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Implications of the Affective Response to Psychological Contract Breach

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Abstract

Purpose

The purpose of this study is to examine the impact of psychological contract violation (PCV) as a mediating variable in the relationship between psychological contract breach (PCB) and workplace attitudes and behaviors. In addition, this study aims to expand the generalizability of psychological contract theories by examining service-oriented employees rather than a population of managers as in most research on PCB.

Design/methodology/approach

A survey was conducted on 196 service-oriented employees working in the United States. Factor analyses (principle components, varimax rotation) were conducted on all of the variables in the study to determine the factorial independence of the constructs. Hierarchical multiple regression analyses were conducted to test the main effects and mediating hypotheses.

Findings

PCV was found to fully mediate the relationship between PCB and job satisfaction, organizational commitment, intent to quit, perceived organizational support, service delivery service-oriented organizational citizenship behaviors, and participation service-oriented organizational citizenship behaviors. PCV partially mediated the relationship between PCB and loyalty service-oriented organizational citizenship behaviors. PCV was not found to mediate the relationship between PCB and in-role job performance.

Research limitations/implications

The use of a cross-sectional design does not allow for definitive conclusions regarding causality and there is a possibility that the results may be influenced by common method variance.

Practical implications

Managers need to carefully consider the psychological contracts of their subordinates. The perception of PCB may negatively impact a whole host of workplace outcomes, particularly when PCB leads to PCV.

Originality/value

This paper empirically examines the PCB→PCV→Outcomes model using a sample of service-oriented employees.

Keywords Psychological Contract Breach, Psychological Contract Violation, Organizational Citizenship Behaviors, Attitudes, Behaviors

JEL Code: M510

Paper type Research paper

The psychological contract has been described as the terms and conditions of the reciprocal exchange relationship between an employee and employer (Rousseau, 1989). Empirical research on the psychological contract has grown at a phenomenal rate over the past 15 years. The impetus for this research is the changing nature of the psychological contract that has resulted from global competition, technology, and downsizing (Csoka, 1995; Deery *et al.*, 2006). Rousseau (1995), for instance, argues that psychological contracts have shifted from being relational in nature to being much more transactional in nature. The result has been a shift from a paternalistic employee-employer relationship, where the employer took care of employees by providing upward mobility, job security, and retirement benefits, to a much more transactional employee-employer relationship where there is far less job security and fewer provisions for retirement planning (Cavanaugh and Noe, 1999; Turnley *et al.*, 2003). This has led to an increased level of ambiguity regarding what the employee can expect from the employer and thus an increased likelihood that the employee will perceive that the employer is not fulfilling its promises and obligations (Rousseau, 1995).

The failure of an organization to fulfill employee perceived promises and obligations has been defined as psychological contract breach (Rousseau, 1989). Psychological contract breach (PCB) has been found to have a negative impact on a wide variety of employee workplace attitudes and behaviors. For example, PCB has been found to be negatively related to satisfaction (e.g., Robinson and Rousseau, 1994; Tekleab *et al.*, 2005; Turnley and Feldman, 1998), commitment (e.g., Bunderson, 2001; Coyle-Shapiro and Kessler, 2000; Lester *et al.*, 2002; Raja *et al.*, 2004), trust (e.g., Robinson, 1996), in-role performance (e.g., Robinson, 1996; Turnley and Feldman, 1999a), and organizational citizenship behaviors (e.g., Robinson and Morrison, 1995; Turnley and Feldman, 2000). PCB has also been found to lead to increased

cynicism (e.g., Johnson and O’Leary-Kelly, 2003), turnover (e.g., Bunderson *et al.*, 2001), and intent to quit (e.g., Raja *et al.*, 2004; Suazo *et al.*, 2005).

The purpose of this study was to examine the mediating role of the negative affective response to PCB in the relationship between PCB and workplace attitudes and behaviors. Specifically, this study examined psychological contract violation (PCV), defined as the negative affective state that can arise from the perception of PCB (Morrison and Robinson, 1997), as a mediating variable in the relationship between PCB and workplace attitudes and behaviors (see Figure 1 for the specific attitudes and behaviors examined in this study). By addressing this issue, this research attempts to advance the research on PCB in three important ways.

Take in Figure (1)

First, the vast majority of prior research on PCB has focused on examining the direct outcomes associated with PCB. As previously highlighted, the research has consistently demonstrated that PCB is related to a whole host of undesirable workplace attitudes and behaviors (Robinson, 1996; Conway and Briner, 2002). Recently, calls have been placed to examine indirect paths between PCB and workplace attitudes and behaviors (e.g., Raja *et al.*, 2004; Suazo *et al.*, 2005; Turnley and Feldman, 2000). These calls are aimed at gaining an understanding of why many of the reported correlations are weak, or at best moderate, in describing the negative relationships between PCB and workplace attitudes and behaviors. The weak to moderate correlations may be an indication that other factors may be playing a role in the relationship between PCB and workplace attitudes and behaviors (Conway and Briner, 2005; Suazo *et al.*, 2005). In this study, it is suggested that when PCB leads to PCV, that PCV is a critical mediating variable in the relationship between PCB and workplace attitudes and behaviors.

Second, researchers in the field have generally accepted the distinction between PCB and PCV (Conway and Briner, 2005). However, since Morrison and Robinson's (1997) distinction between PCB and PCV, researchers have conducted very few empirical studies that have examined PCV (e.g., Conway and Briner, 2002; Robinson and Morrison, 2000). Of the empirical studies that have examined PCV, we are aware of only two studies (i.e., Raja *et al.*, 2004; Suazo, *et al.*, 2005) that have examined PCV as a mediating variable. By examining this issue this study will extend the emerging empirical work on PCV.

Third, the majority of studies on PCB have been conducted on managers, master of business administration (MBA) graduates, and other occupational elite categories of employees (Autry *et al.*, 2007; Deery *et al.*, 2006). This has led to questions about the generalizability of the findings to other populations of the workforce (Robinson and Morrison, 2000; Turnley and Feldman, 1999b). Thus, there is clearly a need for research that examines non-management and non-MBA employees in order to advance the literature on PCB. This study addresses this issue by sampling a group of service-oriented employees that were in non-management positions.

Theory

PCB as an antecedent to workplace attitudes and behaviors

Research on the impact of PCB on employee attitudes and behaviors has generally been grounded in social exchange theory (Aselage and Eisenberger, 2003; Zhao *et al.*, 2007). Social exchange theory posits that the parties in an exchange relationship provide benefits to one another in the form of tangible benefits such as money or intangible benefits such as socioemotional support (Blau, 1964). The exchange of these benefits is a result of the norm of reciprocity. According to the norm of reciprocity, individuals are obligated to return favors that have been provided by others in the course of interactions in order to strengthen interpersonal

relationships (Gouldner, 1960). In addition, social exchange theory maintains that trust is an essential condition for the establishment and maintenance of interpersonal relationships.

Therefore, according to social exchange theory, individuals seek to enter and maintain fair and balanced exchange relationships. In organizations, employees seek a fair and balanced exchange relationship with their employers.

When PCB is perceived, an employee believes that there is a discrepancy between what he/she was promised and what was delivered by the organization (Rousseau, 1995; Morrison and Robinson, 1997). Discrepancies represent an imbalance in the social exchange relationship between the employee and employer. From an equity perspective (Adams, 1965) the employee is motivated to restore balance in the social exchange relationship by various means including negative workplace attitudes and behaviors. Consistent with the predictions of social exchange theory and equity theory, the line of research in the psychological contracts literature that has focused on the outcomes of PCB has found negative relationships between PCB and a variety of workplace outcomes. For example, PCB has been found to be negatively related to job satisfaction (e.g. Robinson and Rousseau, 1994), organizational commitment (e.g. Robinson, 1996), intentions to quit (e.g. Robinson and Rousseau, 1994), trust (e.g. Robinson and Rousseau, 1994), and in-role job performance (e.g., Robinson, 1996; Turnley and Feldman, 1999a).

In order to replicate and extend prior findings conducted on managers and other occupational elite categories of employees, this study sought to draw on the frameworks employed by previous researchers to examine the effect of PCB on service-oriented employees. This was accomplished by examining three distinct workplace attitudes and one distinct workplace behavior that have received considerable attention in the psychological contracts literature. Specifically, the three attitudes are: (1) job satisfaction, (2) organizational

commitment, and (3) intent to quit. The workplace behavior is in-role job performance. As in previous PCB research, the following is expected:

H1. PCB will be negatively related to job satisfaction.

H2. PCB will be negatively related to organizational commitment.

H3. PCB will be positively related to intent to quit.

H4. PCB will be negatively related to in-role job performance.

As of the time of the writing of this article, previous research had yet to examine whether PCB has an impact on the following workplace outcomes: perceived organizational support (POS), loyalty service-oriented organizational citizenship behavior, service delivery service-oriented organizational citizenship behavior, and participation service-oriented organizational citizenship behavior. However, by extending the findings and the theories of psychological contract, POS, and organizational citizenship behavior (OCB) research, it is reasonable to expect that PCB may be negatively related to these workplace outcomes.

First, psychological contract researchers have argued that PCB may lead to the erosion of the psychological contract between the employee and employer (Robinson, 1996; Rousseau, 1989). This argument is based on the premise that psychological contract theory is an exchange-based framework that helps to define the relationship between the employee and employer (Rousseau, 1989; Rousseau and Schalk, 2000). According to Rousseau (1989), the perception of PCB not only leads to negative feelings about the unmet expectations associated with specific promises, but also to more general feelings about the employee-employer relationship by the employee in terms of being valued and respected by the employing organization. The perception of PCB signals to the employee that the employer is not committed to him/her, does not value the employee's contribution, and may not intend to continue the employment relationship (Coyle-

Shapiro and Conway, 2005). The employee's perception of the organization's commitment to him/her is referred to as perceived organizational support (POS) (Eisenberger *et al.*, 1986). An employee's POS is based on global beliefs "concerning the benevolent or malevolent intent of the organization's policies, norms, procedures, and actions as they affect employees" (Eisenberger *et al.*, 2001, p. 42). Therefore, PCB is expected to lead to lower levels of POS.

H5. PCB will be negatively related to POS.

Second, OCB has been described as behavior by an employee that is discretionary, not formally recognized or rewarded by the organization, and in the long run benefits the organization by promoting efficiency and effective functioning (Organ, 1988; Organ *et al.*, 2006). Research on OCBs has been on-going over the past two decades, and it has tended to focus primarily on the antecedents of OCBs. Like the research on psychological contracts, the research on OCB is based on social exchange theory. Accordingly, one of the mechanisms by which an employee can reciprocate either a good or bad social exchange with an employer is through the performance or withholding of OCBs (Organ, 1990). Empirical evidence suggests that when employees perceive an imbalance in the exchange relationship with the employer, where the employee feels that he/she is giving more than he/she is receiving from the organization, that the employee will reduce OCBs (Organ, 1988, 1990; Organ *et al.*, 2006). It is suggested that an employee is more likely to reduce or eliminate OCBs rather than in-role job performance behaviors because OCBs are discretionary and failure to perform them should not be negatively reflected in performance evaluations (Organ *et al.*, 2006; Robinson and Morrison, 1995).

One of the areas in the OCB literature that is gaining attention has to do with service sector employees (e.g., Bettencourt and Brown, 1997; Sun *et al.*, 2007). Extra-role customer

service has been defined as “discretionary behaviors of contact employees in servicing customers that extend beyond formal role requirements” (Bettencourt and Brown, 1997, p. 41). While all OCBs are considered necessary for organizational survival and effectiveness, OCBs by customer service employees may be particularly critical because service employees serve as the primary interface between customers and organizations (Bowen and Schneider, 1985). OCBs by customer service employees are considered critical because it is impossible to predict in advance all of the possible requirements of customers (Bowen *et al.*, 1999). Representative findings on service-oriented OCBs include Stamper and Van Dyne’s (2001) finding that part-time employees are less likely than full-time employees to exhibit helping behaviors, Sun *et al.*’s (2007) findings that service-oriented OCBs partially mediated the relationship between high performance human resource practices and organization performance, that the unemployment rate moderated the relationship between service-oriented OCB and turnover, and that hotel star-rating moderated the relationship between service-oriented OCB and productivity. In addition, job satisfaction has been found to be positively related to service-oriented OCBs (Payne and Webber, 2006) and service-oriented OCBs have been found to be negatively related to turnover (Sun *et al.*, 2007).

Another area of OCB research that is gaining attention has to do with the psychological contract. In particular, PCB has been examined as an antecedent to OCB. The findings of these studies support the idea that a negative perception of the social exchange process leads to a decrease in the performance of OCBs (e.g., Robinson, 1996; Robinson and Morrison, 1995; Turnley *et al.*, 2003; Turnley and Feldman, 2000). For example, Robinson (1996) examined PCB as an antecedent to OCB and found that PCB was negatively related to the performance of civic virtue behaviors. Turnley and Feldman (1999a) examined PCB as an antecedent to OCB and suggest that PCB is negatively related to loyalty behaviors (this is a different construct than

loyalty service-oriented OCB examined in this study). Turnley *et al.* (2003) found that PCB was negatively related to two forms of OCB: 1) OCBs directed at the organization, and 2) OCBs directed at individuals in the organization. In addition, Suazo *et al.* (2005) examined PCB as an antecedent to OCB and found that PCB was negatively related to helping behavior.

This study seeks to extend the research on PCB and OCBs by examining PCB as an antecedent to service-oriented OCBs. As in prior research on PCB as an antecedent to OCBs it is expected that there will be a negative relationship between PCB and the performance of service-oriented OCBs. The particular OCBs examined in this study were taken from Bettencourt *et al.*'s (2001) three part typology of service-oriented OCBs: 1) loyalty, 2) service delivery, and 3) participation. Loyalty service-oriented OCB describes an employee's willingness to promote the organization's product(s) and image to outsiders. Service delivery service-oriented OCB describes conscientiousness in the activities associated with service delivery to customers. Participation service-oriented OCB describes initiative, particularly in terms of communicating, in order to improve individual, co-worker, and organizational service delivery (Bettencourt *et al.*, 2001; Sun *et al.*, 2007). Hence the following hypotheses are proposed:

H6a. PCB will be negatively related to loyalty service-oriented OCB.

H6b. PCB will be negatively related to service delivery service-oriented OCB.

H6c. PCB will be negatively related to participation service-oriented OCB.

PCV as an outcome of PCB and PCV as a mediating variable

As previously mentioned, researchers have used the terms PCB and PCV interchangeably to describe an employee's perception that his/her psychological contract has not been fulfilled. In an effort to add precision to the use of the terms, Morrison and Robinson (1997) proposed the following (well accepted) distinction (Conway and Briner, 2005). PCB refers to the cognitive

perception of an unfulfilled psychological contract and PCV refers to the intense negative affective response that can arise from PCB. PCV “is an emotional experience, yet it arises from an interpretative process that is cognitive in nature” (Morrison and Robinson, 1997, p. 230). Therefore, PCV refers to the sense of anger and betrayal that an employee feels when he/she believes that the organization has failed to keep its promises (Morrison and Robinson, 1997; Robinson and Morrison, 2000).

It is important to note that PCB does not necessarily lead to PCV (Morrison and Robinson, 1997). It appears that the magnitude and the salience of the broken promise impacts the perception of PCB leading to PCV (Morrison and Robinson, 1997). This assertion is supported by empirical evidence which indicates that not all instances of PCB lead to the strong emotional reactions associated with PCV (e.g., Morrison and Robinson, 1997; Turnley and Feldman, 1999a). PCV is thus a mechanism by which PCB may be translated into negative work attitudes and behaviors (Suazo *et al.*, 2005). Similarly, Restubog *et al.* (2006) found that PCB hurt affective commitment which in turn negatively impacted work behaviors. Conway and Briner (2002) found that broken promises were associated with negative emotional reactions. Therefore, it is expected that an affective response to PCB can in turn negatively impact workplace attitudes and behaviors. In particular, PCV is expected to be a key mediating variable that helps to explain when PCB is likely to negatively influence the following attitudes and behaviors: job satisfaction, organizational commitment, intent to quit, POS, in-role job performance, and service-oriented OCBs.

H7. PCB will be positively related to PCV.

H8a. PCV will mediate the relationship between PCB and job satisfaction.

H8b. PCV will mediate the relationship between PCB and organizational commitment.

H8c. PCV will mediate the relationship between PCB and intent to quit.

H8d. PCV will mediate the relationship between PCB and POS.

H8e. PCV will mediate the relationship between PCB and in-role job performance.

H8f. PCV will mediate the relationship between PCB and loyalty service-oriented OCB.

H8g. PCV will mediate the relationship between PCB and service delivery service-oriented OCB.

H8h. PCV will mediate the relationship between PCB and participation service-oriented OCB.

Method

Participants

The sample consisted of customer-service employees working for a Fortune 500 company (in the United States) whose responsibilities included responding to phone and email inquiries regarding company products and services. The customer-service employees were responsible for recommending and selling products and services based on the particular needs of the customer. All of the respondents were full-time employees, selling the same products and services.

Access was granted to 239 customer-service employees. Self-reports were utilized because all the items of interest, and in particular service-oriented OCBs, would not be ratable by peers or supervisors. Of the 239 surveys distributed, 196 usable surveys were returned for a response rate of 82%. The respondents had a mean age of 33.6 years (s.d. = 7.8), and 71% were male. Mean tenure with the organization was 6.26 years (s.d. = 3.87). Approximately 91% of respondents were White, 6% were African-American, 2% were Hispanic-American, and 1% were Asian-American.

Measures

Psychological contract breach. PCB was measured with a 5-item instrument developed by Robinson and Morrison (2000). The instrument was developed to measure the global perception of PCB. A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “I feel that my employer has come through in fulfilling the promises made to me when I was hired.” A Cronbach’s alpha of .89 was obtained for this measure.

Psychological contract violation. PCV was measured with a 4-item instrument developed by Robinson and Morrison (2000). A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “I feel extremely frustrated by how I have been treated by my organization.” A Cronbach’s alpha of .88 was obtained for this measure.

Job satisfaction. Job satisfaction was measured with a 3-item instrument developed by Cammann *et al.* (1983). These items were developed to measure the overall satisfaction of employees. A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “All in all, I am satisfied with my job.” A Cronbach’s alpha of .83 was obtained for this measure.

Organizational Commitment. Organizational commitment was measured with a 6-item instrument developed by Meyer *et al.* (1993). A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “I really feel as if this organization’s problems are my own.” A Cronbach’s alpha of .88 was obtained for this measure.

Intent to quit. Intent to quit was measured with a 4-item instrument developed by Becker (1992). A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “It is likely that I will actively look for a new job in the next year.” A Cronbach’s alpha of .87 was obtained for this measure.

Perceived Organizational Support. POS was measured with an 8-item instrument developed by Eisenberger *et al.* (1997). A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “Help is available from my organization when I have a problem.” A Cronbach’s alpha of .90 was obtained for this measure.

In-role behavior. In-role job performance was measured with a 7-item instrument developed by Williams and Anderson (1991). A Likert-type scale, anchored by (1) Strongly Disagree and (7) Strongly Agree, was used to indicate agreement with each item. A sample item is “Meets formal performance requirements of the job.” A Cronbach’s alpha of .89 was obtained for this measure.

Service-oriented organizational citizenship behavior. Service-oriented OCB was measured with a 16-item measure developed by Bettencourt *et al.* (2001). Specifically, five items measured loyalty service-oriented OCB, six items measured service-delivery service-oriented OCB, and five items measured participation service-oriented OCB. The scale used for the 16-item measure was a seven point Likert-type scale anchored by (1) Strongly Disagree and (7) Strongly Agree. A sample item of loyalty service-oriented OCB is, “Says good things about the organization to others.” A sample item of service delivery service-oriented OCB is “Follows customer service guidelines with extreme care.” A sample item of participation service-oriented OCB is “Contributes many ideas for customer promotions and communications.” The Cronbach alphas obtained for this

measure were: loyalty ($\alpha = .86$), service delivery ($\alpha = .85$), and participation ($\alpha = .85$).

Control variables. Two control variables were included in the analyses in an attempt to eliminate alternative explanations for significant relationships. The control variables were measured in the following manner: organizational tenure (years of employment with the organization), and gender (coded with 1 = female, 2 = male). These control variables were chosen because it has been suggested that they can be related to the perception of PCB (Raja *et al.*, 2004; Robinson, 1996).

Results

The summary of means, standard deviations, and intercorrelations among the variables of the study are presented in Table 1. Bivariate correlations for all of the variables in the study were in the predicted directions. All measurement items utilized in the study were found to be reliable with Cronbach alphas ranging from .83 to .90. Cronbach alphas are presented on the diagonal of the intercorrelation table.

Take in Table (1)

Factor analyses

Before testing the hypotheses, factor analyses (principle components, varimax rotation) were conducted on the psychological contract items, workplace attitude items, and workplace behavior items used in the survey for this research. First, Table 2 contains the results of a factor analysis of PCB and PCV. The results of the factor analysis support the factorial independence of the two constructs and are generally consistent with the results reported in Raja *et al.* (2004) and Suazo *et al.* (2005). Second, Table 3 contains the results of the factor analysis of the items capturing employee attitudes: job satisfaction, organizational commitment, intent to quit, and POS. The results of the

factor analysis support the factorial independence of the four constructs. Third, Table 4 contains the results of the factor analysis of the items capturing employee behaviors: in-role job performance, loyalty service-oriented OCB, service delivery service-oriented OCB, and participation service-oriented OCB. The results of the factor analysis support the factorial independence of the four constructs. The results of the factor analysis of the service-oriented OCB items in particular, were generally consistent with the results reported in Bettencourt *et al.* (2001) and Coyle-Shapiro *et al.* (2006).

Take in Table (2)

Take in Table (3)

Take in Table (4)

Main effects results

Hypotheses 1-7 predicted a direct relationship between PCB and job satisfaction, organizational commitment, intent to quit, POS, in-role job performance, loyalty service-oriented OCB, service delivery service-oriented OCB, participation service-oriented OCB, and PCV. Specifically, PCB was hypothesized to have a negative relationship with job satisfaction, organizational commitment, POS, in-role job performance, loyalty service-oriented OCB, service delivery service-oriented OCB, and participation service-oriented OCB. In addition, PCB was hypothesized to have a positive relationship with intent to quit and PCV.

Hypotheses 1-7 were tested using hierarchical multiple regression analyses. The first step of the analyses consisted of entering all of the control variables into the model. In the second step of the analyses, PCB was entered into the model. The results of the analyses are presented in Tables 5-8. Support was found for Hypotheses 1-7. PCB

accounted for a significant amount of variance in most of the employee attitudes and behaviors examined in this study. Specifically, the amount of additional variance explained was 20% in the equation predicting job satisfaction, 18% in the equation predicting organizational commitment, 22% in the equation predicting intent to quit, 19% in the equation predicting POS, 2% in the equation predicting in-role job performance, 9% in the equation predicting loyalty service-oriented OCB, 7% in the equation predicting service delivery service-oriented OCB, and 15% in the equation predicting participation service-oriented OCB.

Take in Table (5)

Take in Table (6)

Take in Table (7)

Take in Table (8)

Mediating variable results

Hypotheses 8a-8h predicted that PCV would mediate the relationship between PCB and all of the attitudes and behaviors examined in this study. To test these hypotheses, the three-step mediation regression procedure provided by Baron and Kenny (1986) was followed. Baron and Kenny (1986) stipulate three requirements for establishing mediation effects. First, regressing the dependent variable (for Hypothesis 8a, job satisfaction; for Hypothesis 8b, organizational commitment; for Hypothesis 8c, intent to quit; for Hypothesis 8d, POS; for Hypothesis 8e, in-role job performance; for Hypothesis 8f, loyalty service-oriented OCB; for Hypothesis 8g, service delivery service-oriented OCB; for Hypothesis 8h, participation service-oriented OCB) on the independent variable (PCB) must yield a significant effect for the independent variable on the dependent variable. Second, regressing the mediator variable (PCV) on the independent

variable (PCB) must yield a significant effect for the independent variable on the mediator variable. Third, regressing the dependent variable on both the independent variable and the mediating variable must yield a significant effect for the mediator on the dependent variable. Mediation is present when all three conditions are met. Full mediation is demonstrated if the independent variable is no longer significant when the mediator variable is included in the equation. Partial mediation is demonstrated if the effect of the independent variable is smaller when the mediator variable is included in the equation.

The first requirement stipulated by Baron and Kenny (1986) for establishing mediation was met as indicated by the support for Hypotheses 1-6. The second requirement for establishing mediation was met as indicated by the support for Hypothesis 7. In addition, all of the variables of interest were significantly correlated in the predicted direction as show in Table 1 (see *Effect size results* below for details). The third requirement for establishing mediation was examined by including PCV (Step 3 in Tables 5-8) in the regression equation for each of the dependent variables. Hypotheses 8a, 8b, 8c, 8d, 8f, 8g, and 8h were supported by the data as indicated by the results of Tables 5-8. For Hypotheses 8a, 8b, 8c, 8d, 8g, and 8h, when PCV (Step 3) was entered into the regression equation it was found to be a significant predictor while PCB was no longer significantly related to job satisfaction, organizational commitment, intent to quit, POS, service delivery service-oriented OCB, and participation service-oriented OCB. These results indicate that PCV fully mediated the relationship between PCB and job satisfaction, organizational commitment, intent to quit, POS, service delivery service-oriented OCB, and participation service-oriented OCB. For Hypothesis 8f, when PCV (Step 3) was entered into the regression equation it was found to be a significant predictor while PCB also remained a significant predictor (see Table 7). As a result of Step 3, the β weight for PCB

decreased significantly indicating that PCV partially mediated the relationship between PCB and loyalty service-oriented OCB.

Hypothesis 8e was not supported by the data. As shown in Table 7, when PCV was included in the regression equation (Step 3), it was not a significant predictor. In addition, PCB remained a significant predictor. Therefore, PCV did not mediate the relationship between PCB and in-role job performance.

Effect size results

The results of this study are also generally consistent with the findings that PCB is a stronger predictor of workplace attitudes than workplace behaviors (Conway and Briner, 2005). For example, PCB was found to be strongly related to job satisfaction ($r = -.40$), organizational commitment ($r = -.31$), intent to quit ($r = .35$), and POS ($r = -.57$). In terms of workplace behaviors, PCB was found to be moderately to weakly related to in-role job performance ($r = -.13$), loyalty service-oriented OCB ($r = -.11$), service delivery service-oriented OCB ($r = -.18$), and participation service-oriented OCB ($r = -.17$).

Discussion

Pattern of empirical results

The purpose of this study was to determine whether PCV mediates the relationship between PCB and workplace attitudes and behaviors. Specifically, PCV was examined as a mediating variable in the relationship between PCB and job satisfaction, organizational commitment, intent to quit, POS, in-role job performance, loyalty service-oriented OCB, service delivery service-oriented OCB, and participation service-oriented OCB. In addition, this study set out to examine these relationships among a group of service-oriented employees; a category of employees that has generally been ignored in

prior PCB and OCB studies (Bettencourt *et al.*, 2001; Coyle-Shapiro *et al.*, 2006). The vast majority of studies on PCB and OCB have been conducted on managers or highly educated, white collar employees; typically, MBA students, recent MBA graduates, or individuals with MBAs (Autry *et al.*, 2007; Bettencourt *et al.*, 2001).

The findings of this study suggest that an employee's cognitive perception of broken promises in the workplace (PCB) can lead to a sense of anger and betrayal that can be associated with the perception of broken promises (PCV) which in turn can significantly impact employee attitudes and behaviors. In the process of examining these issues this study confirms and extends prior research on the relationship between PCB and workplace attitudes and behaviors. Specifically, this study's findings are consistent with prior research that has found PCB to be negatively related to job satisfaction, organizational commitment, in-role job performance, and OCB, and positively related to intent to quit and PCV (e.g., Coyle-Shapiro and Kessler, 2000; Johnson and O'Leary-Kelly, 2003; Kickul *et al.*, 2002; Raja *et al.*, 2004; Suazo *et al.*, 2005; Tekleab *et al.*, 2005; Zhao *et al.*, 2007). This study extends the research on PCB by examining PCB as a predictor of POS, loyalty service-oriented OCB, service delivery service-oriented OCB, and participation service-oriented OCB. To our knowledge there were no published papers at the time of this study that had examined PCB as a predictor of POS or PCB as a predictor of service-oriented OCBs. The data of this study suggests that PCB is negatively related to POS, loyalty service-oriented OCB, service delivery service-oriented OCB, and participation service-oriented OCB. It is worth noting that the negative effect of PCB on workplace attitudes and behaviors in this study was significant even after controlling for organizational tenure and gender.

The findings of this study also extend the research on psychological contracts by addressing the calls for research that focus on mediating variables in the relationship between PCB and workplace attitudes and behaviors (Suazo *et al.*, 2005; Turnley and Feldman, 2000). The results of this study generally support the study's hypotheses examining the mediating effects of PCV on the relationship between PCB and workplace attitudes and behaviors. In seven out of the eight regression equations examining these relationships, the impact of PCB on employee attitudes and behaviors was at least partially mediated by PCV. Specifically, the data from this study suggests that PCV fully mediates the relationship between PCB and job satisfaction, organizational commitment, intent to quit, POS, service delivery service-oriented OCB, and participation service-oriented OCB. The data also suggest that PCV partially mediates the relationship between PCB and loyalty service-oriented OCB. The only hypothesis that was not supported by the data of the study was Hypothesis 8e which predicted that PCV would mediate the relationship between PCB and in-role job performance. This result supports Suazo *et al.*'s (2005) finding that PCV did not mediate the relationship between PCB and in-role job performance. The results of this study also parallel the findings reported by Restubog *et al.* (2006) where affective commitment was not found to mediate the relationship between PCB and in-role job performance.

The results of this study support the premises of social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960). The perception of PCB represents an imbalance in the social exchange relationship between the employee and employer, and it triggers the employee to reciprocate through negative workplace attitudes and behaviors. The amount and level of negative workplace attitudes and behaviors that

result from perceived PCB are likely to result from the practical implications of those negative attitudes and behaviors. For example, employees are less likely to suffer negative consequences for low job satisfaction or low POS than they are for withholding or decreasing certain workplace behaviors. In particular, a decrease or withholding of in-role job performance is much more likely to result in negative employer provided outcomes such as a loss of a bonus or termination of the employee, than a decrease or withholding of OCBs. The fact that OCBs are defined as discretionary behaviors that are not rewarded by the employer suggests that withholding or decreasing OCBs should not have an adverse impact on the employee. Therefore, as suggested by the data of this study, when PCB leads to PCV, employees are much less likely to withhold or decrease in-role job performance than OCBs.

Limitations of the research

Like the vast majority of studies on PCB this study collected all of the data at one point in time (a cross-sectional design) and utilized self-reports. By some estimates as many as 90% of the studies examining the outcomes of PCB have utilized cross-sectional designs (Conway and Briner, 2005), and self-reports are the conventional method for collecting data on PCB (Raja *et al.*, 2004). The primary concerns are that the results obtained here and in prior research may be subject to percept-percept effects and common method variance. It is possible, for instance, that the strengths of the relationships reported in these types of studies may be inflated. However, as reported by Lester *et al.* (2002), these concerns may be overestimated as it has been found that common method variance may not be as serious a threat to the interpretation of results when examining the relationship between PCB and employee performance.

Directions for future research

There are several areas that need to be addressed in future research on the outcomes of PCB. First, more research needs to examine potential mediating variables in the relationship between PCB and work related outcomes. The research reported here examined an affect based mediating variable; future research could examine cognitive based or trait based mediating variables. For example, an employee's reaction to PCB may be influenced by his/her work ethic. Employees with a strong protestant work ethic would be expected to respond to PCB in terms of workplace outcomes far differently than employees with a weak protestant work ethic. Similarly, an employee's felt obligation to an employer might be a mediating variable in the relationship between PCB and work related outcomes. These and other variables should be examined in order to gain an understanding of the impact of intervening variables in the relationship between PCB and work related outcomes.

Second, in addition to examining mediating variables, future research needs to address potential moderating variables of the relationship between PCB and work related outcomes. Research in this area is in the early stages of development and has already examined potential moderators such as perceptions of external market pressures (Deery, *et al.*, 2006), perceived causes of PCB (Turnley *et al.*, 2003), perceptions of procedural and interactional justice (Kickul *et al.*, 2002), and union instrumentality (Turnley *et al.*, 2004). The implication of this early research is that individual, group, and organizational factors may play a significant role on the impact of PCB on workplace outcomes. Areas of future research on moderating variables might include the importance of the broken promise, group communication regarding PCBs, organization wide communication

regarding PCBs, and available job opportunities for employees. It is clear that additional research is needed to determine factors that exacerbate or attenuate the impact of PCB on workplace attitudes and behaviors. This is an area of research that is conceptually and empirically underdeveloped (Conway and Briner, 2005).

Third, studies that target groups of employees that are not in managerial positions are sorely needed. The majority of prior research on PCB has been conducted on managers, MBA students, or recent MBA graduates (Autry *et al.*, 2007; Deery *et al.*, 2006). The result is that most of the prior research on PCB has been conducted on a relatively homogeneous segment of the working population. Thus, there is a need to conduct research on non-MBA samples, including blue collar samples, in order to test the generalizability of the theories associated with PCB (Robinson and Morrison, 2000; Turnley and Feldman, 1999b). In addition, and linked to the prior point, future research is needed to verify that the current scales that are in use for psychological contract research are generalizable to a variety employees.

Conclusion

The results of this study indicate that psychological contract violation is a mediating variable in the relationship between psychological contract breach and workplace attitudes and behaviors. Specifically, this study found that psychological contract breach can lead to psychological contract violation, which in turn can have a negative effect on workplace outcomes such as job satisfaction, organizational commitment, intent to quit, perceived organizational support and service-oriented organizational citizenship behaviors (i.e., loyalty, service delivery, participation). The findings of this study are a

natural extension to the burgeoning research on mediator and moderator variables of the relationship between psychological contract breach and workplace outcomes.

In addition, the results of this study also provide a promising outlook for theory development and extension because they suggest that the theories about psychological contract breach may be generalizable to populations of employees beyond the typical populations sampled in the psychological contracts literature (e.g., managers, MBA graduates, and other occupational elite categories of employees). This study was conducted on service-oriented employees that were not in managerial roles or managerial positions, and the pattern of results for this study are consistent with those found utilizing typical samples in the psychological contracts literature. This and a limited number of studies have taken the first step toward understanding psychological contract breach in non-occupational elite populations of employees. It is our hope that future studies will further examine the psychological contracts of a wide variety of employee populations.

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Figure 1.
Psychological Contract Violation as a Mediating Variable in the Relationship
Between Psychological Contract Breach and Workplace Attitudes and Behaviors

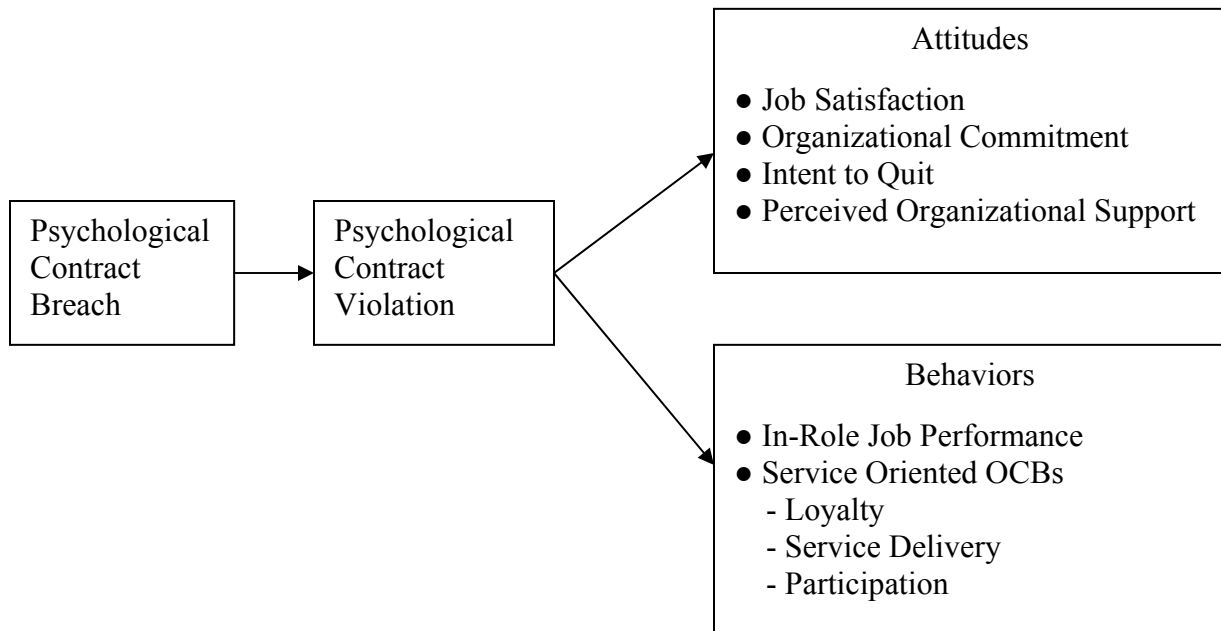


Table 1.
Descriptive Statistics and Inercorrelations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Organizational Tenure	6.26	3.87												
2. Gender	NA	NA	.09											
3. Perceived PCB	3.23	.83	.07	.09	(.89)									
4. PCV	3.18	.78	.08	.08	.71	(.88)								
5. Satisfaction	2.98	.66	.32	.15	-.40	-.52	(.83)							
6. Commitment	3.01	.97	.45	.46	-.31	-.39	.45	(.88)						
7. Intent to Quit	2.89	.85	-.14	.15	.35	.40	-.11	-.13	(.87)					
8. POS	3.51	1.35	.08	.05	-.57	-.54	.19	.18	-.12	(.90)				
9. In-Role Performance	6.13	1.03	.09	.06	-.13	-.20	.09	.07	-.10	.05	(.89)			
10. Loyalty	4.21	.93	-.07	.04	-.11	-.18	.09	.12	-.10	.09	.03	(.86)		
11. Service Delivery	3.84	.78	.08	.05	-.18	-.21	.10	.08	-.07	.08	.05	.03	(.85)	
12. Participation	3.67	.81	.06	.03	-.17	-.19	.08	.10	-.13	.10	.06	.04	.05	(.85)

Cronbach's alphas are listed on the diagonal in parentheses. NA = Not Applicable, PCB = Psychological Contract Breach, PCV = Psychological Contract Violation, POS = Perceived Organizational Support.

All correlations above |.11| are significant at $p < .01$. All correlations above |.31| are significant at $p < .001$.

Table 2.
Results of Factor Analysis of Psychological Contract Items (Psychological Contract Breach and Psychological Contract Violation)

Items	Factor	
	1	2
Psychological Contract Breach		
Almost all the promises made by my employer during recruitment have been kept so far.	.91	.18
I feel that my employer has come through in fulfilling the promises made to me when I was hired.	.88	.26
So far my employer has done an excellent job of fulfilling its promises to me.	.90	.20
I have not received everything promised to me in exchange for my contributions.	.87	.21
My employer has broken many of its promises to me even though I've upheld my side of the deal.	.86	.25
Psychological Contract Violation		
I feel a great deal of anger toward my organization.	.25	.88
I feel betrayed by my organization.	.19	.83
I feel that my organization has violated the contract between us.	.18	.80
I feel extremely frustrated by how I have been treated by my organization.	.21	.85
Eigenvalue	7.15	5.87
Percentage of Variance	58.76	19.89

Table 3.
Results of Factor Analysis of Attitude Items (Job Satisfaction, Organizational Commitment, Intent to Quit, and Perceived Organizational Support)

Items	Factor			
	1	2	3	4
Job Satisfaction				
All in all, I am satisfied with my job.	.85	.21	.09	.15
In general, I don't like my job. (R)	.83	.19	.13	.13
In general, I like working here.	.86	.20	.10	.18
Organizational Commitment				
I would be very happy to spend the rest of my career with this organization.	.19	.82	.15	.20
I really feel as if this organization's problems are my own.	.15	.79	.18	.19
I do not feel a strong sense of "belonging" to my organization. (R)	.18	.83	.19	.21
I do not feel "emotionally attached" to this organization. (R)	.18	.82	.09	.15
I do not feel like "part of the family" at my organization. (R)	.08	.78	.10	.20
This organization has a great deal of personal meaning for me.	.20	.83	.20	.22
Intent to Quit				
It is likely that I will actively look for a new job in the next year.	.13	.21	.77	.18
I often think about quitting.	.16	.07	.80	.10
It would take very little change in my present circumstances to cause me to leave this organization.	.12	.08	.76	.15
There's not to much to be gained by sticking with the organization indefinitely.	.19	.10	.79	.20
Perceived Organizational Support				
My organization cares about my opinions.	.16	.20	.12	.89
My organization really cares about my well-being.	.21	.21	.15	.85
My organization strongly considers my goals and values.	.17	.15	.10	.88
Help is available from my organization when I have a problem.	.19	.12	.18	.89
My organization would forgive an honest mistake on my part.	.09	.18	.16	.87
If given the opportunity, my organization would take advantage of me. (R)	.12	.18	.11	.87
My organization shows very little concern for me. (R)	.17	.16	.19	.89
My organization is willing to help me if I need a special favor.	.15	.21	.20	.86
Eigenvalue	8.57	4.39	3.86	2.95
Percentage of Variance	38.69	12.54	9.62	7.12

Table 4.
Results of Factor Analysis of Behavior Items (In-Role Behaviors and Service-Oriented Organizational Citizenship Behaviors)

Items	Factor			
	1	2	3	4
In-Role Behaviors				
Adequately completes assigned duties.	.90	.20	.18	.12
Fulfills responsibilities in job description.	.91	.18	.19	.08
Performs tasks that are expected of him/her.	.89	.21	.15	.13
Meets formal performance requirements of the job.	.90	.21	.20	.05
Engages in activities that will directly affect his/her performance evaluation.	.88	.08	.10	.12
Neglects aspects of the job he/she is obligated to perform. (R)	.89	.10	.22	.18
Fails to perform essential duties. (R)	.87	.15	.09	.06
Loyalty Service-Oriented OCB				
Tells outsiders this is a good place to work.	.09	.87	.01	.11
Says good things about the organization to others.	.12	.88	.15	.07
Generates favorable goodwill for the company.	.06	.84	.03	.19
Encourages friends and family to use firm's products and services.	.15	.83	.05	.12
Actively promotes the firm's products and services.	.08	.91	.11	.20
Service Delivery Service-Oriented OCB				
Follows customer-service guidelines with extreme care.	.19	.18	.80	.15
Conscientiously follows guidelines for customer promotions.	.21	.13	.85	.08
Follows up in a timely manner to customer requests and problems.	.22	.08	.88	.09
Performs duties with unusually few mistakes.	.06	.11	.66	.19
Always has a positive attitude at work.	.18	.10	.81	.12
Regardless of circumstances, exceptionally courteous and respectful to customers.	.07	.06	.90	.03
Participation Service-Oriented OCB				
Encourages co-workers to contribute ideas and suggestions for service improvement.	.12	.14	.08	.77
Contributes many ideas for customer promotions and communications.	.13	.11	.10	.84
Makes constructive suggestions for service improvement.	.10	.16	.09	.83
Frequently presents to others creative solutions to customer problems.	.09	.19	.13	.79
Takes home brochures to read up on products and services.	.01	.03	.06	.69
Eigenvalue	7.89	6.53	4.32	3.56
Percentage of Variance	48.87	21.56	15.39	13.20

Table 5.
Results of Hierarchical Regression Analyses Examining the Impact of Psychological Contract Breach and Psychological Contract Violation on Job Satisfaction and Organizational Commitment

	Job Satisfaction			Organizational Commitment		
Step 1						
Tenure	.02	.01	.02	.03*	.01*	.02*
Gender	.13	.15	.19	.09	.10	.17
Step 2						
Psychological Contract Breach		-.35***	-.22		-.38***	-.31
Step 3						
Psychological Contract Violation			-.39***			-.39***
<i>F</i>	9.75***	14.79***	15.32***	25.67***	32.03***	35.12***
Adjusted R ²	.02	.22	.30	.05	.23	.33
Δ Adjusted R ²		.20	.08		.18	.10

*** $p < .001$

Table 6.
Results of Hierarchical Regression Analyses Examining the Impact of Psychological Contract Breach and Psychological Contract Violation on Intent to Quit and Perceived Organizational Support

	Intent to Quit			Perceived Organizational Support			
Step 1							
Tenure	.01	.01	.02	.02	.01	.04	
Gender	.05	.05	.08	.07	.11	.17	
Step 2							
Psychological Contract Breach		.46***	.38		-.41***	-.33	
Step 3							
Psychological Contract Violation			.51***			-.48***	
<i>F</i>	13.56***	28.95***	31.54***	41.25***	47.63***	56.38***	
Adjusted R ²	.01	.23	.32	.07	.26	.34	
Δ Adjusted R ²		.22	.09		.19	.08	

*** $p < .001$

Table 7.
Results of Hierarchical Regression Analyses Examining the Impact of Psychological Contract Breach and Psychological Contract Violation on In-Role Job Performance and Loyalty Service-Oriented OCB

	In-Role Job Performance			Loyalty Service-Oriented OCB		
Step 1						
Tenure	.09	.09	.08	.02	.01	.04
Gender	.16	.17	.14	.07	.11	.17
Step 2						
Psychological Contract Breach		-.11*	-.15*		-.43**	-.21**
Step 3						
Psychological Contract Violation			-.08			-.47**
<i>F</i>	8.23*	9.56*	10.54*	12.54**	16.32**	17.24**
Adjusted R ²	.01	.03	.04	.05	.14	.21
Δ Adjusted R ²		.02	.01		.09	.07

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

Table 8.
Results of Hierarchical Regression Analyses Examining the Impact of Psychological Contract Breach and Psychological Contract Violation on Service Delivery Service-Oriented OCB and Participation Service-Oriented OCB

	Service Delivery Service-Oriented OCB			Participation Service-Oriented OCB		
Step 1						
Tenure	.08	.09	.10	.07	.10	.11
Gender	.03	.05	.04	.10	.16	.18
Step 2						
Psychological Contract Breach		-.39***	-.11		-.35***	-.29
Step 3						
Psychological Contract Violation			-.44***			-.41***
<i>F</i>	16.84***	23.43***	24.17***	15.07***	19.41***	21.04***
Adjusted R ²	.02	.09	.17	.01	.16	.24
Δ Adjusted R ²		.07	.08		.15	.08

*** $p < .001$