

# **When Broken Promises Threaten One's Identity: The Impact of Psychological Contract Breach on Self-Identity Threat**

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*Research on psychological contracts has not been clear on how and why psychological contract breach (PCB) has the effect it does on employee attitudes and behaviors. In this study, we suggest that self-identity threat provides a lens through which to better understand PCB. Specifically, PCB is expected to convey information that threatens an employee's sense of value or worth in the organization. In a study of 386 university employees, we found that: 1) PCB results in self-identity threat, which 2) elicits strong negative affect, and 3) results in the use of coping strategies, including seeking social support and organizational retaliation.*

## **INTRODUCTION**

Psychological contracts represent employees' perceptions of what they owe their organization and what their organization owes them in return (Rousseau, 1989). A vast amount of research has focused on the negative consequences of breaching these psychological contracts (i.e. PCB), which include lower commitment, job satisfaction, performance, and organizational citizenship behavior (Zhao, Wayne, Glibkowski, & Bravo, 2007). Unfortunately, we still know very little about precisely *how and why* failing to fulfill psychological contracts has the negative effects it does on employee attitudes and behaviors (Conway & Briner, 2002; 2005). For example, it is not clear why employees have lower organizational commitment following breach or why their performance suffers. What cognitive and affective states are prompted by PCB such that these negative outcomes follow? Without knowing the mechanism(s) behind the negative consequences of PCB, researchers can offer little advice to managers in terms of what to do following its occurrence. Considering the prevalence of PCB in organizations (Robinson & Rousseau, 1994), this seems to be a serious omission in the literature.

The purpose of this paper is to examine one such mechanism through which we believe PCB creates negative outcomes: self-identity threat (SIT). We define SIT as the extent to which people perceive that the relational information they have received signifies that they are not valued or respected by the organization and have low status or standing in the organization (Lind & Tyler, 1988; Smith, Tyler, Huo, Ortiz, & Lind, 1998). In introducing SIT as a potential mechanism, we hope to advance research on psychological contracts in three ways.

First, consideration of SIT directs attention to identity, an issue that has not often been associated with PCB research. Several researchers have suggested a link between the two (e.g. Sims, 1994; Kickul,

2001); however, there is little empirical support for this connection. Our study hopes to add to this limited research by showing that PCB can indeed threaten employees' identity. Second, this study examines a potential mediating mechanism that has not been previously considered in the psychological contract literature. While our study is the first to examine SIT, few studies have examined any potential mediating mechanisms between PCB and outcomes (Othman, Arshad, Hashim, & Isa, 2005; Montes & Irving, 2008; Guerrero & Herrbach, 2008). This study will add to this limited research and provide an explanation for how and why PCB influences employee attitudes and behaviors. Third, when SIT is examined as a mediating mechanism, it raises several questions about likely criterion variables that have not been given much attention in the psychological contract literature. More specifically, we believe that employees might not only react negatively to PCB (as evident in existing research), but could engage in the use of coping strategies to deal with the negative affect (i.e. psychological contract violation or PCV) associated with PCB (Breakwell, 1986; Lazarus, 1991). Finding these additional outcomes would imply that we have yet to uncover all of the effects PCB can have. In summary, we present in this paper a model for explaining how PCB, through its impact on SIT, can influence PCV, and, thus, result in the use of coping strategies.

## **THEORY**

### **Psychological Contract Breach**

Psychological contract breach (PCB) is the *cognition* that the employer has failed to meet one or more obligations within one's psychological contract commensurate with one's contributions (Morrison & Robinson, 1997). Due to the changing nature of employment relationships within organizations (Morrison, 1994; Lo & Aryee, 2003), the occurrence of PCB is prevalent within organizations (Turnley and Feldman, 2000). Most research on psychological contracts, as a result, tends to focus on the consequences associated with PCB (Conway & Briner, 2005). Research has consistently shown that PCB is associated with a variety of negative employee attitudes and behaviors (Zhao et al, 2007).

One consequence of PCB that has received quite a bit of attention in the psychological contract literature is psychological contract violation (or PCV). PCV refers to the *emotional and affective state* that may follow from the belief that the employer has failed to adequately maintain the psychological contract (Morrison & Robinson, 1997). In other words, while PCB reflects the *cognition* that one's organization has failed to meet one or more of its obligations, PCV reflects how strong the *emotional reaction* is to the PCB. PCV represents a mental state of readiness for action that can include feelings such as disappointment, frustration, distress, anger, resentment, bitterness, indignation, and even outrage (Morrison & Robinson, 1997).

Since a recent meta-analysis found that PCV mediates the relationship between PCB and a variety of outcomes (Zhao et al, 2007), an investigation of mediators of the PCB-outcomes relationship (such as this one) means addressing the PCB-PCV relationship. Most previous research has examined the consequences of PCB, while some studies have examined PCV in relation to negative outcomes. However, very little research has examined the relationship between PCB and PCV. One key work that has addressed the connection between PCB and PCV is Morrison and Robinson's (1997) discussion of the sense-making process that takes place following PCB. They argued that employees would determine whether they should be upset by the PCB based on a number of different factors, such as attributions for why the PCB occurred and judgments about how fairly they were treated (Morrison & Robinson, 1997). While several studies have found support for their model (Robinson & Morrison, 2000; Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008), they focus on the moderators of the PCB-PCV relationship (i.e. the conditions under which PCB may lead to PCV), not the mediators (i.e. why PCB leads to PCV).

As a result, we are still left with the question of what it is about the PCB experience that gets people upset. We think a key answer to this question is that PCB is threatening to one's identity. Research on identity threats can not only provide an explanation for how and why PCB has the impact that it does, but can also suggest alternative outcomes that have not yet been considered.

## Self-Identity Threat

The notion of an identity threat stems primarily from research on the group value model. The group value model (Lind & Tyler, 1988; Tyler & Lind, 1992) suggests that: 1) people derive a sense of self-worth from the groups they belong to (Tyler, 1989), 2) people care about fair treatment because it provides relational information (i.e. information that is communicated regarding an employee's position, status, or standing within a valued group), (Tyler et al, 1996), and, thus, 3) the treatment a person receives in the group impacts his or her self-concept (Smith & Tyler, 1997; Smith et al, 1998). Several empirical studies have supported the model's primary assertions. For example, Smith and Tyler (1997) found that feeling that one is respected by important groups is positively related to one's self-esteem, as did Smith et al (1998) who found that fair procedures were positively correlated with feelings of respect and positive self-esteem. It appears then that the way people are treated within a group can indeed impact their self-concept.

While group memberships are typically formed in order to enhance people's feelings of self-worth and self-esteem (Ashforth & Mael, 1989), it seems likely that situations may arise where these are threatened. Based on the group-value model, a threat to one's identity would involve receiving relational information that results in people questioning whether or not they are respected and valued members of a social group (Tyler et al, 1996; Smith et al, 1998). Although research on the group-value model does not use the term identity threat, there is evidence that the relational information one receives is connected to one's self-esteem (Smith & Tyler, 1997; Smith et al, 1998). Therefore, using the group-value model (Tyler et al, 1996; Smith et al, 1998), we define *self-identity threat* (or *SIT*) as the extent to which people perceive that the relational information they have received signifies that they are not valued or respected by some valued social group and have low status or standing in that group.

In order to clarify the meaning of the term SIT, it is important to highlight four of its key characteristics. First, since some people are more likely than others to base their self-concept on the groups to which they belong (Tajfel & Turner, 1985; Ashforth & Mael, 1989), people will differ in terms of whether or not an event is perceived to be an identity threat. Those individuals who base an especially large part of their self-esteem on their group membership will be more likely to perceive an identity threat following unfair treatment within that group (Tyler et al, 1996). Second, SIT occurs when some event impacts an individual's self-identity through a relevant social identity, such as organizational membership (Hogg & Abrams, 1988; Sedikides & Brewer, 2001). In other words, SIT occurs because of a social identity threat (i.e. a threat to one's membership in a specific group); however, it is interpreted in terms of its impact on a person's self-identity or self-concept (Tyler et al, 1996; Smith et al, 1998). The focus that we take when we consider PCB then is on *intragroup* relations, not *intergroup* relations (Tajfel & Turner, 1985; Sousa & Vala, 2002). Third, SIT is a response to a specific event (which may potentially impact one's self-esteem), not a personality variable. As a result, it is distinct from other constructs out there that are related to self-esteem, such as core-self evaluations (Judge, Locke, & Durham, 1997). Finally, the group-value model can be applied to any number of groups, ranging from the very small, such as one's family, to the very large, such as a political party (Tyler, 1989). Considering this, the group-value model can easily be extended to the context of the organization and frequently is in research (e.g. Sousa & Vala, 2002; Restubog, Hornsey, Bordia, & Esposito, 2008). In addition, considering the fact that the workplace is an achievement setting in which people strive to look good, it seems that social identities will be especially salient within the work context.

SIT seems likely to occur when a person perceives PCB, since PCB is likely to be construed as a negative workplace event that communicates information related to one's status or standing in the organization (Tyler & Lind, 1992). Since PCB signifies that the employee is aware of a broken promise by the organization, PCB could communicate to the employee that the organization does not respect the employee or feel that he or she is a valued member of the organization (Tyler & Lind, 1992; Sousa & Vala, 2002). For example, when an organization fails to promote an employee as promised, it seems likely to result in the employee questioning whether or not he or she is an important organizational member. This uncertainty will result in the employee undergoing a sensemaking process (Weick, 1995).

The meaning an employee ascribes to the PCB following this sensemaking process will determine whether or not it is viewed as a threat to one's self-identity (Tyler et al, 1996). Although there is very limited research on the connection between PCB and identity threats, Sims (1994) argued that PCB violates the basic tenets employees have about their employment relationship in that it destroys their sense of security and threatens their identity. Kickul (2001) argued that PCB is likely to indicate to the employee that they are not worthy of respect. These arguments coincide with the group value model, in that PCB implies marginality and disrespect, which can diminish an employee's sense of self-worth (Lind & Tyler, 1988; Tyler & Lind, 1992; Sousa & Vala, 2002). PCB seems likely then to be viewed as a threat to one's self-identity. Thus, we expect there to be a positive relationship between PCB and SIT.

*H1: There will be a positive relationship between an employee's perception regarding the degree of PCB and SIT.*

### **Psychological Contract Violation**

Research on identity threat and emotions suggests there should be a positive relationship between SIT and PCV (Breakwell, 1986; Fridja, 1986; Tedeschi & Felson, 1994; Bies, 1999). Identity threat research suggests that SIT is likely to result in a strong emotional response. Several authors have argued that identity threats will be associated with a variety of negative emotions, especially anger (Steele, 1988; Tedeschi & Felson, 1994; Bies, 1999; Aquino & Douglas, 2003). For example, Geddes and Konrad (2003) argued that the receipt of negative feedback from a member of one's group (i.e. unfavorable relational information) is likely to result in strong negative emotions. As another example, Crocker and Wolfe (2001) argued that affective reactions to events relevant to one's contingencies of self-worth (such as PCB within an organization) are particularly intense.

Research on emotions (Fridja, 1986) suggests that the experience of emotion depends on two factors. First, negative emotions are likely to result when there is mismatch or discrepancy between a person's desired end-state and the current state (Fridja, 1986). SIT represents such a mismatch or discrepancy for employees in that employees perceive that their standing in the organization is not commensurate with what they would like it to be (Lind & Tyler, 1988; Tyler et al, 1996). Second, the seriousness of the event also plays a key role in determining the intensity of the emotions elicited by the event, such that the more serious an event is perceived to be, the more intense the emotional reaction (Fridja, 1986). Considering the importance of positive self-worth to the majority of people (Crocker & Park, 2004), SIT is likely to be construed as a very serious event for most employees. As a result, we expect there to be a positive relationship between SIT and PCV.

*H2: There will be a positive relationship between an employee's perception regarding the degree of SIT and PCV.*

### **SIT as a Mediator Between PCB and PCV**

As noted earlier, only a few studies have examined potential mediators of the PCB-PCV relationship (e.g. Othman et al, 2005; Montes & Irving, 2008; Guerrero & Herrbach, 2008). For example, Montes & Irving (2008) found that trust mediated the relationship between promised and delivered inducements (i.e. the opposite of PCB) and feelings of violation (PCV) but only with respect to relational contracts. While the focus of this study was not to determine all of the potential mediators between PCB and PCV, we did seek to add to this limited research by examining SIT as another potential mediating mechanism. Based on the last two hypotheses, it appears that SIT could be a potential mediator of the PCB-PCV relationship. We believe that PCB will impact PCV to a large extent only when it makes the employee believe that he or she is not valued or respected and has low status or standing. If an employee does not interpret the broken promise as signifying unfavorable relational information, then he or she is not as likely to experience negative affect.

It is important for researchers to start differentiating between possible mediators. For example, if PCB leads to feelings of mistrust in the employer, this seems quite different from feeling that the organization

is signaling to employees that they are worthless. If the seriousness of an event plays a key role in determining the intensity of emotions elicited (Fridja, 1986), then feeling worthless suggests a much more intense emotional reaction than feeling distrustful. Since our study does not investigate multiple mediators, we cannot be certain at this point whether SIT will fully mediate the PCB-PCV relationship. However, it does seem likely that SIT will at least partially mediate this relationship. Therefore, we hypothesize that SIT will partially mediate the relationship between PCB and PCV.

*H3: The positive relationship between an employee's perception of psychological contract breach and psychological contract violation will be partially mediated by his/her perceptions of self-identity threat.*

### **Outcomes of PCV (or Coping Strategies)**

A key benefit to considering SIT as a potential mediating mechanism of the PCB-PCV relationship is that it encourages us to consider what outcomes are likely when an identity is threatened. Past research has clearly associated PCB with a variety of negative attitudes and behaviors (Zhao et al, 2007). In considering SIT as a key mediator though, we were led to several consequences that have not yet been examined in prior PCB research. The research on identity threats has been quite clear in its suggestion that people will need to cope with the emotions that result from SIT (Breakwell, 1986; Steele, 1988; Major & O'Brien, 2005). There is also considerable theoretical support for the link between negative emotions and the use of coping strategies (Lazarus & Folkman, 1984; Lazarus, 1991, 1999, 2001; Fugate, Kinicki, & Prussia, 2008). It appears then that employees are likely to engage in coping strategies to reduce the negative emotions associated with PCV following SIT.

There are several ways in which people can cope with the emotional reaction of PCV. In this study, we will examine PCV's influence on two: seeking social support and retaliation. It is important to note that employees are likely to use a variety of coping strategies (e.g., denial, deflection). However, these two seem especially likely to be the key coping strategies employees will use as research has found that they are frequently used by people to cope with the emotions that result from identity threats (Breakwell, 1986; Crocker & Wolfe, 2001; Crocker & Park, 2004).

#### *Seeking Social Support*

The seeking of social support as a coping strategy suggests a more relational reaction to the experience of PCV. It suggests that some employees will cope with the negative emotion they experience by talking to other people, rather than trying to deal with it on their own (Breakwell, 1986). Since people belong to a myriad of social groups, the seeking of social support is likely to cross boundaries between different groups. As a result, people may seek social support from a variety of sources, such as family members, friends, church members, co-workers, and even strangers.

According to Folkman and Lazarus (1980, 1985), there are two primary ways people attempt to cope with emotions; problem-focused or emotion-focused coping. Problem-focused coping is aimed at trying to do something to alter the situation that caused the stress, whereas emotion-focused coping is aimed at trying to manage the emotional distress itself (Folkman & Lazarus, 1980, 1985). In the case of seeking social support then, problem-focused coping would be where the employee tries to get advice about the situation from other people, while emotion-focused coping would be where the employee tries to talk about their feelings with other people. Both types of seeking social support seem plausible in this context. Seeking problem-focused social support to some extent is a form of sensemaking (Weick, 1995) whereby the employee is attempting to make sense of what happened and fix it, while seeking emotion-focused social support serves as a "therapy session" whereby an employee can unload some of his or her negative feelings by talking with others. Employees seem likely to seek social support for both reasons in order to cope with the PCV they experience. Based on this, we hypothesize that one way employees will cope with PCV is to seek social support.

*H4a: There will be a positive relationship between an employee's perception regarding the degree of PCV and the seeking of social support on the part of the employee.*

### *Retaliation*

As previously suggested, anger is one of the primary emotions generated by an identity threat (Bies, 1999; Steele, 1988; Aquino & Douglas, 2003). It has been well-established that anger frequently results in retaliation against the perceived source of threat (e.g. Aquino & Douglas, 2003). In addition, Breakwell (1986) suggested that one interpersonal coping strategy people use to deal with negative affect following an identity threat is negativism, or outright conflict with anyone who would challenge the identity structure. Tedeschi and Felson (1994) suggested that one of the primary motives for using coercion is to assert or defend identities. They further argued that perceived intentional attack is the most reliable elicitor of coercive action. The goal of retaliation appears to be to nullify the negative identity, reduce humiliation, and "save face" (Schlenker, 1980).

The literature on emotions further supports the likely link between PCV and retaliation. Anger (which is an emotion often associated with PCV) is the passion evoked by perceiving to be slighted or hurt, which directs behavior toward punishing the true or perceived attacker (Fridja, 1986). An angering event is one in which someone or something challenges what "ought" to happen (De Rivera, 1977). Anger implies non-acceptance of the event as necessary or inevitable and implies that the event is amenable to being changed (Fridja, 1986). To some degree then, retaliation represents an attempt by the employee to regain control of the situation. Therefore, PCV, as an emotional experience, instigates a readiness for action that could potentially result in the employee retaliating against the organization or its agent(s). This is especially likely when the primary feeling associated with PCV is extreme anger. Finally, a recent study found that PCV is positively associated with revenge cognitions, which then predicts workplace deviance (Bordia et al, 2008). Based on all this, we hypothesize that a second way employees will cope with PCV is to retaliate against the perceived source of the threat.

*H4b: There will be a positive relationship between an employee's perception regarding the degree of PCV and the engagement in retaliation by that employee.*

## **METHODS**

### **Data and Sample**

Data were collected from 386 employees at two universities: 195 from a large, Southeastern public university and 191 from a medium-sized, Midwestern private university. Subjects filled out an online Qualtrics survey that was both e-mailed across several different listservs and announced in the daily news e-mail each university sent out to all employees. We sent several reminders while the survey was open and offered participation in cash drawings (i.e. \$25, \$50, and \$100) to give employees an incentive to fill out the survey. Subjects were assured confidentiality prior to taking the survey.

In terms of demographic characteristics, 78.65% of the subjects were women, 60.62% were married, and 95.84% were university staff, while the remaining 4.16% were doctoral students employed by the university. Doctoral students have been used in prior psychological contract studies and this research has shown that they do form psychological contracts given that they are employees of the university (e.g., Wade-Benzoni, Rousseau, & Li, 2006). As a result, they were included in all analyses. The average age was 44.55 years old (s.d. = 11.97), the average length of tenure was 9.80 years (s.d. = 8.26), and the average number of positions held at the university was 2.32 (s.d. = 1.62).

It is difficult to determine the precise response rate since we do not know exactly how many employees saw our request for participation and opted in or out. However, a conservative estimate of the response rate would consist of comparing the number who responded to our survey to the number of total university employees who subscribe to the listserv, which technically includes all university employees. Based on the statistics provided by both universities, the overall response rate was 14% (approximately 9.20% for the public university and 18.04% for the private university). Again, because the number of

employees who read about the survey opportunity is likely to be lower than the number of employees who work for the university, the actual response rate is likely to be higher than 14%.

An attempt was made to determine whether there were any significant differences between respondents (i.e. our sample) and non-respondents (i.e. the population). For the public university, we were able to compare our sample to the population on the basis of gender. This comparison indicated that the sample contained substantially more women than the population, such that 14.50% of women responded to the survey compared to 3.00% of men. For the private university, several comparisons could be made, which included gender, exempt vs. non-exempt status, and full-time vs. part-time status. The gender comparison indicated that 23.10% of women responded to the survey compared to 11.63% of men. Considering these differences across both universities, gender was controlled for in all analyses. Other than gender, the sample from the private university tended to match up with the population as 19.22% of exempt staff completed the survey compared to 16.30% of non-exempt staff and 18.37% of full-time staff completed the survey compared to 15.09% of part-time staff.

## Measures

Participants shared their responses on all of the following scales. Unless otherwise noted, all measures were based on a seven-point Likert scale ranging from “Strongly Disagree” (1) to “Strongly Agree” (7). Scale scores were created by averaging responses on the associated items. High scale scores indicate high levels of the construct in question (i.e. high PCB or high SIT).

### *Independent Variables*

*Psychological contract breach* was assessed using two different measures. The first measure (PCB1) used the 5-item scale from Robinson and Morrison (2000). This was the measure used to test all of the hypotheses that included PCB. This scale captures a global assessment on the part of employees regarding how well the university has fulfilled its obligations to them. Sample items include “I have not received everything promised to me in exchange for my contributions” and “So far my employer has done an excellent job of fulfilling its promises to me (reversed).” The reliability of this measure (or Cronbach’s alpha) was .88.

The second measure (PCB2) used the single item, “When was the last time you had an employment-related promise broken to you by the [University]?” This measure was used to determine the existence of PCB. Subjects responded on a six-point scale where 1 was “a week ago,” 2 was “a month ago,” 3 was “last semester,” 4 was “last year,” 5 was “more than a year ago,” and 6 was “never.” This item was used because if employees did not report a broken promise, there is no reason to include them on the questions pertaining to what type of coping strategies they used after experiencing PCB.

*Self-identity threat* (SIT) was assessed using a 7-item measure that was created for this study, since no suitable measure of SIT was found that had been derived from the group-value model. In order to develop this measure, items were created based on identity-threat research, specifically the group-value model and its focus on how the treatment an employee receives from the organization impacts his or her self-concept. To do this, we used the stem “The way I’m treated by the University makes me feel...” and then included a variety of identity-relevant adjectives, including disrespected (or respected), devalued (or valued), and marginal (or important). The original measure included 15 items and was first assessed in a pilot test of 106 employees in the College of Business at a large, public Southeastern university. Following data collection, a principal component factor analysis with direct oblimin rotation was conducted to determine which of the 15 items should be retained for the final measure.

The exploratory factor analysis (EFA) with all 15 items resulted in the items loading on two factors with the first factor explaining 69.70% of the variance, which had strong factor loadings with all 15 items (all above .66), and the second factor explaining 7.58% of the variance, which had the strongest factor loadings with all of the reversed items (all less than .49). In order to reduce the number of items to a more manageable number, items were removed one-by-one following recommended guidelines for scale development and EFAs (Nunnally & Bernstein, 1994; Hinkin, 1998). In doing this, the item with the lowest factor loading and item-total correlation was removed and then the analysis was re-run until all

items loaded on one factor with factor loadings and item-total correlations greater than .70. This resulted in the final measure containing 7 items, which all loaded on one factor that explained 79.73% of the variance. All factor loadings were greater than .86 and reliability (or Cronbach's alpha) was .96.

This newly created 7-item measure was used to test all hypotheses involving SIT. The seven items contained the stem "The way I'm treated by this organization makes me feel \_\_\_\_" and included the following adjectives: devalued, appreciated (reversed), respected (reversed), valued (reversed), insignificant, important (reversed), and disrespected. The reliability of this measure (or Cronbach's alpha) was .96.

*Psychological contract violation* was assessed using the 4-item measure from Robinson and Morrison (2000). Sample items include "I feel a great deal of anger toward the University" and "I feel betrayed by the University." The reliability of this measure (or Cronbach's alpha) was .88.

### *Dependent Variables*

To assess coping strategies, subjects were asked to indicate on a 5-point scale, ranging from "Used Not at All" (1) to "Used Very Much" (5), the extent to which they used a variety of strategies to cope with the negative emotions they experienced following a broken promise.

*Seeking social support* was assessed using both social support COPE measures from Carver, Scheier, and Weintraub (1989). The first 4-item scale assessed seeking social support for instrumental reasons (also referred to as problem-focused coping), while the second 4-item scale assessed seeking social support for emotional reasons (also referred to as emotion-focused coping). Sample items for the former scale include "I asked people who have had similar experiences what they did" and "I talked to someone to find out more about the situation," while sample items for the latter scale include "I talked to someone about how I felt" and "I discussed my feelings with someone." Given that we were not concerned with the reasons for seeking social support but with whether or not it occurred, we combined both 4-item measures into one 8-item measure. The reliability of this measure (or Cronbach's alpha) was .89.

*Organizational retaliation* was assessed using the 17-item organizational retaliatory behavior measure from Skarlicki and Folger (1997). Sample items include "I took supplies home without permission" and "I called in sick when not ill." The reliability of this measure (or Cronbach's alpha) was .82.

### *Control Variables*

Several demographic characteristics were collected as control variables. More specifically, subjects were asked to provide their gender, age, and tenure at the University. Controlling for these three demographic characteristics is consistent with past research on PCB (Rousseau, 1995; Lo & Aryee, 2003; Restubog et al, 2008). Gender was controlled because 1) as noted earlier, there were gender differences between respondents and non-respondents and 2) several studies have found a relationship between gender and PCB, such that men are more likely to perceive PCB than women (Deery, Iverson, & Walsh, 2006). Age was controlled because some research has shown that younger employees are more likely to perceive PCB than older employees (Bordia, Restubog, & Tang, 2008). Tenure was controlled because the longer an employee is at an organization, the more likely it is that he or she will experience PCB (Restubog et al, 2008). Gender was assessed as 1 for male and 2 for female, while age and tenure were both assessed in terms of years. Finally, considering that there could be differences between the two universities, a dummy variable ("institution") was created based on whether the university was public (coded as 1) or private (coded as 2).

### **Analyses**

Before running any analyses, a confirmatory factor analysis was conducted using AMOS 16.0 on the three independent variables: PCB1, SIT, and PCV. The CFA resulted in the following fit statistics:  $\chi^2$  of 370.26 (101 df),  $\chi^2/df = 3.67$ , CFI of .95, and RMSEA of .08. Based on the recommendations of multiple researchers (Bentler, 1992; Hu & Bentler, 1999), these statistics indicate good fit. In addition, all factor loadings are significant ( $p < .001$ ) and over .67. Even more importantly, the three factor model fits the



data best in comparison to all possible two-factor models ( $\Delta X^2 = 153.54$ ,  $\Delta X^2 = 391.49$ , and  $\Delta X^2 = 538.66$ ;  $p < .001$  for all three) and the general one-factor model ( $\Delta X^2 = 666.21$ ,  $p < .001$ ). Therefore, these measures appear psychometrically sound and can be used to test the hypothesized model.

Hypotheses 1, 2, and 3 were all examined using the SPSS macro application produced by Preacher and Hayes (2004, 2008) that allows estimation of the indirect effect using both the Sobel test (Sobel, 1982) and bootstrap approach to obtain confidence intervals. Bootstrapping generates an empirical approximation of the sampling distribution by selecting subsamples of the full data set with replacement to create point estimates and percentile confidence intervals for indirect and total effects. In this study, bias-correction and acceleration were also utilized to further improve the bootstrap confidence intervals based on the recommendation of Preacher and Hayes (2008). The independent variable was PCB and the dependent variable was PCV. The mediating variable was SIT, while gender, age, tenure, and institution were all used as control variables.

Hypotheses 4a and 4b were examined using hierarchical regression analysis in SPSS 17.0. Gender, age, tenure, and institution were entered in step 1 and then PCV was entered in step 2. The dependent variable was the appropriate coping strategy. Again, only subjects who reported experiencing PCB in the PCB2 measure were included in these analyses, which reduced the sample size for these hypotheses to 135-137 (due to some loss of data due to non-responses). Based on the recommendation of Cohen, Cohen, West, and Aiken (2003), all predictor variables were centered prior to analysis.

## RESULTS

Table 1 reports the means and standard deviations of all of the variables, while Table 2 shows the correlation coefficients. Based on responses to the PCB2 measure, 146 subjects (or 37.82%) reported having experienced a broken employment-related promise. This percentage is in the range of percentages that have been reported in past research (e.g. from a low of 32% in Sutton and Griffin, 2004, to a high of 55% in Robinson & Rousseau, 1994). In terms of demographic differences, the only significant correlation was between age and PCV, such that older employees were more likely to report a higher degree of PCV ( $r = .13$ ,  $p < .05$ ).

**TABLE 1**  
**MEANS AND STANDARD DEVIATIONS OF VARIABLES**

Variable	N	Mean	SD
1. Gender	384	1.79	.41
2. Age	378	44.55	11.97
3. Tenure	386	9.80	8.26
4. Institution	386	1.49	0.50
5. Psychological Contract Breach	386	2.69	1.35
6. Self-Identity Threat	386	2.80	1.52
7. Psychological Contract Violation	386	2.01	1.29
8. Seeking Social Support	141	3.00	1.01
9. Organizational Retaliation	138	1.25	0.34

**TABLE 2**  
**CORRELATION COEFFICIENTS**

Variable	1	2	3	4	5	6	7	8
1. Gender								
2. Age	.06							
3. Tenure	-.01	.59***						
4. Institution	-.14**	.05	-.05					
5. Psychological Contract Breach	-.08	.03	.02	-.02				
6. Self-Identity Threat	-.06	.09	.01	-.03	.66***			
7. Psychological Contract violation	-.09	.13*	.03	-.01	.66***	.83***		
8. Seeking Social Support	.09	.03	.03	.16	.15	.08	.14	
9. Organizational Retaliation	-.01	-.02	-.04	.07	.25**	.12	.19*	.41***

\*p < .05, \*\*p < .01, \*\*\*p < .001

In order to check that there were significant differences on the three independent variables (i.e. PCB1, SIT, and PCV) between those who experienced a broken promise and those who did not, the sample was split into one group of subjects who experienced at least one broken organizational promise (i.e. they did *not* respond “never” on PCB2) and another group of subjects who did not experience any broken promise (i.e. they responded “never” on PCB2). ANOVAs were conducted to determine whether there were any significant differences. As expected, the group of subjects who reported having a promise broken to them reported higher PCB (3.51 vs. 2.19,  $F = 113.01$ ,  $p < .001$ ), SIT (3.52 vs. 2.36,  $F = 60.72$ ,  $p < .001$ ) and PCV (2.67 vs. 1.61,  $F = 73.41$ ,  $p < .001$ ) than the group who did not report a broken promise.

Table 3 shows the results of Hypotheses 1-3. Hypothesis 1 predicted a positive relationship between PCB and SIT. Given that PCB was positively associated with SIT in the model ( $\beta = .66$ ,  $p < .001$ ), Hypothesis 1 is supported. This indicates that university employees do indeed perceive SIT following PCB, such that as the degree of PCB increases, so does the degree of SIT.

Hypothesis 2 predicted a positive relationship between SIT and PCV. Given that SIT was positively associated with PCV in the model ( $\beta = .91$ ,  $p < .001$ ), Hypothesis 2 is supported. This indicates that university employees do indeed perceive PCV following SIT, such that as SIT increases, so does PCV.

Hypothesis 3 predicted that SIT would partially mediate the relationship between PCB and PCV. The model shows that PCB has an indirect effect on PCV through SIT ( $\beta = .60$ ,  $p < .001$ ). The formal two-tailed significance test demonstrated that this indirect effect was significant (Sobel  $z = 10.81$ ,  $p < .001$ ). Bootstrap results confirmed the Sobel test since the bootstrapped 95% confidence interval for the indirect effect did not contain zero (i.e. .49-.71). Since the direct effect between PCB and PCV is still significant ( $\beta = .24$ ,  $p < .001$ ), this means that SIT only partially mediates the relationship between PCB and PCV. These results provide support for Hypothesis 3.

Hypothesis 4a predicted a positive relationship between PCV and seeking social support. Based on the significant regression weight for PCV ( $\beta = .19$ ,  $p < .05$ ), hypothesis 4a is supported. Hypothesis 4b predicted a positive relationship between PCV and organizational retaliation. Based on the significant regression weights for PCV ( $\beta = .21$ ,  $p < .05$ ), hypothesis 4b is supported. Table 4 shows the results from these analyses.

**TABLE 3**  
**REGRESSION RESULTS FOR SIMPLE MEDIATION FOR HYPOTHESES 1-3**

Predictor	B	SE	T	
<b>PCB to Mediator</b>				
SIT	.66***	.04	17.15***	
<b>Direct Effect of Mediators on PCV</b>				
SIT	.91***	.05	18.47***	
Gender	-.04	.04	-1.21	
Age	.09	.05	1.92	
Tenure	-.01	.05	-0.29	
Institution	.00	.04	0.05	
<b>Indirect Effect of Mediator on PCV</b>				
SIT	.60***	.05	10.81***	.49-.71
<b>Direct Effect of PCB on PCV</b>				
	0.24***	0.06	5.00***	.71

\* p < .05, \*\* p < .01, \*\*\* p < .001

**TABLE 4**  
**REGRESSION ANALYSIS RESULTS FOR HYPOTHESES 4A AND 4B**

Variable	Seeking Social Support		Organizational Retaliation	
	Step 1	Step 2	Step 1	Step 2
Control Variables				
Gender	.09	.12	-.02	.01
Age	.00	-.05	.02	-.04
Tenure	.06	.10	-.06	-.01
Institution	.16+	.17*	.07	.09
<b>Main Effect</b>				
PCV		.19*		.21*
F	1.19	1.87	0.27	1.36
ΔF	1.19	4.46*	0.27	5.70*
R <sup>2</sup>	.03	.07	.01	.05
ΔR <sup>2</sup>	.03	.03*	.01	.04*
Adjusted R <sup>2</sup>	.01	.03	-.02	.01

+ p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

## DISCUSSION

The purpose of this paper was to examine one mechanism, SIT, through which we believe PCB creates negative outcomes. In doing this, we sought to advance research on psychological contracts in three ways. First, we wanted to direct attention to identity issues, which have not often been associated with PCB research. Second, we wanted to examine a potential mediator, SIT, of the PCB-PCV relationship that has not been previously considered in the literature. Third, we wanted to examine additional outcomes of PCB that have not been given prior attention in the literature. To address these research questions, we introduced the construct of SIT by discussing the group-value model from which it stems. We then brought in research on identity threats and emotions to hypothesize that 1) PCB would be related to SIT, 2) SIT would be related to PCV, 3) SIT would partially mediate the relationship between PCB and PCV, and 4) PCV would result in the use of two coping strategies. We collected data from 386 university staff to test these predictions and found support for all of our hypotheses.

### Research Implications

Our results highlight four important points for future psychological contract research. First, the fact that SIT was a mediator of the PCB-PCV relationship is interesting in a couple of ways. One, it links identity issues to psychological contracts, which has not often been done in prior research. This means that PCB can communicate to the employee that he or she is not respected, has low standing, and is not a valued member of the organization and thus damage an employee's sense of self-worth. Two, it gives us clues about what employees are upset about when they experience PCB, which is necessary to understanding how to manage around PCB. Given that we know PCB is inevitable, we will highlight these practical implications below. However, PCB researchers should definitely consider identity issues in their future research.

Second, SIT gives us clues about what type of negative emotions employees experience within PCV. PCV is a negative affective reaction, but there is little information about what discrete emotions are involved despite the fact that several researchers have noted the importance of emotions in psychological contract research (Zhao et al, 2007; Conway & Briner, 2002; Morrison & Robinson, 1997). It seems likely that the emotions employees experience will depend on why they are upset about PCB. For example, if they are upset about PCB for SIT reasons, then we would expect emotions like anger and betrayal (much like we found in this study). At some point, a greater understanding of the mediators may help us predict the discrete emotions that will follow PCB, which will help us better predict which outcomes will occur. This study serves as one step in this direction, but more research is needed.

Third, our study is among the few to have examined potential mediating mechanisms of the PCB-PCV relationship. Our results show that SIT partially mediates this relationship, rather than fully mediates it. This suggests that SIT is part of the answer to the question, "why do people get upset about PCB," but clearly there are others. Given how little we know about the mechanisms of the PCB-PCV relationship, this study is the first step to better understanding why some employees have an emotional reaction to PCB and others do not. Future research is needed in order to examine whether SIT is a key mechanism even when other mediators are included. It would be especially interesting to see which mechanism emerges as the strongest, as well as under which conditions each mechanism is most often triggered.

Fourth, the results show that viewing PCB through the SIT "lens" suggests additional outcomes of PCB that have not yet been considered. More specifically, the results provide some evidence that employees deal with PCV in a variety of productive and non-productive ways, such as seeking social support and organizational retaliation. More interesting is the fact that employees are likely to seek social support in order to deal with the negative affect associated with a broken promise, whether it is for instrumental or emotional reasons. This suggests the possibility of a "contagion" effect whereby other employees hear about the organization breaking promises to co-workers, which could result in them wondering whether the same fate awaits them and thus adjust their psychological contracts. Additional research is needed to examine whether this occurs for other types of employees following PCB, as well as which employees are more likely to seek social support and which are more likely to be influenced by

hearing about PCB from a co-worker. In terms of the other coping strategy we examined in this study, while the occurrence of retaliation was relatively low in our sample (i.e. only a 1.25 mean on a scale of 1-5), we still found a significant relationship between PCV and retaliation. It is important to be aware then that some employees will react to PCB by retaliating against their employer. Future research should examine the conditions under which one coping strategy is more likely to be used by an employee than another. It seems likely that personality traits could play a key role in determining this. For example, extraversion and neuroticism could play a role in predicting seeking social support, while negative affectivity and attitudes towards revenge could play a role in predicting retaliation.

### **Managerial Implications**

These results also have important implications for managers. First, since SIT occurs when employees feel devalued, unappreciated, and insignificant, it is important for managers to communicate the opposite to employees on a regular basis. A formal reward and recognition program could help achieve this, as could informal positive feedback (e.g. a thank you, a “pat on the back,” etc.) when employees do a good job on a project or task. A positive HR philosophy and effective HR systems can go a long way in proving to employees that they are indeed valued by the organization.

Second, this study showed that not all PCB results in PCV. Therefore, when PCB occurs, managers have an opportunity to intervene prior to employees having a negative emotional reaction that may lead to negative attitudes and behaviors. Knowing that SIT is an important mediator of the PCB-PCV relationship, there are some things managers can do to influence employees’ attitudes and behaviors following PCB, such that they may be able to prevent both SIT and its consequences (e.g. PCV). For example, the group-value model (Lind & Tyler, 1988; Tyler & Lind, 1992; Tyler, 1994) would suggest that, in order to avoid SIT, managers need to communicate to their employees how important and valuable they are to the organization. In addition, managers who must deliver bad news about a broken promise to employees should try to reassure them that it is not a reflection on their worth or value.

Finally, given that employees were found to seek social support from their co-workers, it would be smart for managers to pay attention to the climate of PCB within their department in order to nip any possible contagion effect in the bud.

### **Limitations**

Despite these significant findings, there are several limitations to this study that need to be noted. First, this study utilized a cross-sectional survey, which raises the potential for common-method bias. However, this limitation should be balanced against the benefit that this study is one of the first to test a potential mediator of the PCB-PCV relationship, as well as the first to test SIT as a mediator. In addition, given that psychological contracts are inherently individualistic, it is reasonable to expect that the employee that has lived through the experience is best equipped to describe what that process was like. Finally, our strong reliabilities and CFA results provide evidence for construct validity, which helps to mitigate these common-method concerns (Conway & Lance, 2010).

Second, despite the variety of respondents we had across the university, there is the question of the generalizability of the results. Although we have no reason to expect that university employees will react differently than other types of employees, additional studies may be necessary to see if these effects replicate to other employees in other contexts.

Finally, our response rate is a potential limitation in that there is a chance that our sample does not accurately represent the population. To protect against this, we did control for potential differences between the sample and population (e.g. gender). Furthermore, our response rate is not unusually low in the psychological contract literature, given that several past studies have reported response rates below 50% (e.g. Restubog et al, 2008; Guerrero & Herrbach, 2008; Lo & Aryee, 2003).

### **Conclusion**

Overall, our results suggest that SIT plays a key role in the effects of PCB in organizations, which opens up a whole new arena of research for psychological contracts. It stresses the role that identity issues

play in psychological contract processes. It highlights the importance of emotions in better understanding how PCB will influence employee attitudes and behaviors, which was supported by a recent meta-analysis (Zhao et al, 2007). It also highlights how people must cope with these emotions in some manner, which suggests additional outcomes that have not yet been considered in the literature. Therefore, more research on psychological contracts needs to examine the role of SIT and PCV, as they appear fruitful for better understanding PCB in the workplace.

## REFERENCES

- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90: 195-208.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14: 20-39.
- Bentler, P.M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, 112: 400-404.
- Bies, R. J. (1999). Interactional (in)justice: The sacred and the profane. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational behavior*. San Francisco: The New Lexington Press.
- Bordia, P., Restubog, S.L., & Tang, R.L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *Journal of Applied Psychology*, 93: 1104-1117.
- Breakwell, G. M. (1986). *Coping with threatened identities*. London: Methuen.
- Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56: 267-283.
- Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences, 3<sup>rd</sup> edition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Conway, J.M., & Lance, C.E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25: 325-334.
- Conway, N., & Briner, R. B. (2002). A daily diary study of affective responses to psychological contract breach and exceeded promises. *Journal of Organizational Behavior*, 23: 287-302.
- Conway, N., & Briner, R. B. (2005). *Understanding psychological contracts at work: A critical evaluation of theory and research*. New York: Oxford University Press, Inc.
- Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin*, 130: 392-414.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108: 593-623.
- De Rivera, J. (1977). *A structural theory of the emotions*. New York: International University Press.
- Deery, S. J., Iverson, R. D., & Walsh, J. T. (2006). Toward a better understanding of psychological contract breach : A study of customer service employees. *Journal of Applied Psychology*, 91: 166-175.

- Dulac, T, Coyle-Shapiro, J.A-M, Henderson, D.J., & Wayne, S.J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal*, 51: 1079-1098.
- Folkman, S., & Lazarus, R.S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21: 219-239.
- Folkman, S., & Lazarus, R.S. (1985). If it changes it must be a process: A study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48: 150-170.
- Fridja, N. H. (1986). *The emotions*. New York: Cambridge University Press.
- Fugate, M., Kinicki, A. J., & Prussia, G. E. (2008). Employee coping with organizational change: An examination of alternative theoretical perspectives and models. *Personnel Psychology*, 61: 1 -36.
- Geddes, D., & Konrad, A. M. (2003). Demographic differences and reactions to performance feedback. *Human Relations*, 56: 1485-1513.
- Guerrero, S., & Herrbach, O. (2008). The affective underpinnings of psychological contract fulfillment. *Journal of Managerial Psychology*, 23: 4-17
- Hinkin, T.R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1: 104-121.
- Hogg, M. A., & Abrams, D. (1988). *Social identifications*. London: Routledge.
- Hu, L.T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6: 1-55.
- Judge, T.A., Locke, E.A., & Durham, C.C. (1997). The dispositional causes of job satisfaction: A core-self evaluations approach. *Research in Organizational Behavior*, 19: 151-188.
- Kickul, J. (2001). When organizations break their promises: Employee reactions to unfair processes and treatment. *Journal of Business Ethics*, 29: 289-307.
- Lazarus, R.S. (1991). *Emotion and adaptation*. New York: Oxford Press.
- Lazarus, R.S. (1999). *Stress and emotion: A new synthesis*. New York: Springer Publishing.
- Lazarus, R. S. (2001). Relational meaning and discrete emotions. In K. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research*: 37-67. London: Oxford Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lester, S. W., Turnley, W. H., Bloodgood, J. M., & Bolino, M. C. (2002). Not seeing eye to eye: Differences in supervisor and subordinate perceptions of and attributions for psychological contract breach. *Journal of Organizational Behavior*, 23: 39-56.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.

- Lo, S., & Aryee, S. (2003). Psychological contract breach in a Chinese context: An integrative approach. *Journal of Management Studies*, 30: 1005-1020.
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56: 393-421.
- Montes, S.D., & Irving, P.G. (2008). Disentangling the effects of promised and delivered inducements: Relational and transactional contract elements and the mediating role of trust. *Journal of Applied Psychology*, 93: 1367-1381.
- Morrison, D. E. (1994). Psychological contracts and change. *Human Resource Management*, 33:353-372.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22: 226-256.
- Nunnally, J.C., & Bertnstein, I.H. (1994). *Psychometric theory*, 3<sup>rd</sup> edition. New York: McGraw-Hill
- Othman, R., Arshad, R., Hashim, N.A., & Isa, R.M. (2005). Psychological contract violation and organizational citizenship behavior. *Gadjah Mada International Journal of Business*, 7: 325-349.
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, 36: 717-731.
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40: 879-891.
- Restubog, S.L.D., Hornsey, M.J., Bordia, P., & Esposito, S.R. (2008). Effects of psychological contract breach on organizational citizenship behaviour: Insights from the group value model. *Journal of Management Studies*, 45: 1377-1400.
- Robinson, S. L., & Morrison, E. W. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior*, 21: 525-546.
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 15: 245-259.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2: 121-139.
- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage Publications, Inc.
- Schlenker, B. R. (1980). *Impression management: The self-concept, social identity, and interpersonal relations*. Monterey, CA: Brooks/Cole.
- Sedikides, C., & Brewer, M. B. (2001). *Individual self, relational self, collective self*. Philadelphia: Psychology Press.
- Sims, R. R. (1994). Human resource management's role in clarifying the new psychological contract. *Human Resource Management*, 33: 373-382.



- Skarlicki, D.P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82: 434-443.
- Smith, H. J., & Tyler, T. R. (1997). Choosing the right pond: The impact of group membership on self-esteem and group-oriented behavior. *Journal of Experimental Social Psychology*, 33: 146-170.
- Smith, H. J., Tyler, T. R., Huo, Y. J., Ortiz, D. J., & Lind, E. A. (1998). The self-relevant implications of the group-value model: Group membership, self-worth, and treatment quality. *Journal of Experimental Social Psychology*, 34: 470-493.
- Sobel, M.E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology*, 290-312. Washington DC: American Sociological Association.
- Sousa, F. H., & Vala, J. (2002). Relational justice in organizations: The group-value model and support for change. *Social Justice Research*, 15: 99-121.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, vol. 21: 261-302. San Diego: Academic Press.
- Sutton, G., & Griffin, M. A. (2004). Integrating expectations, experiences, and psychological contract violations: A longitudinal study of new professionals. *Journal of Occupational and Organizational Psychology*, 77: 493-514.
- Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations*, vol. 2: 7-24. Chicago: Nelson-Hall.
- Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*. Washington, D.C.: American Psychological Association.
- Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior*, 21: 25-42.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of Personality and Social Psychology*, 57: 830-838.
- Tyler, T. R. (1994). Psychological models of the justice motive: Antecedents of distributive and procedural justice. *Journal of Personality and Social Psychology*, 67: 850-863.
- Tyler, T. R., & Blader, S. L. (2003). The group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7: 349-361.
- Tyler, T. R., DeGoey, P., & Smith, H. (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. *Journal of Personality and Social Psychology*, 70: 913-930.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), *Advances in experimental social psychology*, vol. 25: 115-191. New York: Academic Press.

Wade-Benzoni, K.A., Rousseau, D.M., Li, M. (2006). Managing relationships across generations of academics: Psychological contracts in faculty-doctoral student collaborations. *International Journal of Conflict Management*, 17: 4-33.

Weick, K.E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.

Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60: 647-680.