

Replications and Refinements

Under this heading are brief reports of studies providing data that substantiate, challenge, or refine what we think we know. These notes consist of a summary of the study's procedure and as many details about the results as space allows. Additional details concerning the results can be obtained by communicating directly with the author. Submissions to this section must provide a meaningful conceptual replication that extends the construct validity of the work.

Perceived Organizational Support and Extra-Role Performance: Which Leads to Which?

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ABSTRACT. L. Rhoades and R. Eisenberger (2002) reported the meta-analytic finding of a highly statistically significant relation between perceived organizational support (POS) and performance but concluded that the reviewed studies' methodology allowed no conclusion concerning the direction of the association. To investigate this issue, the authors assessed POS and extra-role performance 2 times, separated by a 3-year interval, among 199 employees of an electronic and appliance sales organization. Using a cross-lagged panel design, the authors found that POS was positively associated with a temporal change in extra-role performance. In contrast, the relation between extra-role performance and temporal change in POS was not statistically significant. These findings provide evidence that POS leads to extra-role performance.

Keywords: citizenship behavior, organizational behavior, perceived organizational support, work motivation

EMPLOYEES HAVE BEEN FOUND TO DEVELOP general views concerning the extent to which their organization values their contributions and cares about their well-being. Organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rhoades & Eisenberger, 2002; Shore & Shore, 1995) considers the development, nature, and outcomes of such perceived organizational support (POS). According to organizational support theory, POS meets socioemotional needs and is used by employees to infer their organization's readiness to reward increased efforts made on its behalf. The theory holds that workers act in accord with the norm of reciprocity, trading their effort and dedication to their organization for POS and its promise of future benefits. A large body of evidence indicates that employees with high levels of POS judge their jobs more favorably (e.g., increased job satisfaction, more positive mood, reduced stress) and are more invested in their organization (e.g., increased affective organizational commitment, increased performance, reduced turnover; for a review, see Rhoades & Eisenberger).

Rhoades and Eisenberger's (2002) meta-analysis on POS included 20 performance studies and found a highly statistically significant relation between POS and performance (e.g., Moorman, Blakely, & Niehoff, 1998; Shore & Wayne, 1993). Their review reported that the relation between POS and extra-role performance, involving activities that aid the organization but are not explicitly required of employees, was stronger than the relation between POS and performance of standard job activities (in-role performance). The reason may be that extensive monitoring and high standards limit opportunities for variation in in-role performance. For example, factories and call centers often monitor error and production rates of individual employees who are required to meet set standards. In contrast, extra-role behaviors—such as aiding fellow employees, taking actions that protect the organization from risk, offering constructive suggestions, and gaining knowledge and skills that are beneficial to the organization (George & Brief, 1992)—often occur as opportunities arise and are not closely monitored. Research carried out on POS after this meta-analysis continues to support the conclusion that there is a positive relation between POS and extra-role performance (e.g., Byrne & Hochwarter, 2006; Wayne, Shore, Bommer, & Tetrick, 2002).

Prior studies of POS and performance involved a single assessment of this relation, whether POS and performance were reported simultaneously or successively. Although researchers have interpreted the findings to support the view of organizational support theory that POS increases extra-role performance (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001), the aforementioned methodology provides a much weaker inference concerning cause and effect than would be possible if researchers repeatedly assessed POS and performance. In fact, the evidence could be interpreted to indicate that high performance leads to greater POS. That

is, high performers may receive favorable treatment from the organization and conclude that the organization values their contributions and cares about their well-being. Another possibility is that the effects are bidirectional, with POS enhancing performance and high performance leading to greater POS.

The present study used repeated measures of POS and extra-role performance to obtain better evidence of direction of causality. A relation between the initial value of one variable (e.g., POS) and temporal change in a second variable (e.g., extra-role performance) provides stronger causal evidence than is afforded by a single observation of two variables (Finkel, 1995). We accomplished this by controlling for the initial level of the presumptive outcome variable. By measuring POS and extra-role performance at two points in time, we obtained evidence concerning whether POS leads to performance, performance leads to POS, or the effects are bidirectional. Researchers have used such methodology, for example, to demonstrate that supervisor support leads to POS (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002) and POS leads to affective organizational commitment (Rhoades, Eisenberger, & Armeli, 2001), with no evidence of effects in the opposite direction.

Employees of a large electronics and appliance sales organization located in the Northeastern United States voluntarily completed the survey during their regularly scheduled working hours at one sitting (Time 1) and then again 3 years later (Time 2). We asked employees to supply their names, which we used to match their POS and performance ratings at the two times. We and the organization's top management assured the employees confidentiality. The sample consisted of 199 employees. In all, 34% were hourly paid salespeople; 29% were salaried sales-support employees; 29% were hourly paid sales-support employees; and 8% were salaried salespeople. Average tenure prior to the first questionnaire administration was 56 months. To assess POS, we used 7 high-loading items from the Survey of Perceived Organizational Support (Eisenberger et al., 1986), with factor loadings ranging from .71 to .84. The scale's internal reliability (coefficient α) was .87 at Time 1 and Time 2. Supervisors rated employees' extra-role performance on a 6-item Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) that we supplied. We designed the extra-role items to represent the previously described categories of extra-role behavior reviewed by George and Brief (1992), and they were similar to the kinds of extra-role performance evaluation items included in research on POS (e.g., Eisenberger et al., 2001). The items are as follows: This employee (a) keeps well informed where his or her opinion might benefit the organization, (b) volunteers for work that is not required, (c) looks for ways to improve the effectiveness of his or her work, (d) goes out of his or her way to help new employees, (e) helps coworkers who have heavy workloads, and (f) encourages coworkers to try new effective ways to do their jobs. Internal reliability (coefficient α) was .91 at Time 1 and .90 at Time 2.

We estimated a cross-lagged panel model to assess the relations between Time 1 POS and the temporal change in extra-role performance, and between

Time 1 extra-role performance and the temporal change in POS. We used identical items to assess POS and extra-role performance at the two times, so they were likely to have positively correlated error variances from Time 1 to Time 2. Therefore, we allowed the error variances of identical items to covary between the two times (Finkel, 1995, p. 29). Also, we allowed Time 2 latent variable variances to covary (Finkel, p. 29).

We included three covariates as exogenous variables (Time 1 tenure, salaried vs. hourly employee status, sales vs. sales-support employee status). Figure 1 shows the estimated cross-lagged model with standardized regression coefficients. For ease of presentation, Figure 1 does not show the model's measurement component, but we describe the effects of the covariates in the text of this article.

The only statistically significant effects of the covariates were that the sales and salaried status of employees contributed positively to Time 2 POS (β s = .18 and .44, respectively, p s < .01). The relations between Time 1 POS and Time 2 POS and between Time 1 extra-role behavior and Time 2 extra-role behavior were statistically significant and similar in magnitude (β = .42, p < .01 and β = .35, p < .01, respectively). Of more central interest, and as predicted by organizational support theory, POS was positively related to the temporal change in extra-role performance (β = .17, p < .05). In contrast, extra-role performance was not related to the temporal change in POS (β = -.03). The fit indexes indicated adequate fit of the model to the data (*root mean square error of approximation* = .06; goodness of fit index = .83; comparative fit index = .92; *TLI* (Tucker Lewis index) = .90).

The result that POS was positively related to temporal change in extra-role performance supports the view that POS leads to extra-role performance. This finding

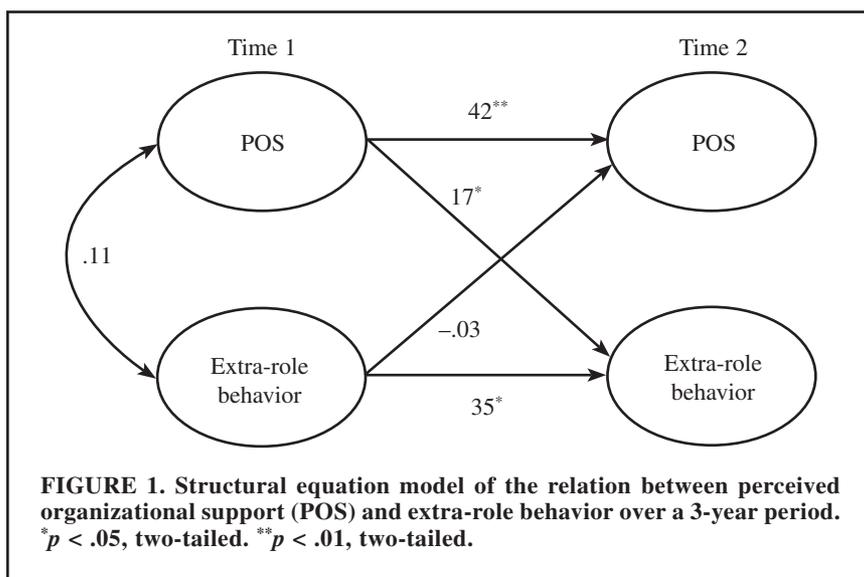


FIGURE 1. Structural equation model of the relation between perceived organizational support (POS) and extra-role behavior over a 3-year period. * p < .05, two-tailed. ** p < .01, two-tailed.

provides a stronger indication of the direction of causality than did prior studies that incorporated a single pairing of POS with extra-role performance. Although we controlled for tenure and job status, the findings do not rule out the possibility that some omitted third variable was responsible for the association between POS and extra-role performance. Further, the results need to be extended beyond retail employees.

Performance was unrelated to temporal changes in POS, providing no evidence that high performers develop greater POS. As a cautionary note, null findings with panel data are much less definitive than statistically significant findings, in part, because selection of an interval that is too short or long relative to a causal relation can make the relation difficult to demonstrate (Finkel, 1995). The interval over which high performance results in an increase in POS may be different from the reverse effect. Therefore, future research should further examine the possible effects of performance on POS with other intervals. Still, the present findings provide key supportive evidence for the prediction of organizational support theory that POS will lead to increased extra-role performance.

AUTHOR NOTES

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