# Psychological Contracts and Organizational Identification: The Mediating Effect of Perceived Organizational Support

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Abstract Understanding the processes through which employees incorporate the organization's identity into their own identity is critical to building positive employer-employee relationships. We draw primarily on organizational support theory to advance the argument that psychological contract breach is negatively related to organizational identification and positively related to organizational disidentification because it makes employees believe that their organizations do not value their contributions or care about their well-being (reduces perceived organizational support). Results from two studies generally provide support for our hypotheses: in Study 1, perceived organizational support fully mediated the relationship between psychological contract breach and organizational identification. In Study 2, Time 2 perceived organizational support fully mediated the relationship between Time 1 relational psychological contract breach (e.g., promises related to training, development, job security) and organizational identification, but not the relationship between transactional psychological contract breach (e.g., promises related to pay and work hours) and organizational identification. Time 2 perceived organizational support partially mediated the relationship between relational psychological contract breach and organizational disidentification, but not the relationship between transactional psychological contract breach and organizational disidentification. We conclude that organizations should be concerned with this

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K. L. Scott Clemson University, Clemson, SC, USA erosion of the positive employer-employee relationship (organizational identification) and fostering of a negative employer-employee relationship (disidentification).

**Keywords** Social exchange · Social identity · Psychological contracts · Perceived organizational support · Organizational identification

The fundamental tenet of organizational support theory (OST; Aselage and Eisenberger 2003; Eisenberger et al. 1986) is that employees develop global perceptions concerning the degree to which the organization values their contributions and cares about their well-being (perceived organizational support; POS). Drawing on social exchange theory (Blau 1964) and the reciprocity norm (Gouldner 1960), scholars suggest that POS positively affects employer-employee relations because it creates feelings of obligation within employees to care about the organization and help it reach its goals (e.g., Eisenberger et al. 2001; Rhoades and Eisenberger 2002). Research generally confirms this viewpoint: positive treatment from the organization (in terms of fairness, job conditions, and supervisory relationships) results in POS, which obligates employees to hold attitudes (affective organizational commitment) and behave in a manner (increased citizenship and task performance, decreased withdrawal) that helps the organization (Eisenberger et al. 2001; Riggle et al. 2009).

Despite this, recent research has suggested that social exchange theory is limited due to its focus on behavioral as opposed to symbolic conceptions of rewards (Fuller et al. 2006; Restubog et al. 2008). That is, social exchange requires that when a party provides a benefit to another individual, the individual must repay the provider (Blau 1964; Homans 1958). This perspective overlooks the importance of the symbolic nature of exchange, particularly the symbolic role that the fulfillment (or breach) of promises made by one party to another plays in signaling the value of that individual to a collective (e.g., Restubog et al. 2008).

In this research, we address this limitation by attempting to integrate social exchange-based and organizational identification-based views of the employeremployee relationship using OST. We choose OST as a framework primarily because its theorizing accounts for both of these perspectives. More specifically, organizational identification research suggests that while an individual will identify with the organization when a meaningful overlap exists between a person's self-identity and the perceived identity of the organization, their propensity to identify also depends on the extent to which employees perceive that the organization considers them to be legitimate organizational members (Dutton et al. 1994; Mael and Ashforth 1992; Ashforth et al. 2008). Accordingly, POS is not just valuable from an instrumental perspective, but also because support signals to employees that they are valued organizational members. To this end, Eisenberger and colleagues (1986) posit that POS fulfills socioemotional needs, leading employees to incorporate organizational membership into their social identities (e.g., Rhoades and Eisenberger 2002). Conversely, while low levels of organizational support (or a lack of support) will likely hinder identification (i.e., lead to low levels of identification), we believe that these conditions will also signal to employees that they are illegitimate members.

Under these conditions, employer-employee relations will be damaged as employees will disidentify with the organization—i.e., cognitively separate from the organization by forming the perception that what they stand for is in direct opposition to what the organization stands for (e.g., Elsbach and Bhattacharya 2001; Kreiner and Ashforth 2004).

Notably, scant research has embraced the organizational identification perspective underlying OST (for exceptions, see; Edwards and Peccei 2010; van Kippenberg, and Sleebos 2006), which is an important theoretical and practical oversight. From a theoretical perspective, exploration and testing of a socialidentity based view is critical to further development of the theorizing of OST (e.g., Rhoades and Eisenberger 2002) and social exchange theory in general (Fuller et al. 2006). Practically speaking, the difference between social exchange and organizational identification is significant because employees who maintain social exchange relationships with their organizations will reciprocate favorable treatment; employees who identify strongly with their organizations believe that they are "one with the organization" (e.g., Mael and Ashforth 1992) and thus see the successes of their organization as their own successes. Thus, those employees whose commitment is based on social exchange will only remain committed if the organization can provide material and social rewards commensurate with the employee's contributions, while employees who identify with the organization are more likely to remain with and help the organization even when circumstances such as the economy or poor organizational performance make it difficult for the organization to demonstrate its commitment to them through the provision of resources (e.g., Riketta 2005; van Kippenberg, and Sleebos 2006). Notably, research indicates that organizational identification is positively associated with ratings of performance by supervisors, extra-role performance, and intent to remain (Carmeli et al. 2007; Riketta 2005) as well whether employees elect to form a union (Blader 2007).

In order to advance our understanding of organizational identification as a theoretical foundation for OST, we test a model incorporating psychological contract breach, POS, and organizational identification and disidentification. We reason that the organization's breach of employees' psychological contracts—relatively stable mental models that encapsulate the perceived promises employees believe the organization has made to them in exchange for their efforts on behalf of the organization (Rousseau 1995)—will threaten employees' socioemotional and material needs. Accordingly, breach will serve as a signal to employees that the organization does not care about them or value the contributions that they make (e.g., reduce perceived organizational support; POS). In response to reduced POS, employees will tend to reduce the importance of the organization in their self-concepts (reduced identification) and actively separate their own self-concepts from the organization (increased disidentification).

This paper will unfold as follows. First, we review relevant literature on organizational support theory, psychological contracts, and social identity to develop our hypotheses. Second, we present the results of two studies testing our hypotheses: a study of university employees as well as a study of employees from a wide variety of organizations drawing on a three-wave longitudinal research design. We then discuss theoretical and practical implications of our research.

#### **Theoretical Development**

#### Organizational Support Theory

Organizational support theory argues that employees pay attention to treatment offered by the organization in an effort to determine the degree to which their contributions to the organization are valued and their organizations care about them (Eisenberger et al. 1986). An important component of this argument is the notion that employees believe that treatment provided to them by agents of the organization is representative of organization's general favorable or unfavorable orientation towards them, as opposed to the independent motives of these individuals (Eisenberger et al. 1986). With this in mind, OST draws on Levinson's (1965) idea that employees personify their employing organization, a notion which provides a basis for the role of the "employer" in employer-employee social exchange relationships. In such relationships, organizations provide material and socioemotional benefits to employees in exchange for their commitment and work effort on behalf of the organization. Consistent with reciprocity norm (Gouldner 1960), support perceived to come from the organization obligates employees to help, or at a minimum not harm, the organization (Gouldner 1960; for an empirical test, see Eisenberger et al. 2001).

While a social exchange-based view has largely dominated the literature on OST, Eisenberger and colleagues (1986) suggested that an important function of POS is that it fulfills employees' socioemotional needs for caring, esteem, and approval in the workplace (for an empirical test, see Armeli et al. 1998). By fulfilling socioemotional needs, Rhoades and Eisenberger suggest that "POS is expected to reduce aversive psychological and psychosomatic reactions (i.e., strains) to stressors by indicating the availability of material aid and emotional support when needed to face high demands of work" (2002, p. 698; for empirical tests, see George et al. 1993; Ilies et al. 2010). In turn, need fulfillment causes individuals to incorporate organizational membership into their social identity (e.g., Eisenberger et al. 1986; Fuller et al. 2006; Rhoades and Eisenberger 2002). Yet a comprehensive empirical test of these relationships has not, to our knowledge, been offered in the literature. To address this, we explore the mediating role of POS on the relationship between a particular form of the organization's failure to fulfill socioemotional and material needs (psychological contract breach) and organizational identification and disidentification. In the following sections, we build our arguments for this mediating effect through discussion of psychological contracts and social identity theories.

#### Psychological Contracts and Social Identity

Psychological contracts theory (Rousseau 1995) suggests that the unwritten promises which employees perceive that the employer has made to them with respect to training, promotions, or other factors not explicitly recognized in formal contracts are critical to developing favorable exchange relationships. These promises, which often develop during recruiting, socialization, and interaction with coworkers and supervisors, are inherently subjective (Rousseau 2001) and thus difficult for organizations to understand and fulfill (Rousseau 1995). It is notable that some

past research distinguishes between transactional and relational obligations in psychological contracts and as a result treats them as a higher-order construct made up of two different dimensions (Rousseau 1995). Relational dimensions of the psychological contract specify that organizations provide training, professional development, fair treatment, and job security in exchange for employees' commitment and willingness to perform tasks which fall outside of their job descriptions. On the other hand, the transactional dimension of the psychological contract captures the organization's provision of adequate compensation, working conditions, and reasonable guarantees of short-term employment in exchange for employee fulfillment of his or her contractual work obligations (Rousseau 1995). Restubog et al. (2008) offered a useful distinction between relational and transactional psychological contract types: relational contracts represent socioemotional goods, while transactional contracts represent employees' material interests.

The restructuring, downsizing and outsourcing that has occurred as a result of international competition and advances in technology make it increasingly difficult for organizations to fulfill psychological contracts, even when they have the best of intentions to do so (Robinson and Morrison 2000). Like most empirical examinations of POS, social exchange theory (Blau 1964) and the reciprocity norm (Gouldner 1960) are commonly used to explain the outcomes that occur in response to psychological contract breach. When organizations fail to fulfill their promises, employees are expected to reduce their contributions to and hold negative attitudes towards the organization.<sup>1</sup> Overall, research confirms that breach is negatively related to in-role and extra-role performance and positively associated with negative attitudes and withdrawal behaviors (Zhao et al. 2007).

While empirical research supports a social exchange model for psychological contract breach, a key oversight of this work is that it fails to inform our understanding of the "symbolic" effects of this phenomenon (Restubog et al. 2008). Restubog and colleagues (2008) suggested that social exchange- and equity-based approaches to psychological contract breach do not account for the fact that breach signals to employees that they are less important and less valuable stakeholders of the organization. With this in mind, Restubog et al. (2008) argued that a critical outcome of psychological contract breach is organizational identification. Organizational identification is defined as the extent to which employees define themselves in terms of what they think the organization represents, or more simply their perceived "oneness" with the organization (Ashforth and Mael 1989). In an organizational context, employees' experiences with their employing organization help them to form perceptions of the organization (Albert and Whetten 1985). The concept of organizational identification, based on social identity theory, suggests that employees

<sup>&</sup>lt;sup>1</sup> Despite the fact that both psychological contracts and OST frequently draw on social exchange theory as a theoretical basis, important differences exist between the constructs (for evidence of empirical distinction, see Coyle-Shapiro and Conway 2005; Coyle-Shapiro and Kessler 2000; Kiewitz et al. 2009; Tekleab et al. 2005). Perhaps the most notable of these is that psychological contracts theory draws on one specific facet of the employer-employee relationship (the extent to which the organization fulfills or fails to fulfill perceived promises) whereas organizational support theory is concerned with employees' overall assessment of the quality of their exchange relationship with the organization, regardless of the promissory nature of the treatment provided (Aselage and Eisenberger 2003).

identify with an organization when their personal identity and the organization's identity are similar and when affiliation with the organization increases self-esteem (Ashforth and Mael 1989; Dutton et al. 1994). When employees identify, they incorporate the organization's identity into their own social identity. As a result, the organization's successes and failures affect employees personally: successes increase and failures decrease employee self-esteem. Thus, as a result of identification, employees tend to be more committed, more apt to engage in citizenship behavior, and are less likely to leave (for a meta-analysis, see Riketta 2005).

In the context of psychological contracts, Restubog and colleagues (2008) suggest that psychological contract breach will be construed by employees as unjust treatment and thus, to some extent, may be symbolic. To understand the "symbolic" effects of psychological contracts, Restubog et al. (2008) argued—and found support for—the proposal that organizational identification and organizational trust mediated the relationship between psychological contract breach and organizational citizenship behavior. Other correlational studies by Kreiner and Ashforth (2004) and Gibney et al. (2011) demonstrate negative relationships between breach and organizational identification.

Just as employees identify when they perceive that similarity exists between themselves and their organizations, they also distance themselves and disidentify when they perceive that fundamental differences exist between themselves and the organization, when they perceive that the organization has values different from their own, when they believe that the reputation of the organization is unfavorable, or when they perceive that its identity threatens their own (Bhattacharya and Elsbach 2002; Elsbach and Bhattacharya 2001; Kreiner and Ashforth 2004). Accordingly, organizational disidentification is a condition in which an employee's sense of self or self-definition—i.e., values, core beliefs, etc.—stands in direct opposition to what he or she perceives defines the organization. Thus, similarly to organizational identification, disidentification describes the role that the organization plays in an employee's self-concept. However, disidentification differs from identification in that the employee's perceived sense of self is "based on (1) a cognitive separation between a person's identity and his or her perception of an organization, and (2) a negative relational categorization of the self and the organization" (Bhattacharya and Elsbach 2002, p. 28). Furthermore, disidentification and identification are not opposite ends of the same continuum. First, just because an employee does not identify with the organization does not mean that he or she will cognitively separate and stand in direct opposition to the organization. In other words, an employee could take a disinterested stance towards the organization in which he or she does not identify nor disidentify with the organization (Bhattacharya and Elsbach 2002). Second, confirmatory factor analysis by Kreiner and Ashforth (2004) demonstrate that organizational identification and organizational disidentification are related but discrete constructs and that the two constructs have different antecedents (see also Gibney et al. 2011).

With respect to psychological contract breach, Gibney and colleagues (2011) evidenced a positive relationship between employees' psychological contract breach and organizational disidentification, (see also Kreiner and Ashforth 2004; Restubog et al. 2008). Overall, we expect that psychological contract breach will signal to employees that they are not valued members of the organization and as a result they

will tend to identify with the organization to a lesser degree and disidentify with the organization to a greater degree. In the next section, we offer a rationale for the mediating role of POS in the psychological contract breach-organizational identification/organizational disidentification relationships.

# The Mediating Role of Perceived Organizational Support

Although past research (Gibney et al. 2011; Kreiner and Ashforth 2004; Restubog et al. 2008) has explored the direct relationship between psychological contract breach and organizational identification, few if any studies have empirically explored *why* these variables are related. This is a critical oversight in the literature: if psychological contract breach is commonplace or perhaps even an inevitable aspect of life in today's organizations (e.g., Rousseau 2001), it is imperative to understand explicitly why it is related to identification and disidentification. By understanding the process through which psychological breach affects the employer-employee relationship and ultimately employee behaviors, organizational interventions can be developed to ameliorate the problem (e.g., Zagenczyk et al. 2009). In the following paragraphs, we review research on OST and organizational identification and then argue that OST offers a unifying framework for research on psychological contract breach process.

# Psychological Contract Breach, POS and Organizational Identification

As mentioned previously, early theorizing on OST and recent empirical tests suggest that POS and organizational identification are related. For instance, in their articulation of the relationship between POS and its consequences, Rhoades and Eisenberger (2002) suggest that "the caring, approval, and respect connoted by POS should fulfill socioemotional needs, leading workers to incorporate organizational membership and role status into their social identity" (p. 699). The main reason POS and organizational identification are positively related stems from observations that identification is the outcome of a process in which employees seek to understand themselves in relation to the organization (Ashforth et al. 2008). Part of this process entails that employees evaluate the attractiveness of the organization's identity (Dutton et al. 1994). When evaluating attractiveness, an employee will be more likely to identify with the organization when he or she comes to see that aspects of the organization's identity—core values and beliefs—are similar to his or her own beliefs (Albert and Whetten 1985) and that identification will provide the employee with the ability to satisfy certain needs (Ashforth and Mael 1989; Fuller et al. 2006). In addition to the organization's attractiveness, another important component of the identification process is the extent to which the organization socially validates the employee (Ashforth et al. 2008; Hogg and Terry 2000). By social validation, we are referring to an organization's (or its representative members) actions and behaviors that are directed to its employees and that play a role in establishing the employee as a legitimate organizational member. Accordingly, employees will interpret the social validation cues that they receive in order to understand their relationship with the organization. Accordingly, we suggest that POS will cause employees to identify with the organization because it serves as a form of social validation.

Some recent studies that have explored the relationship between POS and OI or variables similar in nature to OI suggest that POS may have positive effect on identification (e.g., Edwards and Peccei 2010; Fuller et al. 2003; Gibney et al. 2011; Rhoades and Eisenberger 2002). For instance, Gibney et al. (2011) demonstrated a positive relationship between POS and organizational identification in a correlational study. Van Knippenberg and Sleebos argue that the fundamental distinction between identity and commitment lies in the fact that "identification is self-definitional and implies psychological oneness with the organization whereas commitment implies a relationship where individual and organizational are separate entities psychologically" (2006; p. 579). Findings from their study showed that organizational commitment was more strongly related to POS, and identification was more strongly related to selfreference ("When I think about myself, I often think about myself as a member of this organization"). Finally, and perhaps most relevant to our work, Edwards and Peccei (2010) showed that organizational identification mediated the relationships between POS and (1) intention to leave; and (2) involvement among healthcare workers in the United Kingdom.

Framed from the perspective of OST, we conceptualize psychological contract breach as the organization's failure to fulfill employees' material (e.g., transactional psychological contracts) and socioemotional (e.g., relational psychological contracts) needs (e.g., Restubog et al. 2008). When psychological contract breach threatens employees' socioemotional and material needs, this will serve as a signal to employees that the organization does not care for them or value their contributions, as well as inform them that they cannot count on the organization to help them when job demands are great (e.g., reduce POS). As a result, they will reduce the extent to which they identify with the organization.

Accordingly, we hypothesize

Hypothesis 1: Perceived organizational support will mediate the relationship between psychological contract breach (H1a: transactional psychological contract breach; H2a: relational psychological contract breach) and organizational identification.

## PCB, POS and Organizational Disidentification

While support and social validation are necessary in order to facilitate organizational identification, a lack of support or complete absence of support not only will lead to lower levels of identification, but also will promote disidentification. Essentially, extreme low levels of support (or the perceived absence of support) will be perceived by employees as a form of social invalidation in which the organization is signaling to them that they are not legitimate organizational members. In turn, this social invalidation will promote perceptions among employees that they are being rejected or marginalized and will create membership ambiguity in which their status as organizational members will be "vague, problematic or unstable" (Bartel and Dutton 2001). Accordingly, employees will seek to resolve or make sense of the lack of support or social invalidation in a manner that preserves their self-esteem (Ashforth et al. 2008; Swan 1990). In order to accomplish this, we argue that employees will cognitively reject the organization by forming beliefs that their values (and what they

stand for) are diametrically opposed to those of the organization, and hence, will make sense of the lack of support through disidentification. Thus, we hypothesize:

Hypothesis 2: Perceived organizational support will mediate the relationship between psychological contract breach (H2a: transactional psychological contract breach; H2b: relational psychological contract breach) and organizational disidentification.

# Methods (Study 1)

## Participants and Procedure

The opportunity to complete an online survey was presented to 274 college/ university faculty and staff who were members of a professional association which was created to support student advising. Respondents were contacted via email by the first author and provided a link to the survey. Responses to the survey were collected in a secured website created by the first author. Research comparing on-line and traditional paper and pencil surveys reveals that there are no significant biases that exist between the two methodologies (e.g., Mehta and Sivadas 1995). We ensured that all potential respondents did have internet access to complete the survey. Completed responses were provided by 177 individuals (69% female) for a response rate of 65%. Respondents' mean age was 48.7 years and their organizational tenure was 11.11 years (SD = 9.76). In terms of education level, 5% of respondents held bachelor's degrees, 34% held master's degrees, 52% held PhDs, and 4.9% held other degrees, including JDs, MDs, and EdDs.

## Measures

The response format for all items, except gender and tenure, was a seven point Likert-type scale (1 = strongly disagree; 7 = strongly agree), with items coded such that a higher score indicated a greater amount of the focal construct except when reverse-coded items were considered. Responses to all items were averaged to create the measures that were used for each variable. In this study, several of the items were shortened (psychological contract breach and organizational identification) due to concerns on the part of the organization related to the length of the survey.

*Psychological Contract Breach* Psychological contract breach was measured using the three items from Robinson and Morrison's (2000) five-item psychological contract breach scale with path loadings that exceeded .71, thus indicating that approximately half of the variance in responses is due to the underlying construct (Fornell and Larcker 1981; see Duffy et al. 2006 for utilization of a similar approach). In an effort to compare the shorter version of the psychological contract breach measure with the longer version proposed by Robinson and Morrison (2000), we gave the entire five-item scale to an independent sample of 307 bank employees: bivariate correlation analysis suggests that the long and short versions of the scale were significantly correlated (r=.93, p<.001). For this study, the reported scale reliability was .96, which compares favorably to the .84 reliability coefficient

reported by Robinson and Morrison (2000) for the five-item scale. A sample item is, "I have not received everything promised to me in exchange for my contributions to the organization."

*Perceived Organizational Support* POS was measured using a six-item version of the Survey of Perceived Organizational Support (Eisenberger et al. 2001), which is a recommended measure of POS due to its reliability and validity in the meta-analysis offered by Rhoades and Eisenberger (2002). Sample items from the scale include, "My organization values my contributions to its well-being" and "My organization strongly considers my goals and values." The reliability of the scale was .91.

*Organizational Identification* Organizational identification was measured using three items from Mael and Ashforth's (1992) organizational identification scale. We utilized the three items suggested by Kreiner (personal communication) in light of concerns related to the length of the survey, who recently proposed an expanded model of organizational identification (Kreiner and Ashforth 2004). The items from this scale are "When someone criticizes my organization, it feels like a personal insult", "When I talk about this organization, I usually say 'we' rather than 'they'", and "This organization's success are my successes". Cronbach's alpha for the organizational identification scale was .87.

*Control Variables* Consistent with past research on social exchange and organizational identification, we controlled for gender, age, and tenure. Tenure was controlled because employees with greater organizational tenure tend to have higher levels of POS and lower levels of psychological contract breach, in some cases resulting in range restriction (e.g., Rhoades and Eisenberger 2002). Accordingly, respondents reported the length of employment with their current college/university in years. In a recent meta-analysis, Rhoades and Eisenberger (2002) also noted that most studies control for gender to account for the possibility that this demographic variable influences POS. Respondents' gender was thus utilized as a dummy variable (0 = male and 1 = female). Finally, Rhoades and Eisenberger (2002) found a significant correlation between age and POS, so we included it as a control variable as well.

## **Results (Study 1)**

Prior to testing our hypotheses, we conducted chi-square difference tests to examine discriminant validity (Bentler and Bonett 1980; James et al. 1992) consistent with past research (e.g. Shanock and Eisenberger 2006) to assess: (1) that respondents distinguished between constructs; and (b) the impact of common method bias on the sample. A baseline model was created by assigning all measures to a single latent construct. A two-factor model was next created by removing one construct's items from the base model, creating a second latent construct and assigning the removed items from the first construct to that latent construct. The two latent constructs were allowed to covary. Specifically, the three organizational identification latent

construct was created and the three organizational items were associated with the organizational identification latent construct. This process was repeated again which provided three latent constructs of organizational identification, perceived organizational support and psychological contract breach.

Results of chi-square difference tests (see Table 5) suggest that our constructs were distinct from one another and that common method bias did not influence our results. When a single latent construct most accurately fits the data, there is evidence of common method bias (Podsakoff et al. 2003). Podsakoff et al. (2003) state "it [single-factor test] is a diagnostic technique for assessing the extent to which common method variance may be a problem" (p. 889). In our data, items loaded onto the appropriate factors and the three-factor model fit the data better than a single-factor model.

Fit indices are also presented in Tables 1 and 2. We utilized multiple fit measures because no single measure of fit is unanimously accepted (Bolino and Turnley 1999). Specifically, we report the Root Mean Square Error of Approximation (RMSEA), the normed fit (NFI), relative fit (RFI), incremental fit (IFI), the comparative fit (CFI), the parsimony normed fit (PNFI), and the parsimony comparative fit (CFI). The RMSEA is less than .08 and all of non-parsimonious fit indices (NFI, RFI, IFI and CFI) exceed .90. In total, the fit indices indicate that the three factor model provides the best fit which is described, conservatively, as reasonable based upon current criteria (Lance et al. 2006; Marsh et al. 2004).

We used mediated regression analysis to test Hypotheses 1, which predicted that POS would mediate the relationship between psychological contract breach and organizational identification (see Table 3). Baron and Kenny argue that there are three steps required to test for mediation: (1) the mediator variable must be regressed on the predictor variable, (b) the outcome variable must be regressed on the predictor variable, (c) the outcome variable must be regressed on both the predictor and mediator variables (1986, p. 1177). We found evidence for the first requirement for mediation, as the first regression equation (Step 1) revealed that psychological contract breach was negatively and significantly associated with POS ( $\beta$ =-.67,  $p \leq .001$ ). We next regressed organizational identification on psychological contract breach and found a negative and significant relationship ( $\beta$ =-.34,  $p \leq .001$ ; see Step 2),

Variables	М	SD	1	2	3	4	5	6
		~-				-	-	
Study 1 (N=173)								
1. Age	48.7	19.8	-					
2. Gender	-	_	.04	-				
3. Tenure	11.1	9.8	.67***	.43***	_			
4. PCB	4.97	1.48	05	04	.00	(.96)		
5. POS	5.05	1.17	.08	.44***	.16*	66***	(.91)	
6. OI	5.11	1.06	.12	.14*	.03	33***	.34***	(.87)

Table 1 Descriptive statistics and inter-correlations of Study 1 variables

Study 1: Gender is coded as 0 = Male and 1 = Female; Age and tenure are expressed in years; *PCB* Psychological contract breach; *POS* Perceived Organizational Support; *OI* Organizational Identification. Alpha reliabilities are along the diagonal in (); \*p<.05, \*\*p<.01, \*\*\*p<.001

Model	$\chi^2$ (degrees of freedom)	$\Delta\chi^2$ ( $\Delta$ degrees of freedom)	RMSEA	NFI	RFI	IFI	CFI	PNFI	PCFI
Study 1									
One factor	580.09(54)	-	.24	.67	.52	.68	.69	.46	.48
Two factors	526.18(53)	53.91(1)	.23	.70	.56	.72	.72	.48	.49
Three factors	86.67(51)	439.51(2)	.06	.95	.93	.98	.98	.62	.64
Study 2									
One factor	3014.10(434)	-	.15	.49	.42	.53	.53	.43	.46
Two factor	2787.19(433)	226.91(1)	.14	.53	.46	.57	.57	.46	.50
Three factor	2344.30(431)	442.89(2)	.13	.61	.55	.65	.65	.53	.56
Four factor	1612.55(428)	731.75(3)	.10	.73	.69	.79	.78	.63	.68
Five factor	1558.85(424)	53.7(4)	.09	.74	.69	.79	.79	.63	.68

 Table 2
 Chi-square difference tests

All models are significant at p < .05. Models: Study 1: One factor = All items to one construct; Two factor = Organizational identification and all other items to one construct; Three factor = Organizational identification, psychological contract breach, and perceived organizational support; Study 2: One factor = All items to one construct; Two factor = Organizational identification and all other items to one construct; Three factor = Organizational identification and all other items to one construct; Three factor = Organizational identification, and all other items to one construct; Three factor = Organizational identification, organizational disidentification and all other items to one construct; Four factor = Organizational identification, organizational disidentification, perceived organizational support at Time 2 and all other items to one construct; Five factor = Organizational identification, organizational identification, organizational identification, perceived organizational support, relational psychological contract breach and transactional psychological contract breach. *RMSEA* Root Mean Square Error of Approximation, *NFI* Normed Fit Index, *RFI* Relative Fit Index, *IFI* Incremental Fit Index, *CFI* Comparative Fit Index, *PNFI* Parsimony Normed Fit Index, and *PCFI* Parsimony Comparative Fit Index.

meeting the second requirement for mediation. We then regressed organizational identification on psychological contract breach and POS (Step 3) and found that the positive and significant relationship between psychological contract breach and organizational identification became insignificant ( $\beta$ =-.19, p=n.s.) while the relationship between POS and organizational identification was significant ( $\beta$ =.23, p $\leq$ .05). This result suggests that POS fully mediates the relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because the previously significant relationship between psychological contract breach and organizational identification because insignificant when POS was entered into the regression equation.

As an additional step, we conducted a Sobel test (Sobel 1982) for mediation. This computation applies a bootstrapping procedure and confidence intervals to determine both the significance and effect size of the indirect effect (Preacher and Hayes 2004). The results of this analysis revealed that the indirect path was significant, z = -.10, p < .001 and produced a 95% confidence interval that did not include zero (CI: -.25-(-.01)). Thus, based on the results of the Sobel test, we were able to conclude with 95% confidence that the indirect effect was different from zero which further substantiated our prediction that POS would mediate the relationship between psychological contract breach and organizational identification.

Finally, because the study was cross-sectional and we could not rule out reverse causality, we examined psychological contract breach as a mediator of the

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	.10	.19	.20
Gender <sup>b</sup>	.17*	06	06
Tenure <sup>c</sup>	04	09	09
Step $\Delta R^2$	.03	.03	.03
Step R <sup>2</sup>	.03	.03	.03
Step 2:			
Age	.04	.17	.17
Gender	.11	09	09
Tenure	.01	06	06
Psychological contract	66***	34***	34***
Step $\Delta R^2$	.43***	.09***	.12***
Step R <sup>2</sup>	.46***	.10***	.15***
Step 3:			
Age			.16
Gender			11
Tenure			07
Psychological contract			19
POS			.23*
Step $\Delta R^2$			.02
Step R <sup>2</sup>			.17***

 Table 3 Mediated regression analyses for psychological contract breach predicting organizational identification in Study 1

\*p < .05 \*\*p < .01 \*\*\*p < .001 (two-tailed tests). Beta values are standardized estimates from final step of analysis. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

relationship between POS and organizational identification (see Table 4). Results indicated that the significant relationship between POS and organizational identification remained significant even when psychological contract breach was entered in the regression equation ( $\beta = .23$ ,  $p \le .05$ ), indicating that psychological contract breach did not mediate the relationship between POS and organizational identification.

## Methods (Study 2)

In Study 2, we extended Study 1 in four important ways. First, consistent with the suggestion of Podsakoff and Organ (1986), we attempted to ameliorate the effects of common method bias resulting from our utilization of self-report measures by using a temporal separation of our independent variables (Time 1), our mediating variable (Time 2, 3 months later), and our dependent variables (Time 3, 6 months after Time 2). Second, rather than considering only organizational identification as a dependent variable as in Study 1, we also included organizational disidentification in Study 2. Third, in Study 2, we collected data from full-time employees in a wide array of

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	09	.19	.20
Gender <sup>b</sup>	08	06	06
Tenure <sup>c</sup>	.08	08	09
Step $\Delta R^2$	.01	.03	.03
Step R <sup>2</sup>	.01	.03	.03
Step 2:			
Age	03	.16	.16
Gender	.03	12	12
Tenure	.05	07	07
POS	67***	.36***	.36***
Step $\Delta R^2$	.43***	.13***	.13***
Step R <sup>2</sup>	.44***	.16***	.16***
Step 3:			
Age			.16
Gender			11
Tenure			06
POS			.23*
Psychological contract			18
Step $\Delta R^2$			.02
Step R <sup>2</sup>			.18***

 Table 4 (Alternate results). Mediated regression analyses for perceived organizational support predicting organizational identification in Study 1

\*p < .05 \*\*p < .01 \*\*\*p < .01 (two-tailed tests). Beta values are standardized estimates from final step of analysis. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

occupations, which lends greater generalizability to the findings of Study 1, which was constrained to University employees. Finally, we conducted a constructive replication of the results of Study 1 in Study 2 (Lykken 1968). In Study 1, we utilized the global measure of psychological contract breach, whereas in Study 2 we utilized a facet-based measure (see Zhao et al. 2007 for further discussion). This increases the generalizability of these findings since the results were invariant based upon measurement methodology. Further, in Study 2, we assess breach of both relational and transactional dimensions of the psychological contract are related to identification and disidentification. This is particularly important in the context of our study because Restubog et al. (2008) found that relational psychological contract breach was more strongly associated with citizenship behavior than was transactional psychological contract breach.

## Sample and Procedures

We collected data from full-time employees through a three-wave, on-line survey. Consistent with the procedures employed in previous research (Gettman and Gelfand 2007; Gibney et al. 2009; Piccolo and Colquitt 2006; Zagenczyk et al. 2009), we recruited respondents with the aid of MarketTools.com, an organization which maintains a large opt-in database of individuals willing to participate in on-line surveys for small incentives. At Time 1, MarketTools.com sent a link to the survey which we prepared (i.e., URL) via e-mail to 1,000 full-time, white-collar employees who had volunteered to participate. Our rationale for sampling from employees working in a wide range of occupations addresses calls for researchers to collect data on psychological contracts from samples which did not consist of MBA students (Turnley and Feldman 1999). Employees accessed the survey via a secure internet address and submitted responses to a secure internet database. At Time 1, respondents provided information related to demographic variables, transactional and relational psychological contract breach, and POS. From this first wave, we received 497 completed surveys, yielding a response rate of 49.7%.

We collected data on the mediating variable (POS) 3 months later in order to attenuate the effects of common method variance. Common method variance can be problematic when self-report methodologies are employed, as in some cases the observed relationships between variables can be inflated (Podsakoff and Organ 1986). The same procedures used in the Time 1 data collection were used in data collection at Time 2. The second on-line survey was administered to all 497 participants who completed the Time 1 survey. A total of 310 respondents completed the Time 2 surveys for a response rate of 62%. Participants were 66% female, 88% Caucasian, and ranged in age from 24 to 72 years (M=45 years). Time 2 respondents, on average, had worked in their organizations for 10.0 years. ANOVA results showed no significant differences between the two groups of respondents across demographic variables.

Finally, we collected the dependent variables (organizational identification and disidentification) at Time 3, 6 months after the Time 2 data collection. Again, the same procedures used at Times 1 and 2 were utilized at Time 3. The third on-line survey was administered to all 310 respondents who completed the Time 2 survey. A total of 200 respondents completed the Time 3 surveys for a response rate of 65% of Time 2 respondents and an overall response rate of 40.2%. Participants were 66% female and 88% Caucasian. Respondents' ages ranged between 24 and 72 years (M=46.6 years). Mean organization tenure was 8.9 years. Respondents were employed in a wide variety of occupations, including 21% in business and financial operations occupations, 18% in office and administrative support occupations, 15% in management occupations, 11% in computer and mathematical occupations, 13% in education, training, and library, 3% in production occupations, 2% in architecture and engineering, 2% in healthcare support, 1% in life, physical and social science occupations, 1% in community and social services, 1% in legal occupations, 1% in healthcare practitioner and technical occupations, 1% in protective services, and 1% in food preparation and serving related occupations. ANOVA results showed no significant differences between the respondents at Time 2 and Time 3, between Time 1 and Time 3, or between respondents who completed the Time 3 survey and employees who completed Time 1 (but not Time 2) and Time 2 (but not Time 3) with respect to demographic variables. As in Study 1, responses to all items were averaged to create the measures that were used for each variable.

## Measures

*Psychological Contract Breach* At Time 1, employees completed Robinson and Morrison's (1995) psychological contract breach measure (19 items). Unlike the measure of psychological contract breach that employees completed in Study 1, which assessed employees' global perceptions of psychological contract breach, the measure developed by Robinson and Morrison taps specific aspects of transactional and relational psychological contracts. Sample items for the relational dimension include: 'a job that has high responsibility' and 'being treated with respect'. Some items for the transactional dimension are: 'a competitive salary' and 'overall benefits package provided'. Participants responded to the of each scale on a five-point Likert-type scale ranging from 1 (*I am receiving <u>much less</u> than I expect*) to 5 (*I am receiving <u>much more than I expect</u>*). All items were reverse-scored to operate as an index of psychological contract breach. Cronbach's alphas for transactional and relational psychological dimensions of psychological contract breach were .88 and .84, were respectively.

*Perceived Organizational Support* We measured POS using the same scale employed in Study 1 in the initial survey as a control (Time 1) and in the follow-up survey 3 months later (Time 2). The reliability of the scale was .92 at Time 1 and .94 at Time 2.

*Organizational Identification* As in Study 1, organizational identification was measured using three items from Mael and Ashforth (1992) organizational identification scale. Cronbach's alpha for the organizational identification scale was .85.

*Organizational Disidentification* We measured organizational disidentification using three items from Kreiner and Ashforth's (2004) organizational disidentification scale. As was the case with the identification scale, our selection of items was guided by personal correspondence. Items measuring disidentification included, "I am embarrassed to be a part of this organization," "I want people to know that I disagree with how this organization behaves", and "I have been ashamed of what goes on in this organization." Cronbach's alpha for the three-item organizational disidentification scale was .89.

*Control Variables* As in Study 1, we controlled for gender, age, and tenure. In addition, we controlled for POS at Time 1 to demonstrate that changes in POS from Time 1 to Time 2 resulted from psychological contract breach, and did not just stem from general changes in POS.

## **Results (Study 2)**

Descriptive statistics, correlations among the variables, and alpha coefficients are presented in Table 5. Again, correlations were in the expected directions.

Variables	М	SD	1	2	3	4	5	6	7	8	9
Study 2 (N at	T3 = 2	200)									
1. Age	46.7	9.59	_								
2. Gender	_	_	.17*	_							
3. Tenure	8.87	7.91	.36***	13	_						
4. POS (T1)	4.34	1.50	06	.08	01	(.92)					
5. TPCB (T1)	5.32	0.64	.06	09	.01	51***	(.84)				
6. RPCB (T1)	5.08	0.71	04	04	01	58***	23***	(.88)			
7. POS (T2)	4.44	1.49	.04	.08	05	.56***	44***	48***	(.94)		
8. OI (T3)	4.63	1.54	.14*	09	.08	.41***	37***	44***	30**	(.85)	
9. ODI (T3)	2.77	1.65	08	04	.02	46***	.46***	.52***	.36**	65***	(.89)

Table 5 Descriptive statistics and inter-correlations of Study 2 variables

Study 2: Gender is coded as 0 = Male and 1 = Female; Age and tenure are expressed in years; *TPCB* Transactional psychological contract breach; *RPCB* Relational psychological contract breach. *POS* Perceived Organizational Support; *OI* Organizational Identification; *ODI* Organizational Disidentification. Alpha reliabilities are along the diagonal in (), \*p<.05, \*\*p<.01, \*\*\*p<.001

Following the same process as outlined in Study 1, we chose to perform chisquare difference tests before testing the hypotheses. We again created a baseline model which contained a singular construct. We then created another latent variable and reassigned the appropriated items to the second latent construct. This process was repeated until all five latent constructs (organizational identification, organizational disidentification, perceived organizational support at Time 2, relational psychological contract breach and transactional psychological contract breach) were measured independently. Each model (see Table 2) was significant at the .05 level, a pattern of results which suggests that respondents distinguished between constructs.

As in Study 1, we used mediated regression analysis to test Hypotheses 1a, which predicted that POS would mediate the relationship between transactional psychological contract breach and organizational identification (see Table 6). Consistent with past research, we elected to run separate regressions for transactional and relational psychological contract breach (e.g., Kiewitz et al. 2009). The first regression equation (Step 1) provided evidence meeting the first requirement for mediation, as our independent variable (transactional psychological contract breach, Time 1) was negatively and significantly associated with the mediating variable, Time 2 POS ( $\beta = -.17$ ,  $p \le .01$ ). We did not find support for the second requirement for mediation, as we found an insignificant relationship between Time 1 transactional psychological contract breach and Time 3 organizational identification ( $\beta = -.03$ , p = n.s.). Thus, POS did not mediate the relationship between transactional contract breach and POS, and Hypothesis 1a was not supported.

We did find support for Hypothesis 1b, which suggested that POS would mediate the relationship between relational psychological contract breach and organizational identification (Table 7). The first requirement for mediation was met, as Time 1 relational psychological contract breach was negatively and significantly associated with

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	.12*	.05	.05
Gender <sup>b</sup>	.01	07	07
Tenure <sup>c</sup>	07	.02	.02
POS T1	.60***	.45***	.45***
Step $\Delta R^2$	.37***	.21***	.21***
Step R <sup>2</sup>	.37***	.21***	.21***
Step 2:			
Age	.13*	.05	.05
Gender	.01	07	07
Tenure	07	.02	.02
POS T1	.52***	.44***	.44***
Transactional contract	17***	03	03
Step $\Delta R^2$	.02	.00	.00
Step R <sup>2</sup>	.40***	.21***	.21***
Step 3:			
Age			.10
Gender			11
Tenure			.05
POS T1			.27***
Transactional contract			.02
POS T2			.31***
Step $\Delta R^2$			.06***
Step R <sup>2</sup>			.27***

 Table 6 Mediated regression analyses for transactional psychological contract breach predicting organizational identification in Study 2

\*p < .05 \*\*p < .01 \*\*\*p < .01 (two-tailed tests). Beta values are standardized estimates from final step of analysis. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

Time 2 POS ( $\beta$ =-.20, p≤.001, Step 1). The second requirement for mediation was also met, as Time 1 relational psychological contract breach was negatively and significantly associated with Time 3 organizational identification ( $\beta$ =-.23, p≤.001; Step 2). We derived support for the third requirement for mediation, as our mediating variable (POS, Time 2) was positively and significantly related to our dependent variable (organizational identification, Time 3:  $\beta$ =.28, p≤.001, Step 3) while the previously significant relationship between Time 1 relational psychological contract breach and our Time 3 organizational identification became insignificant ( $\beta$ =-.10, p=n.s., Step 3).

As in Study 1, we again conducted a Sobel test (Sobel 1982) to confirm the mediating effect of POS (T2) between relational contract breach (T1) and organizational identification (T3). Again, the results of the Sobel test revealed that the indirect path was significant, z = -.35, p < .001 and produced a 99% confidence interval that did not include zero (CI: -.67-(-.12)). Thus, based on the results of the

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	.12*	.05	.14*
Gender <sup>b</sup>	.01	07	10
Tenure <sup>c</sup>	07	.02	.03
POS T1	.60***	.45***	.43***
Step $\Delta R^2$	.37***	.20***	.21***
Step R <sup>2</sup>	.37***	.20***	.21***
Step 2:			
Age	.12*	.05	.10
Gender	.01	06	11
Tenure	07	.01	.05
POS T1	.48***	.32***	.26***
Relational contract	20***	23***	.30***
Step $\Delta R^2$	.03***	.04***	.06***
Step R <sup>2</sup>	.40***	.24***	.27***
Step 3:			
Age			.10
Gender			11
Tenure			.05
POS T1			.21**
Relational contract			10
POS T2			.28***
Step $\Delta R^2$			.01
Step R <sup>2</sup>			.28***

 Table 7
 Mediated regression analyses for relational psychological contract breach predicting organizational identification in Study 2

\*p < .05 \*\*p < .01 \*\*\*p < .001 (two-tailed tests). Beta values are standardized coefficients. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

Sobel test, we concluded that POS mediated the relationship between relational contract breach and organizational identification.

We used the same procedures used to test H1a and H1b to test Hypotheses 2a, which predicted that that Time 2 perceived organizational support would mediate the relationship between Time 1 transactional psychological contract breach and Time 3 organizational disidentification (see Tables 8 and 9). Evidence obtained from our first regression equation (Step 1) fulfills the first requirement for mediation, as our Time 1 transactional psychological contract breach was negatively and significantly related to the mediator variable, Time 2 POS ( $\beta = -.17$ ,  $p \le .01$ ). We did not find evidence meeting the second requirement for mediation, as Time 1 transactional psychological contract breach did not demonstrate a negative and significant relationship with Time 3 organizational disidentification. Thus, we concluded that Time 2 POS did not mediate the relationship between Time 1 transactional psychological contract breach did sidentification.

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	.12*	08	14*
Gender <sup>b</sup>	.01	08	10
Tenure <sup>c</sup>	07	.07	.05
POS T1	.60***	44***	46***
Step $\Delta R^2$	.36***	.21***	.23***
Step R <sup>2</sup>	.36***	.21***	.23***
Step 2:			
Age	.13*	08	14*
Gender	.01	08	10
Tenure	07	.08	.06
POS T1	.51***	39***	42***
Transactional contract	17**	.09	.08
Step $\Delta R^2$	.02*	.01	.01
Step R <sup>2</sup>	.38***	.22**	.24***
Step 3:			
Age			10
Gender			08
Tenure			.03
POS T1			25***
Transactional contract			.01
POS T2			36***
Step $\Delta R^2$			.08***
Step R <sup>2</sup>			.32***

 Table 8 Mediated regression analyses for transactional psychological contract breach predicting organizational disidentification in Study 2

\*p < .05 \*\*p < .01 \*\*\*p < .01 (two-tailed tests). Beta values are standardized estimates from final step of analysis. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

Hypothesis 2b stated that Time 2 POS would mediate the relationship between Time 1 relational psychological contract breach and Time 3 organizational disidentification. The first requirement for mediation was met, as Time 1 relational psychological contract breach was negatively and significantly related to Time 2 POS ( $\beta = -.29$ ,  $p \le .001$ , Step 1). The second requirement for mediation was met as well, as Time 1 relational psychological contract breach was positively and significantly related to Time 3 organizational disidentification ( $\beta = .29$ ,  $p \le .001$ ; Step 2). The third requirement for mediation revealed evidence of partial mediation, as the mediating variable (Time 2 POS) was negatively and significantly associated with Time 3 organizational disidentification ( $\beta = -.32$ ,  $p \le .001$ , Step 3). However, Time 1 relational psychological contract breach was also still significantly related to Time 3 organizational disidentification ( $\beta = .20$ ,  $p \le .001$ , Step 3).

We again conducted Sobel tests to verify our results for Hypothesis 2b. The results of our Sobel bootstrap analysis provided support for the mediating effect of

Models	Step 1: IV $\Rightarrow$ mediator	Step 2: IV $\Rightarrow$ DV	Step 3: IV, mediator $\Rightarrow$ DV
Step 1:			
Age <sup>a</sup>	.12*	08	14*
Gender <sup>b</sup>	.01	08	10
Tenure <sup>c</sup>	07	.07	.05
POS T1	.60***	44***	46***
Step $\Delta R^2$	.37***	.21***	.23***
Step R <sup>2</sup>	.37***	.21***	.23***
Step 2:			
Age	08	08	12
Gender	08	09	10
Tenure	.07	.08	.05
POS T1	27***	27***	30***
Relational contract	.29***	.29***	.27***
Step $\Delta R^2$	.05***	.05***	.05***
Step R <sup>2</sup>	.26***	.26***	.28***
Step 3:			
Age			09
Gender			08
Tenure			.03
POS T1			17*
Relational contract			.20***
POS T2			32***
Step $\Delta R^2$			.07***
Step R <sup>2</sup>			.34***

 Table 9
 Mediated regression analyses for relational psychological contract breach predicting organizational disidentification in Study 2

\*p < .05 \*\*p < .01 \*\*\*p < .001 (two-tailed tests). Beta values are standardized estimates from final step of analysis. <sup>a</sup> Gender: male = 0, female = 1; <sup>b</sup> Age: years

POS (T2) between relational contract breach (T1) and organizational disidentification (T3): the indirect path was significant, z = -.41, p < .001 and produced a 99% confidence interval that did not include zero (CI: .15–.76). This demonstrates that the indirect effect of the mediated relationship was significantly different from zero. Because the Sobel test is argued to be more rigorous than the Baron and Kenny (1986) test, we suggest that POS fully mediated the relationship between relational psychological contract breach and organizational disidentification.

## Discussion

Drawing on organizational support theory (Eisenberger et al. 1986; Eisenberger and Stinglhamber 2011), we argued that psychological contract breach would cause

employees to feel as if their organizations do not value their contributions and care about their well-being, which would cause them to reduce the degree to which they identify with and increase the degree to which they disidentify with their employing organizations. We found support for the mediating effect of POS on the psychological contract breach-organizational identification relationship in Study 1 (full mediation), which comprised university faculty and staff. In Study 2, we found that Time 2 POS fully mediated the relationship between Time 1 relational psychological contract breach and Time 3 organizational identification and partially mediated the relationship between Time 1 relational psychological contract breach and Time 3 organizational disidentification. However, Time 2 POS did not mediate the relationship between Time 1 transactional psychological contract breach and Time 3 organizational identification or Time 3 organizational disidentification. Overall, the pattern of results that we obtained provide support for the idea that broken promises related to relational elements of the employer-employee relationship signal to employees that they are not supported, and as a result they incorporate organizational membership into their self-concept to a lesser degree and cognitively distance themselves from the organization. However, while broken promises related to transactional elements of the employer-employee relationship signaled to employees that they were not supported, they were not related to identification and disidentification.

## Implications and Contributions

Our work contributes to organizational and applied psychological research by responding to recent calls for research expanding the scope of social exchange theory. In particular, social exchange has been criticized for the manner in which it conceptualizes rewards as well as its focus on simple dyadic relationships (Fuller et al. 2006; Ho & Levesque, 2005; Restubog et al. 2008; Zagenczyk et al. 2010). Our focus in this work was on exploring the significance of the symbolic aspects of exchange: we did this by bringing together social exchange and social identity through the theoretical lens of OST. This perspective suggests that favorable treatment from the organization makes employees feel valued and thus motivates them to make organizational membership an important component of their social identities (Rhoades and Eisenberger 2002). Our results support this perspective: in particular, we show that negative treatment (psychological contract breach) reduces the degree to which employees feel valued and as a result they are less apt to incorporate organizational membership into their self-concept. In Study 2, we broke psychological contract breach down into relational and transactional components. When we did this, we found that only relational contract breach-more symbolic in nature-was related to identification and disidentification through its effects on POS. These results are consistent with the findings of Restubog et al. (2008), who also showed that relational (and not transactional) breach was related to trust and identification. Because relational elements of the contract are largely symbolic (relative to transactional elements), our results suggest that symbolic elements of the employer-employee relationship have important implications for organizational identification and disidentification.

A second contribution of our work relates to psychological contracts. The vast majority of past research on psychological contracts has explored the ramifications of psychological contract breach and produced relatively consistent results (Zhao et al. 2007). By comparison, less is known about why breach results in these negative outcomes (Kiewitz et al. 2009), particularly among studies in which identification-based variables are considered outcomes. In this research, we demonstrate that OST is a useful framework for understanding the implications of psychological contract breach. In particular, breach that signals to employees that they are not valued organizational members may be particularly damaging.

Our research also has some methodological features which contribute to the literature. For one, our data in Study 2 spans three points in time, thus minimizing the effects of common method variance and demonstrating the relationship between psychological contract breach, POS and organizational identification/disidentification across time (Podsakoff and Organ 1986). Second, we demonstrate that the pattern of results we obtained was consistent across two samples (employees from different Universities in Study 1 as well as employees from a wide variety of industries in Study 2), lending some confidence that our results may be relatively generalizable. Third, we provide a constructive replication of our Study 1 results in Study 2 (Lykken 1968) through our use a facet-based measure of psychological contract breach as opposed to the global measure of breach used in Study 1. The replication is a particularly important contribution in light of recent research. For instance, Schmidt (2009) emphasizes the important and largely neglected role that replication plays in the possibility of making generalizations from behavioral science research, while Lindsay and Ehrenberg (1993) suggest that results that have not been replicated are "virtually meaningless and useless" (p. 219). These more recent commentaries on replication are consistent with the words of Popper (1959), who strongly encouraged multi-study research design because "only by such repetitions can we convince ourselves that we are not dealing with a mere isolated 'coincidence'" (p. 45).

Practically speaking, our research suggests that it is important to understand how employees understand breach to predict whether or not it will cause them make organizational membership a more or less meaningful part of their self-concepts. Consistent with the recent writing of Baruch (2006), our research suggests that not all breach is damaging with respect to identification and disidentification, but instead that breach is damaging because it makes employees feel as if the organization does not value their contributions or care about their well-being. This effect operated for relational—as opposed to transactional—employment terms. Further, our results suggest that managers-before designing interventions to assuage psychological contract breach—must understand why its effects are damaging. For example, a recent study by Blader (2007) demonstrated that the decision to organize and vote for certification of a union was influence by social-psychological factors, specifically procedural justice and social identification variables (identification with the University, identification with the graduate student community, and identification with union organizing group) explained variance in decisions to certify over and above economic considerations. Thus, understanding identification and disidentification with the organization may be useful for managers seeking to predict whether employees are likely to organize.

Like most research, our study has limitations which should be considered. First, common method variance is a concern, as all measures used in this research were the result of employee self-reports. To ameliorate the effects of common method bias, we separated collection of our independent, mediating, and dependent variables temporally as suggested by Podsakoff and Organ (1986) in Study 2 and present empirical evidence that employees distinguished between the constructs that we measured in both Studies 1 and 2. Further, to ameliorate concerns about reverse causality, we examined psychological contract breach as a mediator of the relationship between POS and organizational identification in Study 1 (See Table 4) and found that results were consistent with our argument that POS mediates the relationship between breach and outcomes.

It bears mentioning that other researchers have presented different conceptualizations of the relationship between psychological contract breach and POS. For instance, Tekleab et al. (2005) found that employees with higher levels of POS at time 1 reported lower levels of psychological contract breach 3 years later, while Coyle-Shapiro and Conway (2005) found that POS is both an antecedent of and an outcome to psychological contract components such that employer inducements predict POS and POS causes employees to reduce perceived obligations that they have of their employers. In total, research suggests a possible feedback process in the relationship. With these results in mind, we emphasize the fact that common method bias is still a concern which should limit the confidence that practitioners and other researchers have in our results. A second and related limitation is the fact that we were unable to include objective outcomes or performance evaluations in this research. To address this, as well as the relatively inconsistent findings of past research, we suggest that researchers employ longitudinal research designs, experiments, or vignettes to determine the causal directions of relationships and make the results more useful to practitioners. This research will have greater utility if the subsequent effects of identification and disidentification on outcomes such as turnover, citizenship, in-role performance, and absenteeism are explored.

A third limitation of our work was that we explored only POS as a mediator of the link between psychological contract breach and identification and disidentification. While OST's use of both social exchange and social identity perspectives makes POS a logical and theoretically defensible choice to mediate these relationships, future research simultaneously examining various mediators of the relationship between psychological contract breach and outcomes is desirable. Examinations of variables such as job satisfaction, trust, psychological contract violation, and unmet expectations on a wide array of attitudinal and behavioral outcomes could provide evidence as to which mediating variables are most critical. Further, we suggested that psychological contract breach threatened employees' socioemotional needs and thus resulted in lower POS. Psychological contracts do not necessarily reflect "needs", but actually represent promises. Thus, future research examining the degree to which employees' socioemotional (in the case of relational psychological contract breach) and material (in the case of transactional psychological contract breach) needs were threatened would be a more rigorous test of our theoretical perspective (see Armeli et al. 1998).

A fourth potential limitation of our work was our utilization of on-line surveys to collect information from respondents. This method could potentially create a bias, as respondents needed to have access to the internet to respond to our survey. We do not believe that this is a concern in Study 1, as we ensured that all potential respondents had internet access. However, it is clear that we oversampled white-collar employees (who have access to the internet at work) as opposed to blue-collar employees (who are perhaps less likely to have internet access at work) in Study 2. Further, although we found that there were no significant differences between employees who responded to the survey and didn't respond to the survey at different points in time in Study 2, we were unable to examine differences between employees who did not respond to any of our surveys and those who responded to a survey in either Study 1 or Study 2. Thus, it is possible that we oversampled employees who enjoy doing online surveys (in Study 2) or were more committed to the student advising organization (in Study 1).

#### Conclusion

In this paper, we drew on organizational support theory to argue for the mediating role of POS in the relationship between psychological contract breach and organizational identification and disidentification. Results from Study 1 confirmed that POS indeed mediates the relationship between breach and identification. Our second study built on Study 1 by breaking out psychological contract breach into relational and transactional dimensions. Results demonstrated the mediating effect of POS on the relational psychological contract breach-identification (full mediation) and relational contract breach-disidentification (partial mediation) connections. However, transactional contract breach was unrelated to organizational identification and disidentification. Our results suggest that employees are less apt to identify with and more apt to disidentify with their organizations in response to relational psychological contract breach because it signals to them that the organization does not care for them or value their contributions.

#### References

- Albert S, Whetten DA (1985) Organizational identity. In: Cummings LL, Staw BM (eds) Research in organizational behavior. JAI Press, Greenwich, pp 263–295, 17
- Armeli S, Eisenberger R, Fasolo P, Lynch P (1998) Perceived organizational support and police performance: the moderating influence of socioemotional needs. J Appl Psychol 83:288–297
- Aselage J, Eisenberger R (2003) Perceived organizational support and psychological contracts: a theoretical integration. J Organ Behav 24:491–509
- Ashforth BE, Harrison SH, Corley KG (2008) Identification in organizations: an examination of four fundamental questions. J Manag 34:325–374
- Ashforth BE, Mael F (1989) Social identity theory and the organization. Acad Manag Rev 14:20-39
- Baron RM, Kenny DA (1986) The moderator-mediator distinction in social psychological research: conceptual, strategic, and statistical considerations. J Personal Soc Psychol 51:1173–1182
- Bartel C, Dutton JE (2001) Ambiguous organizational memberships: constructing organizational identities in interactions with others. In: Hogg MA, Terry DJ (eds) Social identity processes in organizational contexts. Psychology, Philadelphia, pp 115–130

- Baruch Y (2006) Career development in organizations and beyond: balancing traditional and contemporary viewpoints. Hum Resource Manag Rev 16:125–138
- Bentler P, Bonett DG (1980) Significance tests and goodness of fit in the analysis of covariance structures. Psychol Bull 88:588–606
- Bhattacharya CB, Elsbach KD (2002) Us versus them: the roles of organizational identification and disidentification in social marketing initiatives. J Publ Pol Market 21:26–36
- Blader SL (2007) What leads organizational members to collectivize? injustice and identification as precursors to union certification. Organ Sci 18:108–126
- Blau PM (1964) Exchange and power in social life. Wiley, New York
- Bolino MC, Turnley WH (1999) Measuring impression management in organizations: a scale development based on the Jones and Pittman taxonomy. Organ Res Meth 2:187–206
- Carmeli A, Gilat G, Waldman DA (2007) The role of perceived organizational performance in organizational identification, adjustment and job performance. J Manag Stud 44:972–992
- Coyle-Shapiro JA, Conway N (2005) Exchange relationships: examining psychological contracts and perceived organizational support. J Appl Psychol 90:774–781
- Coyle-Shapiro JA, Kessler I (2000) Consequences of the psychological contract for the employment relationship: a large scale survey. J Manag Stud 37:904–930
- Duffy MK, Shaw JD, Scott KD, Tepper BJ (2006) The moderating roles of self esteem and neuroticism in the relationship between group and individual undermining behavior. J Appl Psychol 91:1066– 1077
- Dutton JE, Dukerich JM, Harquail CV (1994) Organizational images and member identification. Adm Sci Q 39:239–263
- Edwards MR, Peccei R (2010) Perceived organizational support, organizational identification, and employee outcomes. J Pers Psychol 9:17–26
- Eisenberger R, Armeli S, Rexwinkel B, Lynch PD, Rhoades L (2001) Reciprocation of perceived organizational support. J Appl Psychol 86:42–51
- Eisenberger R, Huntington R, Hutchison S, Sowa D (1986) Perceived organizational support. J Appl Psychol 71:500–507
- Eisenberger R, Stinglhamber F (2011) Perceived organizational support: fostering enthusiastic and productive employees. American Psychological Association Books, Washington
- Elsbach K, Bhattacharya CB (2001) Defining who you are by what you're not: organizational disidentification and the National Rifle Association. Organ Sci 12:393–413
- Fornell C, Larcker DF (1981) Evaluating structural equation models with unobservable variables and measurement error. J Mark Res 18:39–50
- Fuller JB, Barnett T, Hester K, Relyea C (2003) A social identity perspective on the relationship between perceived organizational support and organizational commitment. J Soc Psychol 143:789– 791
- Fuller JB, Hester K, Barnett T, Frey L, Relyea C (2006) Perceived organizational support and perceived external prestige: predicting organizational attachment for university faculty, staff, and administrators. J Soc Psychol 146:327–347
- George JM, Reed TF, Ballard KA, Colin J, Fielding J (1993) Contact with AIDS patients as a source of work-related distress: effects of organizational and social support. Acad Manag J 36:157–171
- Gettman HJ, Gelfand MJ (2007) When customers shouldn't be king: antecedents and consequences of sexual harassment by clients and customers. J Appl Psychol 92:757–770
- Gibney R, Zagenczyk TJ, Fuller JB, Hester K, Caner TC (2011) Exploring organizational obstruction and the expanded model of organizational identification. J Appl Soc Psychol 41:1083–1109
- Gibney R, Zagenczyk TJ, Masters M (2009) The negative aspects of social exchange: an introduction to perceived organizational obstruction. Group Organ Manag 34:665–697
- Gouldner AW (1960) The norm of reciprocity: a preliminary statement. Am Sociol Rev 25:161-178
- Ho VT, Levesque L (2005) With a little help from my friends (and substitutes): social referents and influence in psychological contract fulfilment. Organ Sci 16:275–289.
- Hogg MA, Terry DJ (2000) Social identity and self-categorization processes in organizational contexts. Acad Manag Rev 25:121–140
- Homans GC (1958) Social behavior as exchange. Am J Sociol 63:597-606
- Ilies R, Dimotakis N, De Pater IE (2010) Psychological and physiological reactions to high workloads: implications for well-being. Pers Psychol 63:407–436
- James LR, Mulaik SA, Brett JM (1992) Causal analysis: assumptions, models and data. Sage Publications, Beverly Hills

- Kiewitz C, Restubog SLD, Zagenczyk TJ, Hochwarter W (2009) The interactive effects of psychological contract breach and organizational politics on perceived organizational support: evidence from two longitudinal studies. J Manag Stud 46:806–834
- Kreiner GE, Ashforth BE (2004) Evidence toward an expanded model of organizational identification. J Organ Behav 25:1–27
- Lance CE, Butts MM, Michels LC (2006) The sources of four commonly reported cutoff criteria: what did they really say? Organ Res Meth 9:202–220
- Levinson H (1965) Reciprocation: the relationship between man and organization. Adm Sci Q 9:370–390

Lindsay R, Ehrenberg A (1993) The design of replicated studies. Am Stat 47:217–228 Lykken D (1968) Statistical significance in psychological research. Psychol Bull 70:151–159

- Mael F, Ashforth BE (1992) Alumni and their alma mater: a partial test of the reformulated model of
- organizational identification. J Organ Behav 13:103–123 March HW Hau K. Wan Z (2004) In search of golden rules: comment on hypothesis testing app
- Marsh HW, Hau K, Wen Z (2004) In search of golden rules: comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. Struct Equ Model 11:320–341
- Mehta R, Sivadas E (1995) Comparing response rates and response content in mail versus electronic mail surveys. J Mark Res Soc 37:429–439
- Piccolo RF, Colquitt JA (2006) Transformational leadership and job behaviors: the mediating role of core job characteristics. Acad Manag J 49:327–340
- Podsakoff PM, MacKenzie SB, Jeong-Yeon L, Podsakoff NP (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies. J Appl Psychol 88:879–903
- Podsakoff PM, Organ DW (1986) Self-reports in organizational research: problems and prospects. J Manag 12:531–544
- Popper K (1959) The logic of scientific discovery. Basic Books, New York
- Preacher KJ, Hayes AF (2004) SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behav Res Meth Instrum Comput 36:717–731
- Restubog SLD, Hornsey M, Bordia P, Esposo S (2008) Effects of psychological contract breach on organizational citizenship behavior: insights from the group value model. J Manag Stud 45:1377–1400
- Rhoades L, Eisenberger R (2002) Perceived organizational support: a review of the literature. J Appl Psychol 87:698–714
- Riggle RJ, Edmondson DR, Hansen JD (2009) A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. J Bus Res 62:1027–1030
- Riketta M (2005) Organizational identification: a meta-analysis. J Vocat Behav 66:358-384
- Robinson SL, Morrison EW (1995) Developing a standardized measure of the psychological contract. Paper presented at the annual meeting of the Academy of Management, Vancouver
- Robinson SL, Morrison EW (2000) The development of psychological contract breach and violation: a longitudinal study. J Organ Behav 21:525–546
- Rousseau DM (1995) Psychological contracts in organizations: understanding written and unwritten agreements. Sage, Thousand Oaks
- Rousseau DM (2001) Schema, promises, and mutuality: the psychology of the psychological contract. J Organ Occup Psychol 24:511–541
- Schmidt S (2009) Shall we really do it again? the power concept of replication is neglected in the social sciences. Rev Gen Psychol 13:90–100
- Shanock LR, Eisenberger R (2006) When supervisors feel supported: relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. J Appl Psychol 91:689–695
- Sobel ME (1982) Asymptotic confidence intervals for indirect effects in structural equation models. Sociol Methodol 13:290–312
- Swan WB (1990) To be adored or to be known? the interplay of self-enhancement and self-verification. In: Higgins ET, Sorrentino RM (eds) Handbook of motivation and cognition: foundations of social behavior, vol. 2. The Guilford, New York, pp 409–448
- Tekleab AG, Takeuchi R, Taylor MS (2005) Extending the chain of relationships among organizational justice, social exchange, and employee reactions: the role of contract violations. Acad Manag J 48:146–157
- Turnley WH, Feldman DC (1999) The impact of psychological contract violations on exit, voice, loyalty, and neglect. Hum Relat 52:895–922
- van Kippenberg D, Sleebos E (2006) Organizational identification versus organizational commitment: selfdefinition, social exchange, and job attitudes. J Organ Behav 27:571–584

Zagenczyk TJ, Scott KD, Gibney R, Murrell AJ, Thatcher JB (2010) Social influence and perceived organizational support: a social network analysis. Organ Behav Hum Decis Process 111:127–138

Zhao H, Wayne SJ, Glibkowski BC, Bravo J (2007) The impact of psychological contract breach on workrelated outcomes: a meta-analysis. Pers Psychol 60:647–680