

Perceived Organizational Support: A Meta-Analytic Evaluation of Organizational Support Theory

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Organizational support theory (OST) proposes that employees form a generalized perception concerning the extent to which the organization values their contributions and cares about their well-being (perceived organizational support, or POS). Based on hypotheses involving social exchange, attribution, and self-enhancement, we carried out a meta-analytic assessment of OST using results from 558 studies. OST was generally successful in its predictions concerning both the antecedents of POS (leadership, employee–organization context, human resource practices, and working conditions) and its consequences (employee’s orientation toward the organization and work, employee performance, and well-being). Notably, OST successfully predicted the relative magnitudes of different relationships, influences of process variables, and mediational effects. General implications of the findings for OST and research on POS are discussed.

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According to organizational support theory (OST; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger & Stinglhamber, 2011; Shore & Shore, 1995), 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). OST has attracted considerable interest because of the potential value of viewing the employee–organization relationship from the employees’ viewpoint, the clarity of the POS construct, and the strong associations of POS with affective organizational commitment, job satisfaction, and other attitudinal outcomes. Rhoades and Eisenberger’s (2002) meta-analytic review indicated that POS is related to the major hypothesized antecedents of POS (fairness, human resource [HR] practices, and supervisor support), attitudinal consequences (e.g., affective organizational commitment, job satisfaction), and job performance. A more recent meta-analysis by Riggle, Edmonson, and Hansen (2009) confirmed the attitudinal outcome findings with more studies.

However, no quantitative analysis has addressed many important recent POS findings on such topics as leadership, organizational context, positive orientation toward the organization, and employee well-being. Using OST, we organize and theoretically integrate the POS literature to clarify the role of POS in employee–organization relationships. OST, emphasizing social exchange, attribution, and self-enhancement, has been considerably elaborated in the past few years (e.g., Aselage & Eisenberger, 2009; Baran, Shanock, & Miller, 2012; Eisenberger & Stinglhamber, 2011; Wayne et al., 2009), providing the opportunity for the present theory-driven meta-analysis of the POS literature based on OST. In the following section, we describe OST, emphasizing the major propositions assessed in the meta-analysis. This is followed by our meta-analytic methods, hypotheses, and findings.

Organizational Support Theory Assessed

According to OST, POS strongly depends on employees’ attributions concerning the organization’s intent behind their receipt of favorable or unfavorable treatment. In turn, POS initiates a social exchange process wherein employees feel obligated to help the organization achieve its goals and objectives and expect that increased efforts on the organization’s behalf will lead to greater rewards. POS also fulfills socioemotional needs, resulting in greater identification and commitment to the organization, an increased desire to help the organization succeed, and greater psychological well-being.

Employee Attributions

According to OST, POS should be enhanced to the degree that employees attribute favorable treatment received from the organization to positive regard. The organization’s discretion when providing favorable treatment, as opposed to such extraneous factors as a tight job

market or government regulations, should enhance POS (Eisenberger, Cummings, Armeli, & Lynch, 1997). Similarly, providing benefits that employees make use of, and therefore are specific to employee needs (Gouldner, 1960), should increase POS.

Social Exchange

OST invokes social exchange theory wherein employment is viewed as the trade of effort and loyalty by the employee for tangible benefits and social resources from the organization (Cropanzano & Mitchell, 2005). POS should elicit the norm of reciprocity, leading to a felt obligation to help the organization, as well as the expectation that increased performance on behalf of the organization will be noticed and rewarded. As a result, employees with high POS should engage in greater job-related efforts, resulting in enhanced in-role job performance and extrarole performance helpful to the organization. With regard to affective organizational commitment, employees seek balance in their relationship with the organization by developing favorable attitudes and behaviors consistent with POS. Thus, felt obligation resulting from POS has been found to be positively related to affective organizational commitment (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001).

Self-Enhancement

OST is often mischaracterized as predominantly a social exchange theory. However, OST also emphasizes self-enhancement processes. POS is assumed to fulfill socioemotional needs (approval, esteem, affiliation, and emotional support), leading to identification with the organization. OST holds that affective organizational commitment arises both from self-enhancement and social exchange. Concerning self-enhancement, the organizational identification arising from POS may lead to affective organizational commitment through the development of shared values (Meyer, Becker, & Van Dick, 2006) and the promotion of stronger relational bonds between employees and organizational representatives.

In this meta-analysis, we examine 31 hypotheses, derived from OST, as related to attribution, social exchange, and self-enhancement. Because there are many hypotheses, we have combined the presentation of the hypotheses, their rationale, and empirical findings into a single Hypotheses and Results section that follows the methodology description.

Method

Reviews, such as Kepes, McDaniel, Brannick, and Banks (2013), and guidelines, such as the Meta-Analysis Reporting Standards (MARS; American Psychological Association, 2008), provide detailed discussions of the methodological and procedural information that should be reported to ensure that meta-analyses are transparent and replicable. We have used these recommendations to guide the information and level of detail provided in this section.

Literature Search and Inclusion Criteria

We identified relevant published and unpublished studies (e.g., dissertations, theses, technical reports) through systematic searches (Rothstein, 2012) using the databases ABI-Inform,

Academic Search Complete, APA PsycNET, Business Source Complete, Defense Technical Information Center, Digital Dissertations, Educational Administration Abstracts, Google Scholar, JSTOR, ProQuest Research Library, Psychology and Behavioral Sciences Collection, Science Direct, and Social Science Full Text. We used the following key terms in our search: *perceived organizational support*, *organizational support*, *perceived support*, and *POS*. We also used the common British Commonwealth spelling *organisational*. These searches identified studies from 1986, when the POS construct was introduced by Eisenberger and his colleagues, through 2011. Second, we searched previous meta-analyses by Rhoades and Eisenberger (2002) and Riggle et al. (2009). Third, we collected studies that cited, or were cited by, one of several major source articles on POS (Eisenberger et al., 1986, 1997; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Rhoades & Eisenberger, 2002). Fourth, we attempted to identify and collect additional unpublished data and manuscripts by contacting leading researchers in this area. Using these search methods, we collected a total of 743 documents.

Studies were identified for inclusion by examining their abstract, correlation matrix, study method and procedure, and full text of each study, with the following exclusions. First, we excluded studies that failed to measure POS based on Eisenberger et al.'s (1986) definition, such as the use of the initials *POS* for other constructs. Second, studies were excluded for applying POS to specific types of support (e.g., POS for creativity; Zhou & George, 2001) that are distinct from global POS (Eisenberger & Stinglhamber, 2011). Third, we excluded studies using combinations of POS with other measures (e.g., supervisor support and engagement; Ward, 2006). Fourth, we excluded studies failing to provide adequate statistical information or clearly identify the correlate of POS. Fifth, we excluded data from unpublished studies (e.g., dissertations) that were later published using the same data. However, when the published version of a study and the unpublished version of the same study reported results for different variables, we included the unique results from each manuscript in our meta-analysis. Finally, we excluded foreign-language studies where an English translation was not available. We then narrowed the database to studies containing variables relevant to our hypotheses. Based on these exclusion criteria, our final database included 492 papers containing 558 studies (see online Appendix C for information about each study and online Appendix D for a list of references).

Coding Procedure

All coders had a background in psychology (i.e., were psychology students or held a degree in psychology) and were provided with training, written coding instructions, and examples of accurate coding. The coders practiced until they coded without error. Each study was first independently evaluated for inclusion by two coders based on the criteria noted above. Relevant studies were then independently coded by two members of the research team, and coding was compared for disagreements. Using a subset of 50 articles, coder agreement was calculated to be 97.6%. Disagreements about inclusion of a study or specific coding were resolved by referring to the original source or other relevant literature (e.g., scale validation studies), and discrepancies were discussed until a consensus was achieved. We categorized correlates of POS based on information provided in the studies or, when necessary, the scale source. For performance-related constructs, we distinguished between self- and supervisor ratings.

Outlier Search

We searched for outliers in each meta-analytic distribution using a two-step approach. First, we computed the sample-adjusted meta-analytic deviancy statistic (SAMD; Beal, Corey, & Dunlap, 2002; Huffcutt & Arthur, 1995) and used a scree plot to visually search for outliers. Second, because the SAMD statistic may overidentify outliers (Beal et al., 2002), we examined whether the effect sizes identified as outliers were three or more standard deviations from the mean construct correlation. Applying these criteria, we found only two potential outliers. These involved the relationship between POS and organizational citizenship behavior (OCB) directed toward individuals (OCB-I). Excluding these outliers made little difference, $\rho = .19$ and $.20$, with and without outliers, respectively. Because caution has been urged in removing outliers (e.g., Cortina, 2003) and these two did not substantially impact results, we retained them.

Data Analysis

We used the random-effects meta-analytic procedures and formulas described by Hunter and Schmidt (2004). At least three studies were required to be considered sufficient to provide data for a hypothesis. Using the zero-order effect sizes (in the form of a correlation) and the study sample size, we computed sample-size weighted mean correlations. If a study reported effect sizes for multiple independent samples, all of the relevant correlations were included as separate effect sizes, and if a study reported effect sizes for multiple dependent samples, a single mean correlation and reliability coefficient was computed (Hunter & Schmidt, 2004).

The overall mean correlations were corrected for unreliability using full artifact distributions as described by Hunter and Schmidt (2004). Our analyses corrected for sampling error, but we did not correct for range restriction because the population variance of the variables was unknown. For each effect size, the coefficient alpha was coded as the reliability for POS and all other constructs, and when no coefficient alpha was reported or a single-item measure was used in a study, no reliability estimate from that study was included in the artifact distribution. We also conducted our analyses on a subset of variables with the largest number of studies using partial artifact distributions. Because the results for our analyses using full and partial artifact distributions were nearly identical, we report only the results from the full artifact analysis.

Using the formulas provided by Hunter and Schmidt (2004), we computed two tests of effect size heterogeneity. First, we computed the percentage of variability in the effect sizes due to sampling error. Second, we computed the 95% credibility intervals around the corrected effect sizes. Last, we computed the 95% confidence intervals around each population effect size using the standard error of the weighted mean observed correlation. These values represent the extent to which sampling error remains in the effect size estimate.

Hypotheses and Results

Here we present hypotheses and results for proposed antecedents and outcomes of POS (see listing in Table 1). Although many of the estimated effect sizes are based on large numbers of studies, this was not always the case. The number of studies used to assess a given relationship ranged from 237 (affective organizational commitment) to 3 (e.g., reward

Table 1
Organization of Variables Included in the Meta-Analysis

Category	Variables
Antecedents	
Treatment by organization members	Abusive supervision Consideration and initiating structure Leader-member exchange Supervisor and coworker supportiveness Transformational and transactional leadership
Employee-organization relationship quality	Fairness Perceived organizational politics Psychological contracts Value congruence with the organization
Human resource practices and job conditions	Job security, flexible and family supportive work practices, and developmental opportunities Work role characteristics
Outcomes	
Orientation toward the organization and work	Affective organizational commitment Economic and social exchange with the organization Felt obligation and normative commitment Job involvement Organizational identification Performance-reward expectancy Trust
Subjective well-being	Positive psychological wellbeing Negative psychological wellbeing
Behavioral outcomes	In-role performance Organizational citizenship behavior Counterproductive work behavior Withdrawal

expectancy). Because estimates based on few studies are less robust than estimates based on large numbers of studies, we urge readers to examine the sample sizes reported in the tables and consider the more provisional nature of findings that are based on smaller samples. We encourage the reader to interpret estimates in light of credibility intervals, which indicate the range of effect sizes within which 95% of studies would be expected to fall (with narrower credibility intervals reflecting less heterogeneity) and the percentage of variance explained by sampling error and other statistical artifacts. When the percentage of variance explained is small or the credibility intervals are wide, estimates may not be robust and substantive moderators may be present. For a review, we direct the reader to Kepes et al. (2013).

Because this is a theory-driven review of OST, we focus on partially corrected effect size estimates, as such estimates control for error and most accurately represent the theoretical constructs (Hunter & Schmidt, 2004), although our results tables also present the uncorrected estimates. Relationships are reported as statistically significant when the high and low confidence limits do not include zero. We conclude that effect size is larger than another effect size when the confidence limits of the two effect sizes do not overlap. To interpret effect size, we use Cohen's effect size rules of thumb (e.g., Cohen, 1992; cf. Bosco, Aguinis, Singh, Field, & Pierce, in press) that a correlation of .50 is considered strong, .30 is moderate, and .10 is small.

Table 2
Meta-Analytic Results for Treatment by Organization Members

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Supervisor support	.53	[.52, .54]	.60	[.36, .84]	64	22,371	10.7
Coworker support	.40	[.38, .41]	.47	[.17, .77]	16	12,773	4.7
Team support	.31	[.26, .35]	.34	[-.14, .82]	8	1,626	7.6
Abusive supervision	-.30	[-.37, -.23]	-.34	[-.34, -.34]	3	662	100.0
Consideration (leadership)	.41	[.37, .45]	.46	[.29, .63]	4	1,433	24.5
Initiating structure (leadership)	.29	[.24, .34]	.33	[.06, .60]	4	1,433	13.6
Transformational leadership	.51	[.47, .55]	.56	[.37, .76]	8	1,353	26.8
Transactional leadership	.18	[.08, .27]	.21	[-.08, .51]	3	427	30.7
Leader-member exchange	.47	[.46, .48]	.53	[.27, .78]	59	16,481	13.6

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error.

Antecedents of POS

Treatment by Organization Members

Favorable treatment by organization members should enhance employees' view that the organization is positively oriented toward them. Because they ascribe humanlike characteristics to the organization and view organizational members as agents of the organization, employees will tend to attribute role-related actions taken by members of the organization to the organization itself (Eisenberger et al., 1986). Thus, behaviors by organizational members that meet socioemotional needs should have an especially strong influence on POS. The results for such favorable treatment are presented in Table 2.

Supervisor and coworker supportiveness. Perceived supervisor support refers to employees' view that their supervisor values their contributions and cares about their well-being (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Although the supportiveness of all organizational members should be related to POS, some members more closely embody the organization and are seen as acting on its behalf (Eisenberger et al., 2010). Supervisors and others in leadership roles play a key role in providing organizational rewards and resources to employees, and thus should be viewed as a greater source of organizational support than coworkers (Wayne, Shore, & Liden, 1997). Therefore, supportive behavior from supervisors should be more closely related to POS than supportive behavior from coworkers and teammates, who would be seen as less representative of the organization.

Hypothesis 1: Perceived supervisor support is positively related to POS.

Hypothesis 2: Perceived supervisor support is more strongly related to POS than is perceived coworker support or perceived team support.

Supervisor support was strongly related to POS, $\rho = .60$. Based on confidence intervals that do not overlap, supervisor support is more closely related to POS than is coworker

support, $\rho = .47$, or team support, $\rho = .34$. Consistent with OST, support from higher-status organizational members is more strongly interpreted by employees as organizational support.

Abusive supervision. *Abusive supervision* refers to subordinates' subjective assessment of the supervisor's hostile behavior (Tepper, 2000). Because supervisors embody and represent their organizations to some degree, abusive supervision should reduce POS.

Hypothesis 3: Abusive supervision is negatively related to POS.

Abusive supervision was negatively related to POS, $\rho = -.34$. Thus, hostile supervisor behavior reflects poorly on the organization. This relationship was weaker in magnitude than the POS–supervisor support relationship. This may be, in part, a measurement issue because abusive supervision measures use extreme negative wording. Alternatively, this weaker relationship with POS may be due to the tendency to attribute personally oriented abuse more to the personality of the supervisor than to the organization's general supportiveness (Eisenberger et al., 2010).

Leader consideration and initiating structure. Leader consideration, the extent to which the leader is supportive and shows concern for subordinates' well-being, is usually contrasted with initiating structure, in which the leader communicates clear work role expectations to subordinates. Although followers associate both types of leadership with effectiveness (Judge, Piccolo, & Ilies, 2004), consideration should be more strongly related to POS since it more directly conveys high regard for the work group.

Hypothesis 4: Leader consideration is more strongly related to POS than is leader initiating structure.

POS was more strongly related to leader consideration, $\rho = .46$, than to initiating structure, $\rho = .33$, although both types of leadership were related to POS. Leader behaviors that convey caring, concern, and support for followers appear to be effective ways to enhance POS. However, taking the time and effort to clarify role responsibilities also communicates to followers their leaders' positive valuation by leaders.

Transformational and transactional leadership. Transformational and transactional leadership (Bass, 1990) should differ in the extent to which each type of leadership fulfills socioemotional needs and lead to POS. Transformational leadership includes individualized consideration and inspirational motivation. Because individualized consideration involves concern with followers' needs, transformational leadership should enhance their subjective well-being. Inspirational motivation provides followers with purpose and efficacy, thus conveying positive valuation of their contributions to the organization. In contrast, transactional leadership involves the use of rewards to motivate followers' performance and corrective action to prevent or mend errors and should be more associated with the short-term trade of effort for wages, conveying less positive valuation of employees.

Hypothesis 5: Transformational leadership is more strongly related to POS than is transactional leadership.

Table 3
Meta-Analytic Results for Employee–Organization Relationship Quality

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Value congruence with organization	.41	[.37, .45]	.50	[-0.14, 1.00]	7	1,946	3.3
Psychological contracts							
Psychological contract breach	-.60	[-.63, -.58]	-.67	[-0.95, -0.38]	16	3,464	9.6
Psychological contract fulfillment	.37	[.35, .39]	.42	[0.15, 0.69]	9	9,315	4.5
Procedural justice	.59	[.58, .59]	.66	[0.37, 0.95]	72	25,070	6.5
Distributive justice	.51	[.50, .53]	.57	[0.34, 0.80]	46	16,929	11.0
Interactional justice	.47	[.45, .49]	.52	[0.20, 0.85]	21	6,835	7.7
Organizational politics	-.75	[-.76, -.74]	-.83	[-1.00, -0.54]	12	4,980	2.5

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error.

POS was more strongly related to transformational leadership, $\rho = .56$, than transactional leadership, $\rho = .21$. Consistent with OST, transformational leaders, who display a concern for the needs of subordinates and inspire subordinates to dedicate themselves to organizational goals, more strongly convey POS than do transactional leaders.

Leader–member exchange (LMX). A high-quality LMX relationship is characterized by mutual trust and respect wherein the leader provides substantial support and resources and the subordinate reciprocates with commensurate effort and performance (Liden, Sparrowe, & Wayne, 1997). Because leaders are representatives of the organization, LMX should be positively associated with POS.

Hypothesis 6: LMX is positively related to POS.

LMX was strongly related to POS, $\rho = .53$, similar in magnitude to the strong relationships found with leader consideration and transformational leadership. Thus, various forms of leadership that convey positive valuation for employees as individuals or members of a group are highly related to POS.

Employee–Organization Relationship Quality

Contextual factors that convey the organization's regard for employees influence POS. Such factors include common values shared with employees (value congruence), fulfillment or breach of the perceived obligations to employees (psychological contracts), fairness of treatment, and perceived organizational politics. These results are presented in Table 3.

Value congruence. High employee–organization value congruence occurs when employees have beliefs and priorities that are similar to those of their employers. Employees who do not share their values with the organization may find it more difficult to communicate

and cooperate with organizational members (Erdogan, Kraimer, & Liden, 2004), resulting in lessened organizational support. We included three types of value congruence measures in our review: (a) direct measures where employees rated the alignment of their values and those of the organization, (b) difference scores reflecting the difference between the employee's values and the organization's values, and (c) correlations between the employee's values and the organization's values. There were too few studies ($k = 7$) to differentiate these methods of operationalization, so all were included in a single effect size estimate.

Hypothesis 7: Employee–organization value congruence is positively related to POS.

Consistent with OST, employee–organization value congruence was strongly related to POS, $\rho = .50$. In addition to this direct relationship between value congruence and POS, preliminary evidence indicates that POS may compensate for low value congruence in influencing employee job satisfaction and career satisfaction (Erdogan et al., 2004).

Psychological contracts. The psychological contract reflects employees' beliefs about their social exchange relationships with their organization, mutual obligations, and the extent to which these obligations are fulfilled (Rousseau, 1995). The obligations could be based on explicit promises made by the organization or implicit expectations held by employees. Because most organizational obligations are viewed by employees as *voluntary* implicit or explicit promises (Morrison & Robinson, 1997; Rousseau, 1995), contract breach should have a strong negative relationship with POS (Aselage & Eisenberger, 2009).

Hypothesis 8: Psychological contract breach is negatively related to POS.

As predicted, psychological contract breach, $\rho = -.67$, and contract fulfillment, $\rho = .42$, were related to POS. Additionally, the absolute values of these confidence intervals do not overlap, which suggests that, at least with regard to psychological contracts, the negative event of a contract breach has a stronger influence on POS than the positive event of contract fulfillment.

Fairness. Fair procedures should make a major contribution to POS because they are generally seen as under the organization's discretionary control (Moorman, Blakely, & Niehoff, 1998). *Distributive justice* involves the fair distribution of outcomes, *procedural justice* concerns processes used to determine outcome distribution, and *interactional justice* refers to the way one is treated during the enactment of organizational decisions. Procedural justice reflects policies and practices, such as employee participation and bias in decision making, that are relatively stable and generally under the overall organization's control. Distributive and interactional fairness should be less related to POS. Distributive justice involves specific pay decisions more subject to factors outside of the organization's control. Interactional justice is based on the actions of specific organizational agents, such as supervisors, who differ in the extent to which they embody the organization (Shoss, Eisenberger, Restubog, & Zagenczyk, 2013). Interactional justice also tends to be more episodic and less stable than procedural justice (D. Ferris, Spence, Brown, & Heller, 2012) and thus may be more attributable to specific events.

Hypothesis 9: Procedural justice is more strongly related to POS than distributive or interactional justice.

Although all three forms of fairness were strongly related to POS, POS was more strongly related to procedural justice, $\rho = .66$, than to distributive justice, $\rho = .57$, and interactional justice, $\rho = .52$. These results suggest that employees place an added emphasis on general enduring characteristics of the organization as indications of the organization's favorable or unfavorable orientation toward them.

Perceived organizational politics. Organizational politics involves perceptions of favoritism, lack of meritocracy and of frank discussion, and the presence of cliques or in-groups (G. Ferris & Kacmar, 1992), all of which influence organizational policies and practices. Such a political organizational orientation would suggest to employees that the organization cares too little about their welfare to rein in harmful behaviors.

Hypothesis 10: Perceptions of organizational politics are negatively related to POS.

As expected, perceptions of organizational politics were strongly and negatively related to POS, $\rho = -.83$. Because of this strong relationship, and because this estimate is based on only 12 studies, we reviewed 10 recent studies for evidence that POS and politics are distinct constructs (see online Appendix A for a table detailing the relevant findings of each study). Of the eight studies reporting confirmatory factor analyses (CFAs), all but one found POS to be clearly distinct from organizational politics. Distinct from POS, organizational politics therefore seems to be highly damaging to POS because organization members who are willing to damage the organization's future to further their personal welfare may have little interest in generally supporting other organization members.

HR Practices and Job Conditions

Here we focus on HR practices, work role characteristics, and working conditions that can be enhanced by the organization to make the context and nature of work more pleasant. These results are presented in Table 4. Most employees believe that organizations have considerable control over HR practices (Eisenberger et al., 1997). This perception reflects the substantial control that many organizations do have over such practices, such that perceptions of their favorableness should be strongly related to POS.

Hypothesis 11: Job security, flexible work practices, family supportive work practices, and developmental opportunities are positively related to POS.

Developmental opportunities were strongly related to POS, $\rho = .57$, and job security was moderately related to POS, $\rho = .42$. Flexible work schedules, $\rho = .21$, and perceptions of family supportive organizational practices, $\rho = .26$, were also related to POS, although less so. These findings are consistent with the findings of Eisenberger et al. (1997), indicating that training (developmental) opportunity was the job condition most strongly viewed as under the discretionary control of organizations and, presumably, most indicative of POS. By contrast, flexible and family-supportive work practices may be seen as supportive mainly by

Table 4
Meta-Analytic Results for Favorable Human Resource Practices and Job Conditions

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Employee security and benefits							
Developmental opportunities	.50	[.48, .51]	.57	[.39, .75]	15	12,712	8.7
Job security	.36	[.34, .39]	.42	[.13, .71]	11	4,098	11.2
Flexible work schedule	.16	[.08, .24]	.21	[.10, .31]	3	627	72.2
Perceptions of family supportive organizational practices	.22	[.19, .24]	.26	[-.13, .64]	6	4,425	4.3
Benefits used	.07	[.02, .12]	.08	[.03, .12]	5	1,550	88.9
Work role characteristics							
Enriching job characteristics	.52	[.47, .57]	.65	[.65, .65]	5	832	98.1
Autonomy	.42	[.40, .43]	.51	[.34, .68]	15	10,603	13.2
Participation in decision making	.49	[.46, .51]	.56	[.25, .87]	13	3,640	9.6
Role stressors							
Role ambiguity	-.31	[-.32, -.29]	-.36	[-.84, .13]	31	12,757	4.2
Role conflict	-.38	[-.40, -.37]	-.45	[-.78, -.12]	26	10,270	8.2
Role overload	-.24	[-.25, -.22]	-.29	[-.51, -.06]	19	11,951	13.0

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error.

those employees who need and want those benefits, weakening the relationship between these practices and POS among workers without these needs.

Gouldner (1960) suggested that the receipt of benefits specific to an individual's needs would create a greater obligation to reciprocate because such benefits convey a greater concern for the individual's well-being. As an example, the substantial number of employees who have little desire or need for flexible and family-oriented work practices may associate these benefits to only a small degree with POS. This argument suggests that actual benefit use, rather than just the availability of benefits, should be positively associated with POS.

Hypothesis 12: Benefit use is positively related to POS.

Benefit use was related to POS, $\rho = .08$, as hypothesized. The weakness of this relationship should be judged cautiously in view of the small number of studies ($k = 5$) but may indicate the need for a more nuanced approach in future research studies to better understand the conditions under which benefits contribute to POS. For example, many organizations offer health benefits that cover only a small proportion of costs and thus may be viewed as indicating low POS. From a measurement perspective, because employees may engage in different degrees of benefit use, measuring use in an all-or-none fashion may be insufficient. Both sufficiency and use of benefits should be taken into account in future research.

Work role characteristics relevant to POS include job enrichments, such as skill variety, task identity, autonomy, and feedback (Hackman & Oldham, 1980), and role stressors, such

as ambiguity, conflict, and overload (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Eisenberger et al. (1997) reported that job enrichment conditions were believed by employees to be under greater organizational control than role stressors. Therefore, job enrichment characteristics should be more strongly related to POS than role stressors.

Hypothesis 13: Job enrichment conditions are more strongly related to POS than work role stressors.

Job enrichment conditions as a group were closely related to POS, $\rho = .65$. Considering specific job conditions, POS was highly associated with autonomy, $\rho = .51$, and participation in decision making, $\rho = .56$. As predicted, POS was less related to role stressors, including ambiguity, $\rho = -.36$; conflict, $\rho = -.45$; and overload, $\rho = -.29$. According to Eisenberger and Stinglhamber (2011), although stress and pressure are highly unpleasant for employees, in most occupations, employees attribute stress and pressure more to the nature of the job rather than to discretionary actions by employers. This suggests the importance of attribution for POS when employees experience favorable or unfavorable work experiences.

Relative Importance of Supervisor Support, Fairness, and Dispositional Affectivity

We examined the distinct contributions of three conceptually important antecedents of POS: supervisor support, fairness, and dispositional affectivity. Supervisor support, involving communication of the leader's positive valuation of subordinates and care about their well-being, is the component of all leadership behaviors most directly related to POS and with the strongest relationship to POS. We selected organizational fairness because it is widely considered a fundamental aspect of employees' experience that makes an important contribution to POS (Rhoades & Eisenberger, 2002). Finally, we included affectivity because, although receiving relatively little attention in OST, affectivity has been found to be related to job attitudes (e.g., Thoreson, Kaplan, Barsky, Warren, & deChermont, 2003) and may substantially influence POS. The inclusion of affectivity allowed us to test the incremental effects of fairness and supervisor support on POS beyond this broad personal disposition.

To construct the correlation matrix shown in Table 5, we either (a) used correlations from other meta-analyses or (b) computed correlations using studies from our meta-analysis. In computing correlations involving fairness, we used the intercorrelations among the justice dimensions reported by Colquitt et al. (2013) to create a composite of fairness dimensions. We could not find a meta-analysis of the relationship between negative affectivity and supervisor support, and there was not a study in our meta-analysis that reported this relationship. Thus, we used .30 as an estimate for this effect, based on similar effects found by Thoresen et al. (2003). Because we were unable to find a precise estimate of this relationship, we ran analyses using estimates of .20 and .40 to test whether this influenced the conclusions drawn from our analyses.

We tested a multiple regression model predicting POS from supervisor support, fairness perceptions, and affectivity. We used as the sample size the harmonic mean of the samples sizes on which the correlations in Table 5 were based, which was 3,159. Our

Table 5
Intercorrelations Among Variables

	1	2	3	4	5
1. Supervisor support	—				
2. Fairness	.61 ^a	—			
3. Positive affectivity	.33 ^a	.26 ^b	—		
4. Negative affectivity	-.30 ^c	-.22 ^b	-.36 ^c	—	
5. POS	.60	.70	.34 ^d	-.43 ^d	—

Note: POS = perceived organizational support.

^aBased on correlations reported among studies included in this meta-analysis.

^bBased on meta-analytic correlations reported by Barsky and Kaplan (2007).

^cBased on an estimate reported by Thoresen, Kaplan, Barsky, Warren, and de Chermont (2003).

^dBased on meta-analytic correlations reported by Rhoades and Eisenberger (2002).

^eEstimated based on corrected correlations found between negative affectivity and job satisfaction (-.34), organizational commitment (-.28), and turnover intentions (.22) (Thoresen et al., 2003). Models were also tested using .20 and .40 as the correlation between negative affectivity and supervisor support.

Table 6
Analyses of Relative Importance

Variable	β Weights From Multiple Regression ^a	Raw Relative Weight	Relative Weight as % of R^2
Supervisor support	.20	.161	26.8
Fairness perceptions	.51	.302	50.5
Positive affectivity	.06	.039	6.5
Negative affectivity	-.24	.097	16.2

Note: $N = 3,159$, which is the harmonic mean of the samples sizes on which the correlations in Table 5 are based. All coefficients were statistically significant at the .05 alpha level.

^aModel $R^2 = .60$.

multiple regression results (see Table 6) indicate that fairness perceptions emerged as the strongest predictor of POS, $\beta = .51$, followed by negative affectivity, $\beta = -.24$; supervisor support, $\beta = .20$; and positive affectivity, $\beta = .06$. All weights were statistically significant at $p < .05$.

We also conducted a relative-weights analysis using techniques described by Johnson (2000) and LeBreton and Tonidandel (2008). The relative weights analysis yielded similar results (see Table 6), although supervisor support had a stronger relative weight than negative affectivity. Analyses were also run using $-.20$ and $-.40$ as the correlation between supervisor support and negative affectivity. This did not influence the ordering among the antecedents in their relative importance, although the relative weights for negative affectivity and supervisor support increased as their intercorrelation decreased. These results suggest that fairness has a strong unique effect on POS, with supervisor support and negative affectivity having lesser unique effects. The nearly comparable effect size for negative affectivity and supervisor support suggests the need to examine the influence of negative affectivity on POS in more detail.

Table 7
Meta-Analytic Results for Orientation Toward the Organization and Work

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Economic exchange with organization	-.36	[-.40, -.31]	-.40	[-.49, -.32]	5	1,385	54.6
Social exchange with organization	.58	[.56, .61]	.68	[.49, .87]	9	2,549	17.1
Felt obligation	.52	[.48, .55]	.62	[.42, .83]	8	1,716	23.1
Organizational identification	.47	[.46, .49]	.55	[.25, .86]	24	6,625	10.6
Performance–reward expectancy	.33	[.27, .39]	.37	[.37, .37]	3	859	100.0
Affective commitment	.60	[.60, .61]	.69	[.48, .91]	237	79,335	9.5
Normative commitment	.46	[.45, .47]	.54	[.24, .84]	53	20,354	8.4
Job involvement	.29	[.27, .32]	.35	[.02, .67]	27	6,070	15.6
Trust in coworkers	.41	[.37, .46]	.46	[.36, .57]	6	1,390	52.7
Trust in management	.64	[.63, .66]	.74	[.51, .96]	13	4,813	7.9
Trust in supervisor	.48	[.46, .51]	.54	[.38, .69]	16	3,624	33.0
Trust in the organization	.66	[.65, .67]	.75	[.50, .99]	23	9,362	5.9

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error.

Outcomes of POS

We have grouped outcomes of POS into three categories: positive orientation toward the organization and work, subjective well-being, and behavioral outcomes. Following consideration of bivariate associations, we examine evidence for potential mediators of the POS–affective commitment and POS–performance relationships.

Orientation Toward the Organization and Work

According to OST, POS increases employees' positive orientation toward the organization through social exchange by eliciting increased felt obligation, trust, and expectation that effort on behalf of the organization will be rewarded. Further, employees balance the organization's favorable orientation toward them with affective commitment. Besides social exchange, the fulfillment of socioemotional needs should lead to greater identification with and affective commitment to the organization. This favorable orientation toward work and the organization should also lead to a more pleasant work experience, increasing employees' interest in the work itself. These results are presented in Table 7.

Economic and social exchange. Social exchange relationships differ from economic relationships in their emphasis on long-term gains associated with trust in one's partner. Shore, Tetrick, Lynch, and Barksdale (2006) argued that trust, investment of increased resources of time and effort, and a long-term outlook characterize employees' social exchange relationship

with the organization, as contrasted with an economic relationship in which employees trade specified work effort for specified short-term rewards. The greater perceived investments on the part of the organization provided by social exchange, as opposed to economic exchange, should produce higher POS.

Hypothesis 14: POS is more closely related to social exchange than economic exchange.

Consistent with prediction, POS was more closely related to social exchange, $\rho = .68$, than economic exchange, $\rho = -.40$. The negative relationship between POS and economic exchange is in accord with Shore et al.'s (2006) conceptualization and operationalization of economic and social exchange as incompatible. However, as previously examined, employees are concerned with the fairness of their pay and other kinds of economic incentives as part of a social exchange relationship with the organization.

Trust. Trust differentiates economic relationships from long-term social exchange relationships (Shore et al., 2006). Employees with high POS should be more assured that the organization will not take advantage of their vulnerabilities (Eisenberger et al., 1990; Shore & Shore, 1995). Furthermore, in most organizations, higher-level management is closely identified with the organization, meaning that there should be little difference between the trust associated with management and trust in the overall organization (Eisenberger & Stinglhamber, 2011). Based on greater identification of high-status organizational members with the organization, trust in management should be more strongly related to POS than trust in supervisors or coworkers.

Hypothesis 15: Trust in the organization is positively related to POS.

Hypothesis 16: Trust in management is more closely related to POS than is trust in supervisors, which in turn is more closely related to POS than is trust in coworkers.

These hypotheses were partly confirmed. POS was positively related to trust in the organization, $\rho = .75$. The relationship between POS and trust in management, $\rho = .74$, exceeded that between POS and trust in supervisor, $\rho = .54$, and trust in coworkers, $\rho = .46$. However, the POS–trust-in-supervisors confidence intervals slightly overlapped with those for the POS–trust-in-coworkers relationship. Thus, as evidenced by the small number of studies ($k = 6$) examining trust in coworkers, additional research is needed to draw a more definitive conclusion concerning whether the relationship between POS and trust in the supervisor exceeds that between POS and trust in coworkers. Further, although trust in management was more strongly related to POS than was trust in supervisors, many of the documents we reviewed were unclear about whether or not *management* includes direct supervisors. We encourage future studies to make this clear.

Felt obligation and normative commitment. OST assumes that, based on the reciprocity norm, POS increases employees' felt obligation (or indebtedness) toward the organization. Accordingly, this relationship has been found to be stronger among employees who strongly endorse the reciprocity norm as applied to work (Eisenberger et al., 2001). Although normative commitment was originally conceptualized as an obligation to remain with the organization (Meyer & Allen, 1997), the construct has been extended to diverse

obligations to the organization (Meyer & Herscovitch, 2001). Wayne et al. (2009) suggested that felt obligation and normative commitment are now very similar and that both should be enhanced by POS.

Hypothesis 17: POS is positively related to felt obligation and normative commitment.

POS was positively related both to felt obligation, $\rho = .62$, and normative commitment, $\rho = .54$. The stronger relationship of POS with felt obligation than with normative commitment may result from the inclusion in the normative commitment scale of a majority of items specifically related to a desire to remain with the organization.

Performance–reward expectancy. POS should increase employees' expectation that greater efforts on behalf of the organization will be rewarded (Eisenberger et al., 1990). These rewards may be symbolic as well as tangible.

Hypothesis 18: POS is positively related to performance–reward expectancy.

As predicted, POS was positively related to performance–reward expectancy, $\rho = .37$. Future research might control for reward structure and the kinds of rewards available, which may differ markedly across organizations. For example, if external constraints prevent an organization from providing pay for high performance, POS would not be expected to have much impact on pay expectation. However, depending on the reward structure, POS might yet be related to expectation of promotions or praise.

Organizational identification. Mael and Ashforth (1992) argued that employees who identify highly with the organization view its gains and losses as their own. By fulfilling employees' socioemotional needs for esteem, approval, affiliation, and emotional support (Armeli, Eisenberger, Fasolo, & Lynch, 1998), and thereby providing comfort, meaning, and purpose to employees' lives, POS may contribute to organizational identification.

Hypothesis 19: POS is positively related to organizational identification.

POS was strongly related to organizational identification, $\rho = .55$, which suggests that supported employees incorporate organizational membership into their self-identity. This finding is consistent with OST's emphasis on self-enhancement as a second set of processes, in addition to social exchange, set off by POS.

Affective organizational commitment. Affective organizational commitment has been viewed as an important determinant of employees' willingness to pursue organizational goals and remain with the organization (Klein, Becker, & Meyer, 2009; Meyer & Allen, 1997). According to OST, POS leads to affective commitment via social exchange as well as by organizational identification (Eisenberger & Stinglhamber, 2011).

Hypothesis 20a: POS is strongly related to affective organizational commitment.

Hypothesis 20b: The relationship between POS and affective organizational commitment is partially mediated by organizational identification.

As predicted, POS was positively and strongly related to affective organizational commitment, $\rho = .69$. Because the relationship was high and conceptually important, we reviewed the 10 most recent studies on POS and affective commitment to provide evidence concerning discriminant validity (see online Appendix A for a table detailing the relevant findings of each study). Each of these studies conducted a CFA and concluded that POS and affective commitment are distinct.

To test the hypothesized mediated effect, we added the estimate from Riketta's (2005) meta-analysis of organizational identification and affective commitment, $\rho = .78$, to our meta-analytic estimates of the relationship between POS and organizational identification, $\rho = .55$, and between POS and affective commitment, $\rho = .69$, creating a meta-correlation matrix among these three variables (Viswesvaran & Ones, 1995). Riketta reviewed factor-analytic studies that found organizational identification and affective commitment to be distinct. The correlations were entered into a multiple regression model predicting affective commitment with POS and organizational identification to test for mediation. The harmonic mean of the meta-analytic correlation sample sizes was used as the sample size for the analysis. Results indicated that POS and organizational identification were both significant predictors of affective commitment, $\beta = .37$ and $.57$, respectively, $p < .05$. The Sobel test of the mediated effect of POS on affective commitment through organizational identification was significant, $Z = 46.4$, $p < .05$. These results suggest that organizational identification partially mediates the relationship between POS and affective commitment. This finding is consistent with OST, which holds that POS contributes to affective commitment via social exchange and self-enhancement processes.

Job involvement. Job involvement represents employees' identification with job tasks (Kanungo, 1982). Job involvement and organizational commitment have been described as distinct kinds of work commitment (Morrow & Goetz, 1988). When POS is high, employees may find their work environment more pleasant, feel their work is more appreciated, and take a greater interest in their jobs. However, because the intrinsic features of the job may contribute strongly to job involvement, POS may be less related to job involvement than to affective organizational commitment (Eisenberger & Stinglhamber, 2011).

Hypothesis 21: POS is positively related to job involvement.

Hypothesis 22: POS is more strongly related to affective organizational commitment than to job involvement.

As predicted, POS was related to job involvement, $\rho = .35$, and the relationship was weaker than that with affective organizational commitment, $\rho = .69$. This is consistent with OST in that the organization, not the job itself, is the focus of POS. Yet, being valued by the organization does appear to increase employees' involvement in the job itself to a modest degree.

Subjective Well-Being

Subjective well-being involves employees' moods, emotions, and evaluation of satisfaction (Diener, Scollon, & Lucas, 2004). POS should fulfill socioemotional needs, increase the anticipation of help when needed, and strengthen reward expectancies and self-efficacy, thereby enhancing job satisfaction, organization-based self-esteem, and the experienced balance between work and family life.

Table 8
Meta-Analytic Results for Subjective Well-Being

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Burnout	-.41	[-.45, -.37]	-.46	[-.62, -.30]	7	1,442	37.7
Emotional exhaustion	-.42	[-.44, -.40]	-.47	[-.67, -.28]	22	6,584	21.5
Job satisfaction	.57	[.56, .57]	.65	[.39, .91]	154	64,303	7.2
Job self-efficacy	.10	[.06, .13]	.11	[-.13, .36]	10	3,594	20.1
Organization based self-esteem	.49	[.47, .52]	.53	[.31, .75]	11	3,337	15.0
Stress	-.38	[-.40, -.36]	-.43	[-.66, -.20]	16	6,511	13.9
Work–family balance	.30	[.29, .31]	.40	[.40, .40]	4	21,057	100.0
Work–family conflict	-.24	[-.27, -.21]	-.27	[-.56, .01]	23	4,871	20.8

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error.

Hypothesis 23: POS is positively related to job satisfaction, self-efficacy, organization-based self-esteem, and work–family balance.

POS was strongly related to job satisfaction, $\rho = .65$, and organizationally-based self-esteem, $\rho = .53$; moderately related to work–family balance, $\rho = .40$; and weakly related to job self-efficacy, $\rho = .11$ (see Table 8). Employees with high POS appear to be more satisfied with their jobs and have a more balanced relationship with home life. However, POS appears to afford only limited feedback concerning general competence. Perhaps self-efficacy is more strongly determined by feedback from the task itself and from recipients of the task's outcomes. POS might be more strongly related to self-efficacy in the absence of clear and specific sources of feedback from other sources (Eisenberger & Stinglhamber, 2011).

POS's role in fulfilling socioemotional needs, increasing the anticipation of help when needed, and enhancing self-efficacy should lessen stress; burnout and its components, such as emotional exhaustion; and work–family conflict. According to resource-based models of work stress, such as conservation-of-resources theory (Hobfoll, 1989) and the job demands–resources model of burnout (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), job distress and burnout result largely from a lack of resources to cope with the demands of work. POS should serve as an important resource for reducing stress and job burnout (Maslach, 1982) as well as work–family conflict, which occurs when the demands and behavioral requirements of work are incompatible with family life (Greenhaus & Beutell, 1985).

Hypothesis 24: POS is negatively related to job stress, burnout, emotional exhaustion, and work–family conflict.

Results (see Table 8) show that POS was negatively related to job stress, $\rho = -.43$; burnout, $\rho = -.46$; emotional exhaustion, $\rho = -.47$; and work–family conflict, $\rho = -.27$, as expected. Because occupational stress is a widespread and major negative feature of employee well-being that is very costly to business (Spielberger, Vagg, & Wasala, 2003), the considerable negative relationships between POS and stress suggest POS' important practical application.

Behavioral Outcomes

By meeting socioemotional needs, POS should increase identification with the organization, leading to greater affective organizational commitment. POS should also elicit the norm of reciprocity, leading to a felt obligation to help the organization as well as the expectation that increased performance on behalf of the organization will be rewarded. These factors should increase effort in standard job activities, resulting in enhanced in-role job performance and extrarole performance and reduced withdrawal behaviors. In contrast, low POS should elicit the negative norm of reciprocity (Eisenberger, Lynch, Aselage, & Rohdieck, 2004), leading to behaviors intended to harm the organization and its representatives. Besides examining bivariate relationships between POS and outcomes, reported in Table 9, we consider mediators of the POS–performance relationship for which meta-analytic data were available: organizational identification, affective commitment, normative commitment, and self-efficacy.

In-role performance, organizational citizenship behaviors (OCB), and counterproductive work behaviors (CWB). POS should be positively related to effort on behalf of the organization, leading employees to go beyond in-role behaviors to engage in OCB directed toward the organization (OCB-O) and other employees (OCB-I). The multifoci perspective on social exchange holds that employees develop distinct orientations toward organizational entities, such as the work group and the overall organization (Cropanzano & Mitchell, 2005; Lavelle, Rupp, & Brockner, 2007). Because the organization is the focus of POS, POS should contribute more to OCB-O than to OCB-I. In contrast, because aversive treatment evokes revenge based on the negative reciprocity norm, low POS may engender CWB. Consistent with the multifoci approach, CWB resulting from low POS should be more strongly directed toward the organization (CWB-O) than toward other individuals (CWB-I).

Hypothesis 25: POS is positively related to effort on behalf of the organization, in-role behaviors, and OCB.

Hypothesis 26: POS is more closely related to OCB-O than to OCB-I.

Hypothesis 27: POS is negatively related to CWB and is more strongly related to CWB-O than to CWB-I.

As predicted, POS was positively related to effort on behalf of the organization, $\rho = .26$; in-role performance, $\rho = .19$, and OCB, $\rho = .28$. POS was more strongly related to OCB-O, $\rho = .40$, than to OCB-I, $\rho = .19$, consistent with the view that POS evokes behavior specifically intended to aid the organization. Further, POS was related to both CWB-O, $\rho = -.21$, and CWB-I, $\rho = -.19$. However, the relationship between POS and CWB-O was not significantly stronger than that between POS and CWB-I. Perhaps the considerable power of the organization to punish misbehavior disinclines many employees from taking substantial degrees of retribution. In Table 9, we also separated the POS–performance correlations by rating source. The difference between the POS–supervisor ratings correlation and the POS–self-ratings correlation differed by greater than .05 only for the POS–OCB-O relationship ($\rho = .24$ vs. $.42$, respectively). All other POS–performance correlations were similar across rating sources. The small but reliable effect sizes suggest the value of a theory-based examination of moderators. For example, Armeli et al. (1998) found that the relationship between POS and drunk-driving arrests made by police was positively related to the needs for esteem, affiliation, emotional support, and approval.

Table 9
Meta-Analytics Results for Behavioral Outcomes

Variable	<i>r</i>	95% CI	ρ	95% CrI	<i>k</i>	<i>N</i>	% Variance Explained
Effort	.22	[.19, .25]	.26	[.10, .42]	9	3,685	31.5
Task/in-role/overall performance, all ratings	.17	[.16, .18]	.19	[-.06, .45]	98	24,480	22.1
Task/in-role/overall performance, self-ratings	.19	[.17, .21]	.22	[-.09, .54]	37	11,318	14.1
Task/in-role/overall performance, supervisor ratings	.14	[.13, .16]	.16	[-.04, .36]	56	12,947	34.3
OCB, all ratings	.25	[.23, .26]	.28	[-.06, .63]	54	15,382	11.4
OCB, self-ratings	.25	[.23, .27]	.29	[.03, .54]	21	8,047	15.4
OCB, supervisor ratings	.22	[.19, .24]	.24	[-.08, .57]	27	6,157	15.3
OCB-I, all ratings	.17	[.15, .19]	.19	[.02, .37]	39	8,280	42.3
OCB-I, self-ratings	.16	[.13, .20]	.20	[.16, .24]	14	3,642	90.8
OCB-I, supervisor ratings	.15	[.12, .18]	.18	[-.04, .39]	24	4,549	35.5
OCB-O, all ratings	.34	[.33, .36]	.40	[-.13, .94]	44	19,235	3.1
OCB-O, self-ratings	.36	[.34, .37]	.42	[-.09, .94]	25	15,064	2.5
OCB-O, supervisor ratings	.21	[.18, .24]	.24	[-.25, .73]	20	3,908	9.0
CWB-I, all ratings	-.17	[-.21, -.12]	-.19	[-.30, -.09]	7	1,860	61.7
CWB-I, self-ratings	-.16	[-.21, -.12]	-.19	[-.19, -.19]	5	1,667	100.0
CWB-O, all ratings	-.18	[-.21, -.15]	-.21	[-.31, -.11]	14	4,315	58.5
CWB-O, self-ratings	-.19	[-.23, -.16]	-.22	[-.35, -.09]	12	3,418	48.2
CWB-O, supervisor ratings	-.15	[-.20, -.09]	-.18	[-.18, -.18]	3	1,231	100.0
Withdrawal activities							
Absenteeism	-.07	[-.10, -.04]	-.07	[-.27, .12]	13	3,833	28.2
Tardiness	.00	[-.08, .08]	.00	[-.14, .14]	4	670	59.7
Intention to stay	.45	[.43, .47]	.51	[.28, .75]	16	6,416	12.5
Job search behavior	-.29	[-.33, -.24]	-.32	[-.45, -.19]	4	1,591	37.5
Turnover intentions	-.43	[-.44, -.42]	-.50	[-.78, -.22]	132	47,968	10.6
Turnover	-.20	[-.22, -.18]	-.21	[-.44, .01]	15	7,933	13.5

Note: *r* = uncorrected mean correlation; ρ = corrected mean correlation; *k* = number of studies; *N* = sample size; 95% CI = 95% confidence interval around uncorrected mean correlation; 95% CrI = 95% credibility interval around corrected mean correlation; % variance explained = percentage of variability in effect sizes that would be expected based on sampling error. OCB = organizational citizenship behaviors; OCB-I = OCB toward other individuals; OCB-O = OCB toward organization; CWB = counterproductive work behaviors; CWB-I = CWB toward other individuals; CWB-O = CWB toward organization.

Withdrawal activities. Because employees with high POS identify more with the organization, are more affectively committed to it, and feel an obligation to promote its goals and objectives, they should be less inclined to withdraw from the organization

Hypothesis 28: POS is negatively related with intentions and actions related to withdrawal from the organization.

We found POS to be positively related to intention to stay, $\rho = .51$, and negatively related to turnover intentions, $\rho = -.50$; absenteeism, $\rho = -.07$; job search behavior, $\rho = -.32$; and turnover, $\rho = -.21$. Contrary to our expectations, POS was unrelated to tardiness, $\rho = .00$.

Mediators of POS–Performance Relationships

Previous meta-analyses have quantified the relationships of organizational identification (Riketta, 2005), affective commitment and normative commitment (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), and self-efficacy (Stajkovic & Luthans, 1998) with job performance. OST assumes each of these factors contributes to the relationship between POS and performance.

Hypothesis 29: The relationships between POS and performance are partially mediated by organizational identification, affective commitment, normative commitment, and self-efficacy.

We assessed each of these mediators individually, rather than in combination, because of insufficient data concerning intercorrelations among the mediators. For each hypothesized mediator, we entered into a meta-correlation matrix (Viswesvaran & Ones, 1995) the corrected correlation from a past meta-analysis of the mediator–performance (i.e., in-role performance and overall OCB) relationship and the corrected correlation from our meta-analysis of the POS–mediator and the POS–performance relationship. We regressed performance onto POS and the hypothesized mediator. The regression weights from this model allowed us to estimate the effect of the mediator on performance while controlling for POS. Then we estimated the indirect mediated effect of POS on performance by multiplying the POS–mediator effect from our meta-analysis and the mediator–performance effect from the regression model. We conducted a Sobel test to evaluate the statistical significance of this indirect effect.

Organizational identification. Riketta's (2005) meta-analysis provided correlations between organizational identification and in-role and extrarole performance. The mediated effect of POS on in-role performance through organizational identification was significant, mediated effect (ab) = .05, $Z = 8.74$, $p < .05$, as was the mediated effect on OCB, $ab = .15$, $Z = 23.89$, $p < .05$. There were direct effects of POS on each performance outcome independent of organizational identification, indicating partial mediation. The magnitude of the mediated effect on OCB was also notably larger than that on task performance. These results indicate that organizational identification contributes to POS–performance relationships, with a stronger contribution to the POS–OCB relationship than to the POS–in-role performance relationship.

Affective organizational commitment. To analyze affective organizational commitment as a mediator, we entered the affective commitment–performance correlations from Meyer et al.'s (2002) meta-analysis. The mediated effect of POS on in-role performance was significant, $ab = .03$, $Z = 22.93$, $p < .05$, but weak. The direct effect of POS independent of affective commitment was significant, $\beta = .15$, $p < .05$, supporting only partial mediation. The mediated effect of POS on OCB was significant, $ab = .17$, $Z = 51.85$, $p < .05$, while the direct effect of POS independent of affective commitment was also significant, $\beta = .11$, $p < .05$, supporting partial mediation. The mediated effect of POS through affective commitment also was much stronger on OCB than on in-role performance. These results indicate that affective organizational commitment contributes substantially to the relationship between POS and OCB.

Normative organizational commitment. As previously noted, the more recent conceptualization of normative organizational commitment is very similar to felt obligation to the organization. Meta-analytic estimates of the normative commitment–performance relationship were drawn from Meyer et al.'s (2002) meta-analysis and inserted into mediation analyses along with the POS correlations obtained from our meta-analyses. No comparable meta-analytic data were available for felt obligation. The mediated effect of POS on in-role performance was weak and negative, $ab = -.03, p > .05$, whereas the direct effect of POS on in-role performance independent of normative commitment was significant, $\beta = .22, p < .05$, indicating that normative commitment did not mediate the positive relationship between POS and in-role performance. The mediated effect of POS on OCB through normative commitment was significant, $ab = .07, Z = 18.62, p < .05$, while the direct effect of POS on OCBs independent of normative commitment was also significant, $\beta = .21, p < .05$, supporting partial mediation. The results indicate that normative commitment contributes to the relationship between POS and OCB but not to the relationship between POS and in-role performance.

Job self-efficacy. To complete the meta-correlation matrices linking POS, self-efficacy, and in-role performance, we added the correlation estimate of .35 between self-efficacy and performance from Stajkovic and Luthans' (1998) meta-analysis (no effect size linking self-efficacy to OCB was available). The mediated effect of POS on in-role performance through job self-efficacy as operationalized with other measures was significant, $ab = .04, Z = 9.50, p < .05$. The direct effect of POS on in-role performance independent of job self-efficacy was also significant, $\beta = .15, p < .05$. The results suggest that self-efficacy partially mediates the relationship between POS and in-role performance, although the effect size was small.

Summary. These analyses provide evidence that affective and normative commitment and organizational identification partially mediate the relationship between POS and OCB and that affective commitment, organizational identification, and self-efficacy partially mediate the relationship between POS and in-role performance. The mediated effects on OCB were stronger than those on in-role performance. Finally, affective commitment and organizational identification were stronger mediators than normative commitment and job self-efficacy for all effects. These results support OST in that POS is related to in-role and extra-role performance through social exchange and self-enhancement. As previously discussed, stronger effects for extrarole performance than in-role performance may be due to closer observation and greater constraints on employees' in-role performance.

Publication Bias Analysis

The large number of unpublished studies in our database limits the influence of publication bias toward positive results. Regardless, because there is potential for bias in the publication process, resulting in the suppression of nonsignificant results (e.g., small effect sizes from smaller samples), we used several techniques to estimate the extent to which the publication bias may have influenced our results. Specifically, we used Duval and Tweedie's (2000) trim-and-fill technique, cumulative meta-analysis by precision forest plots, and Copas and Shi's (2000) selection model. We refer the reader to Kepes, Banks, McDaniel, and Whetzel (2012) for an overview of these techniques. We limited these analyses to effects that

were based on at least 50 samples in order to ensure adequate power and meaningful results (see Kromrey & Rendina-Gobioff, 2006). Detailed results, which are based on uncorrected correlations, are presented online in Appendix B.

The results of these analyses show evidence of modest publication bias in the POS–job performance meta-analysis, based on converging evidence from the trim-and-fill analyses and selection models suggesting an underrepresentation of studies from small samples with small effect sizes. Adjustments based on Copas and Shi's (2000) selection model suggest the meta-analysis overestimated the observed mean POS–job performance effect size by .02. In the other nine effect sizes we examined, there was no converging evidence across the trim-and-fill and selection model analyses of missing studies on the weaker side of the effect size distribution. This suggests that publication bias did not have a substantial impact on this study's results.

Gender and Age as Moderators of POS–Outcome Relationships

We examined gender and age as possible moderators of POS–outcome relationships. There is some evidence that women who receive favorable treatment reciprocate to a greater extent than men (Croson & Buchan, 1999) and are more likely to respond to stress by affiliating with others and seeking and using social support (Taylor, Klein, Lewis, Gruenewald, Gurung, & Updegraff, 2000). Because POS meets socioemotional needs (Armeli et al., 1998) and elicits the norm of reciprocity (Eisenberger et al., 2004), we hypothesized that female employees would show a more positive relationship between POS and performance than would men.

Hypothesis 30: The relationship between POS and overall/task performance and OCB is stronger among women than men.

To test this hypothesis, we coded the percentage of women in each sample and examined the relationship between the proportion of women sampled and the observed effect size for the POS–performance relationships. The results did not support our prediction regarding the effect of gender composition on POS–performance relationships. The relationship between POS and overall/task performance was somewhat *less* among women than men ($r = -.24, p < .05$), and gender was unassociated with POS's relationships with OCB, OCB-O, and OCB-I ($r = .10, -.03, \text{ and } -.07$, respectively, all *ns*). This suggests that POS–performance relationships do not vary systematically based on the gender composition of the sample.

Age may also influence POS–outcome relationships, and thus we considered this as a sample-level moderator. There is evidence that older workers tend to have more positive perceptions of their employer (Carstensen, Isaacowitz, & Charles, 1999) and thus may be less attentive to POS in forming their job attitudes. To the extent that this is true, we would expect weaker relationships between POS and job attitudes, namely, job satisfaction and organizational commitment, among older workers.

Hypothesis 31: The relationship between POS and job satisfaction, affective commitment, and normative commitment is weaker among older than among younger samples.

Supporting the hypothesis, the relationship between POS and job satisfaction was reduced among older workers ($r = -.24, p < .05$). However, age was unrelated to the relationship

between POS and affective and normative commitment ($r = -.03$ and $.03$, respectively, both *ns*). Thus, the relationship between POS and job satisfaction was lessened to a small degree among older workers, but other attitudinal variables were unaffected.

Discussion

We found that OST is useful for unifying the growing empirical literature on POS. OST made successful predictions concerning the relative strengths of a substantial number of bivariate relationships involving POS. Further, key processes proposed by OST involving felt obligation, organizational identification, affective commitment, and performance-reward expectancies received support. The results suggest that POS is an important link between various types of favorable treatment by the organization and employees' positive orientation toward the organization, psychological well-being, and performance on behalf of the organization.

Antecedents of POS

Our results indicate that there are various ways of conveying to employees that the organization cares about their well-being and values their contributions. Supportive aspects of leadership, fairness, HR practices, and working conditions were all related to POS. This suggests that many, if not most, chronic or recurring elements of employees' relationship with the organization influence the employees' perception of the organization's favorable or unfavorable disposition toward them.

Cropanzano, Byrne, Bobocel, and Rupp (2001) maintained that fair procedures allow employees to better predict the actions that will lead to rewards and punishments and suggest the organization is concerned with employees' welfare as opposed to individual self-dealing implied by organizational politics. Accordingly, we found that fairness made a strong unique contribution to POS. Further, consistent with our view that employees view procedural justice to be more under the organization's control than other forms of fairness, procedural justice had a stronger relationship with POS than other kinds of fairness. In contrast to fairness, organizational politics showed a strong negative relationship with POS.

Consistent with OST's view that higher-level employees are more closely identified with the organization than lower-level employees, supervisor support was more strongly related to POS than coworker support. However, the moderate relationship between supervisor support and POS was substantially reduced when fairness was taken into account. Consistent with OST, we found that various types of inspirational and supportive leadership contributed substantially to POS. In contrast, initiating structure and transactional leadership were far less associated with POS. Recent findings also suggest that supervisors may vary in the degree to which they are identified with the organization and that favorable leadership by supervisors so identified is strongly linked to POS (Eisenberger et al., 2010, 2014).

Working conditions were also major contributors to POS, although these relationships differed in strength, as anticipated by OST. Relating OST to Demerouti and colleagues' (2001) job demands–resources model, working conditions that would be considered as *resources*, such as autonomy, rewards, and other elements of job enrichment, were stronger predictors of POS than *demands* related to the character of the job, such as role overload, conflict, and ambiguity. This indicates that although demands inform POS judgments,

resources do so to a greater degree such that employees place more weight on what the job provides them than on stressful aspects of the job. It may be that employees tend to attribute job resources to the organization's discretion, whereas they are less likely to blame the organization for the demands placed on them, perhaps attributing many of these demands to the nature of their occupations and industries. Consistent with this view, Eisenberger et al. (1997) found, across a diversity of organizations, that "stress and pressures" was ranked last of 18 job conditions in terms of control exerted by the organization, whereas job enrichment conditions were viewed as most under organizational control. Thus, it is not simply the impact of treatment that influences POS but the organization's control and intent behind favorable or unfavorable treatment.

Outcomes of POS

According to OST, POS encourages employees to favor a social exchange relationship with the organization over an economic exchange (Shore et al., 2006). We found that POS was positively related to social exchange and negatively related to economic exchange. High-POS employees also expressed more trust in the organization, believing that risks can be taken on the organization's behalf without fear of being exploited (Rousseau, Sitkin, Burt, & Camerer, 1998).

Consistent with the social exchange processes proposed by OST, high-POS employees reported greater felt obligation (and similarly defined normative commitment) directed toward organizational goals and objectives, higher affective commitment, and a greater expectation that high performance will be rewarded. In accord with the self-enhancement processes proposed by OST, POS was positively related to organizational identification, and organizational identification partially mediated the relationship between POS and affective commitment.

Also consistent with the importance of self-enhancement processes, POS was positively related to job satisfaction, job self-efficacy, organization-based self-esteem, and work-family balance and was negatively related to job stress, burnout, and work-family conflict. When a consistent pattern of supportive experiences with leaders and favorable job conditions leads to POS such that workers see the organization as dispositionally supportive, workers may be happier in their jobs. Their positive expectations about the future may also reduce threat appraisals that are central to stress processes (Lazarus & Folkman, 1984).

POS was related to behavioral outcomes helpful to the organization, including increased in-role performance and OCB and reduced withdrawal behaviors. Our results supported the prediction that because organizational representatives are only partly identified with the organization (Eisenberger et al., 2010; Shoss et al., 2013), OCB-O should be more closely related to POS than OCB-I. By contrast, a parallel analysis failed to find that POS was more negatively related to CWB-O than to CWB-I. Perhaps employees with low POS are hesitant to engage in CWB-O because of the high risk of detection and punishment.

The mediated relationships relating organizational identification and affective organizational commitment to OCB were stronger than those relating normative commitment (felt obligation) to OCB. The results suggest that POS leads employees to engage in OCB more because they feel a positive orientation toward the organization than because they feel obligated to reciprocate the organization's support. In other words, employees high in POS tend

to go outside of their roles to help the organization because they *want* to more than because they feel they *ought* to (see Meyer & Allen, 1997). However, because the normative commitment scale contains a substantial number of items related to turnover, more evidence is needed with items specifically related to an expressed obligation to help the organization meet its obligations.

It is also notable that the mediation of the POS–performance relationship by job self-efficacy was of low magnitude. It is possible that POS serves as a stronger indication of job self-efficacy only when performance feedback is lacking from other sources; when performance feedback is available from supervisors, coworkers, and/or customers, this specific feedback may be the primary determinant of job self-efficacy, diminishing the importance of POS.

Limitations

Our review's limitations should be noted. First, the small number of studies available for many of the analyses suggests the provisional nature of those findings. For example, team support, psychological contract fulfillment, and trust in management each had less than 10 studies, and we were able to account for only a small proportion of the variance in those effect sizes. This caveat also applies to the other 22 (of 71) effect sizes we analyzed. Second, although we were able to test many hypotheses derived from OST, investigating bivariate relationships as well as relative importance and mediated relationships for key variables, we lacked sufficient data to examine more general models involving multiple variables (e.g., path analyses). Third, during data gathering, although the inclusion criteria were relatively straightforward, we did not document why particular studies failed to meet the criteria, and we were not able to compute an agreement index for the decision to include or exclude a study. We encourage future authors to adhere to the guidelines provided by Kepes et al. (2013) and the Meta-Analysis Reporting Standards published by the American Psychological Association (2008) when conducting meta-analyses.

Future Directions

Future progress in understanding the role of POS in the employee–organization relationship could be advanced by focused research on the heuristics that guide employees' attributions about the organization's favorable or unfavorable treatment, processes linking POS to employee well-being and performance, longitudinal and more advanced research designs, and studies demonstrating the practical implications of POS. It should also be noted that many of the relationships showed substantial variability across samples, much more than could be accounted for by sampling error, suggesting there are sample-level moderators not accounted for here and that contextual variables warrant further research attention in addition to these other factors.

The organization's benevolent intent behind favorable treatment plays a key role in the development of POS. We have discussed two attributional heuristics, the employees' perceptions concerning the organization's discretion over favorable treatment and the specificity of favorable treatment to the employee's needs. The following four additional attributional heuristics have been suggested in interpersonal exchange relationships as indicating the donor's

concern with the welfare of a recipient and may further moderate the relationship between favorable treatment by the organization and POS: (a) the generosity of the organization relative to its resources, (b) the intent to aid the employee as opposed to accidental help, (c) the extent of the employee's need at the time the resources were provided, and (d) the extent to which the resources appear to benefit the employee more than the organization (Eisenberger et al., 1986; Gouldner, 1960). Employees may apply these attributional heuristics to various kinds of treatment received from the organization to ascertain POS. Based on social exchange theory, OST predicts that all of the attribution heuristics that employees use to judge the organization's concern with their welfare enhance the positive relationship between favorable treatment from the organization and POS.

Future research is needed to better understand the contribution of POS to self-enhancement outcomes. For example, POS may lessen the perceived severity of stressors (Lazarus & Folkman, 1984) by meeting the need for emotional support during stressful times (Armeli et al., 1998), by providing comfort via identification with the organization, or by providing assurance that help will be available when needed. In addition, POS may encourage active coping strategies by leading employees to believe that the organization will not take advantage of their vulnerabilities as they attempt to deal with organizational stressors.

Conclusion

Predictions based on OST processes involving social exchange, attribution, and self-enhancement were generally successful in accounting for contributions of leadership, fairness, HR practices, and working conditions to POS, as well as the relationship of POS with employees' positive orientation toward the organization, subjective well-being, and behaviors helpful to the organization. Taken as a whole, the results suggest that POS plays a central role in the employee–organization relationship and has important implications for improving employees' well-being and favorable orientation toward the organization.

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