organization's support to their supervisor. However, previous research concerning PSS and employee POS and performance is consistent with our findings. In a cross-lagged panel study involving two samples of employees, Eisenberger et al. (2002) found that employees' beliefs that their supervisor cared about them led to enhanced POS and not vice versa.

Another possible limitation is that the subordinate PSS and POS measures come from the same source (the subordinate) and are worded similarly. Such similarities are sources of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Common method variance, or variance attributable to the measurement method, can provide an alternative explanation for the observed relationships between variables to the ones hypothesized (Podsakoff et al., 2003). However, the results of the confirmatory factor analysis indicated that the subordinate PSS and POS constructs were distinct. Also we found that subordinate PSS mediated not only the relationship between supervisor POS and subordinate POS but also two other outcomes (i.e., in-role and extra-role performance).

In summary, our findings suggest that organizational support theory may be expanded to include support provided to subordinates as a means by which supervisors reciprocate favorable treatment from the organization. Supervisors' perceptions that the organization valued their contribution and cared about their well-being were found related to subordinates' perceptions of support by the supervisor, which, in turn, was related to subordinates' POS, in-role performance, and extra-role performance. Thus, the organization's supportive treatment of supervisors may have value for increasing the POS and performance of subordinates.

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