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A psychological contract perspective on organizational citizenship behavior

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Abstract

This study examined the contribution of the psychological contract framework to understanding organizational citizenship behavior (OCB) using survey data gathered at three measurement points over a three year period from 480 public sector employees. Separating perceived contract breach into its two components, the data suggest that perceived employer obligations explained unique variance in three dimensions of citizenship behavior (helping, advocacy and functional participation) beyond that accounted for by perceived employer inducements. Employees' acceptance of the norm of reciprocity moderated the relationship between employer inducements and the dimensions of advocacy and functional participation. Employees' trust in their employer moderated the relationship between perceived employer obligations and the dimensions of advocacy and functional participation. Contrary to the hypothesis, procedural or interactional justice were not found to moderate the relationship between the psychological contract and OCB. The implications of the findings for psychological contract research are discussed.

Introduction

In the past decade, a good deal of research has been conducted on employee responses to psychological contract breach. When an employee perceives that his/her employer has failed to fulfill one or more promised obligations, he/she is likely to reciprocate in a number of ways. As such, existing empirical research demonstrates that contract breach is related to lower employer trust (Robinson, 1996), job satisfaction (Robinson & Rousseau, 1994), organizational commitment (Coyle-Shapiro & Kessler, 2000), intentions to remain (Turnley & Feldman, 1999) in-role and extra-role performance (Robinson, 1996; Robinson & Morrison, 1995).

Perceived contract breach results in a sense of discrepancy between what is promised and what is fulfilled. This perceived discrepancy leads to unmet expectations, a loss of trust (Robinson, 1996) and job dissatisfaction (Turnley & Feldman, 2000), which in turn negatively affects employee contributions. It is the perception of a discrepancy that is the motivational mechanism underlying much of this research. It seems, therefore, that the role of promises (i.e. perceived obligations) is limited to providing the baseline to which an individual compares what they have received. However, perceived obligations may exert an important influence on employee behavior for the following reason: promises made represent potential future inducements that an employee may or may not receive in the course of their relationship with the employer. Whether these potential inducements are realized is contingent upon how the employee behaves in that relationship. Consequently, employees should be motivated to behave in a manner that increases the likelihood of those promises being fulfilled.

The primary purpose of this research is to gain a better understanding of how psychological contracts affect employee behavior. Specifically, this study hopes to advance

prior research in two ways. First, this study examines the concurrent effects of perceived employer obligations and inducements on employees' reported organizational citizenship behavior (OCB). By separating the components of contract breach, this permits an examination of the unique feature of the psychological contract; that is, its focus on obligations. If perceived employer obligations and inducements have independent effects on OCB, this would provide preliminary support for the view that the psychological contract is distinctive in capturing present as well as anticipated inducements. A second aim of this study is to examine whether differences exist between perceived employer obligations and inducements in terms of their relationship with OCB. This is accomplished by investigating the moderating role of employees' acceptance of the norm of reciprocity, procedural and interactional justice and trust in the employer in the relationship between the components of breach and OCB.

Exchange Models

The exchange model proposed by Barnard (1938) and later revised by March and Simon (1958) posited that individuals exchange their contributions for certain inducements that the organization provides. Subsequently, Blau (1964) distinguished between social and economic exchange that differ among other things on the nature of the inducements being offered by the organization; economic exchange emphasizes the financial and more tangible aspects of the exchange while social exchange emphasizes the socio-emotional aspects of the exchange (Shore, Tetrick, Lynch & Barksdale, 2002). Central to social exchange theory is the norm of reciprocity (Gouldner, 1960) that obligates individuals to respond positively to favorable treatment received from others (Blau, 1964). A common feature of these exchange models is their exclusive focus on the inducements provided in the relationship. Gould (1979) argues that a limitation of these frameworks is that they fail to consider the impact of employee expectations for future

organizational outcomes. Consequently, Gould (1979) recommends that research attention should be directed towards operationalizing future anticipated rewards that an employee may receive in the course of his/her exchange relationship with the employer. The psychological contract framework seems appropriate as it captures perceived employer obligations (anticipated inducements) alongside present inducements. This extended focus, in theory, differentiates the psychological contract from inducement based exchange models.

Organizational Citizenship Behavior

The importance of OCB for organizational functioning has been well rehearsed but more recently, empirical research suggests that OCB accounts for at least as great an effect as that of in-role performance in evaluation ratings (Podsakoff, MacKenzie & Hui, 1993; Podsakoff, MacKenzie, Paine & Bachrach, 2000). Organ (1988) defines OCB as “behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in aggregate promotes the effective functioning of the organization.....the behavior is not an enforceable requirement of the role or the job description.....the behavior is a matter of personal choice” (Organ, 1988, p.4). Researchers have argued that exchange based frameworks are especially relevant to understanding discretionary behavior at work (Organ, 1990; Rousseau, 1995) as situational constraints may limit an individual’s ability to lower their in-role performance in response to employer treatment (Turnley & Feldman,1999). Hence, citizenship-type behaviors may be the first to be withdrawn by the individual in response to the treatment they have received (McLean Parks and Kidder,1994) as this response is likely to carry with it fewer negative repercussions than lowering in-role performance (Turnley & Feldman, 2000).

Podsakoff et al. (2000) note in their review paper that there is a lack of consensus among researchers about the dimensionality of OCB. The authors identify thirty dimensions of OCB

that have been used by researchers but argue that there is considerable conceptual overlap among the dimensions. Furthermore, they argue that current dimensions of OCB can be traced back to Katz's (1964) dimensions of "innovative and spontaneous" behavior to include: cooperating with others, protecting the organization, volunteering constructive ideas, self training and maintaining a favorable attitude toward the organization. Empirically, the psychological contract has been linked to a number of dimensions to include civic virtue (Lewis-McClear & Taylor, 1998; Robinson & Morrison, 1995; Robinson, 1996), loyalty (Tekleab & Taylor, 2000; Turnley & Feldman, 1999), helping (Irving & Gellatly, 2001; Van Dyne & Ang, 1998), courtesy and conscientiousness (Lewis-McClear & Taylor, 1998). These findings seem to suggest that the psychological contract framework may predict a variety of citizenship behaviors rather than a particular dimension. Consequently, a number of dimensions are captured in this study that draw on the work of Katz (1964).

Psychological Contracts

Critics of the psychological contract framework may well argue that contract breach is not distinctive from other exchange related constructs that capture how well or fairly employees feel their employer treats them. Guest (1998) suggests that there may be potential conceptual overlap between social exchange theory and the psychological contract that may bring into question the "added value" of the psychological contract construct. Along similar lines from a methodological stance, Arnold (1996) argues that contract breach combines two elements: obligations and fulfillment of obligations and hence, it may be one of the elements that is significant in explaining the outcomes. Furthermore, Arnold (1996) suggests that if perceived obligations do not explain any additional variance, then "what matters is purely the amount of reinforcement received" (p. 515). If this is the case, the conceptual overlap between the

psychological contract and related constructs may become problematic in that a distinctive feature of the psychological contract (i.e. promissory obligations) becomes illusory.

Consequently, it is important to empirically examine the added contribution of perceived employer obligations to understanding employee behavior.

Fulfillment of employer obligations (present inducements)

Social exchange theorists have viewed the employment relationship as an exchange of loyalty and effort in return for organizational inducements (Rhoades & Eisenberger, In Press). Forms of inducements can include wages, fringe benefits, nature of the job, working conditions (March & Simon, 1958) as well as socioemotional benefits (Armeli, Eisenberger, Fasolo & Lynch, 1998). Eisenberger, Armeli, Rexwinkel, Lynch and Rhoades (2001) argue, based on the norm of reciprocity, employees are motivated to compensate beneficial treatment by acting in ways that support the organization. The empirical evidence is strongly supportive in demonstrating a positive relationship between organizational inducements and employee attitudes and behavior (Irving & Gellatly, 2001; Rhoades & Eisenberger, in press; Porter, Pearce, Tripoli & Lewis, 1998). As employees will attempt to match their contributions with the inducements provided by the employer, one would expect employees' who perceived greater inducements to reciprocate by engaging in OCB.

Hypothesis 1: Employee perceptions of employer inducements will positively predict employees' reported organizational citizenship behavior

Individuals are unlikely to respond to employer inducements in exactly the same manner. Within the psychological contract literature, attention is primarily given to situational determinants (e.g. employer treatment) thereby downplaying the role of individual dispositions in influencing how employees respond to the treatment they receive. In doing so, the view that

employees attempt to keep their contributions and that of their employer relatively equitable is assumed and not empirically tested. In practice, employees may differ in their acceptance of the norm of reciprocity that underlies the exchange relationship. As noted by Eisenberger, Cotterell and Marvel. (1987), “partners’ readiness to return favorable treatment is influenced by their acceptance of the norm of reciprocity” (p.43). Therefore, the extent to which an individual accepts the norm of reciprocity may influence the degree to which they strive to “match” the inducements provided by the employer. The following hypothesis examines the relationship between norm of reciprocity and employer inducements:

Hypothesis 1b: Employees’ acceptance of the norm of reciprocity will moderate the relationship between employer inducements and OCB such that the relationship will be stronger for those who have greater acceptance of the norm of reciprocity.

Organizational justice theory suggests that individuals consider not only the outcomes they receive but also the procedures used to determine those outcomes in defining justice (Leventhal, Karuza & Fry, 1980; Brockner & Weisenfeld, 1996). The empirical research is supportive and furthermore, procedural justice appears to be a better predictor of OCB than distributive justice (Konovsky and Pugh, 1994; Moorman, Niehoff and Organ, 1993; Organ and Moorman, 1993; Taylor and Tepper, 1999). Greenberg (1993) explains this finding in terms of the time dimension involved in evaluating procedural and distributive justice; procedural justice involves evaluations over a long time horizon whereas distributive justice involves discrete evaluations of specific allocation decisions. Individuals are more likely to alter their citizenship behavior if they believe that the system is inherently fair or unfair than when they believe a decision outcome was favorable or unfavorable. Bies and Moag (1986) propose a third category of justice perceptions capturing the quality of interpersonal treatment an individual receives from

an authority figure during the enactment of procedures. This aspect of justice has been referred to as interactional justice (Bies and Moag, 1986). Although closely related, procedural and interactional justice are generally treated as distinct constructs (Colquitt, 2001; Konovsky & Cropanzano, 1991; Maletesta & Byrne, 1997; Skarlicki, Folger & Tesluk, 1999). Colquitt (2001) argues that collapsing procedural and interactional justice into one scale would mask important differences.

Procedural and interactional justice may play a moderating role in the relationship between organizational inducements and OCB. Recent evidence suggests that individual responses to unfavorable actions are less severe when they perceive the procedures adopted as just (Brockner, Dewitt, Grover & Reed, 1990). In addition, Folger (1993) proposes that individuals will respond most negatively to unfavorable outcomes when the conduct of the supervisor is deemed inappropriate. Drawing on this, when employees receive low inducements (an unfavorable outcome) in conjunction with perceptions of procedural injustice or unfair treatment, they may be more likely to withdraw OCB than when they experience low inducements but perceive procedural and interactional justice.

Hypothesis 1c: Procedural and interactional justice will moderate the relationship between employer inducements and OCB such that employees will engage in OCB to a lesser extent when procedural justice/interactional justice and employer inducements are low.

Employer obligations (anticipated employer inducements)

Perceived employer obligations define the parameters of the relationship and signal to the employee the potential inducements that may be exchanged over the course of the relationship. As such, perceived promises signal the organization's future intent and their willingness to invest

in the relationship. However, the realization of these obligations is not unconditional but rather predicated on employees' fulfilling their side of the exchange. The nature of some obligations may be ongoing during the relationship and temporarily discharged periodically as the relationship progresses. For example, an obligation to keep skills up to date may be temporarily fulfilled when an individual is given additional training but the obligation to continue to update skills in the future may exist. In addition, the nature of the exchange involves the contingent interplay between the individual and his/her employer. Therefore, an individual's behavior should be influenced by the anticipation of fulfilled promises, as the "actual" fulfillment of those promises is contingent upon the employee's contributions.

Emerging empirical research suggests that the type of relationship an individual perceives they have with their employer has important consequences for how the individual contributes to that relationship (Blancero and Kreiner, 2000; Irving & Gellatly, 2001; O'Leary-Kelly & Schenk, 1999). Van Dyne and Ang (1998) found that perceived employer obligations was positively related to the helping dimension of OCB in a sample of professional Singaporean employees. Drawing on Bernard's (1938) idea of 'net anticipated satisfactions', perceived employer obligations reflect anticipated benefits arising from the exchange relationship and it is the anticipation of future benefits that may motivate behavior. Recognizing the reciprocal nature of the interplay between the employer and employees, employees may engage in OCB as a way of increasing the likelihood that the employer, over the longer term will fulfill its promises.

Hypothesis 2: Employee perceptions of employer obligations will predict employees' reported citizenship behavior

Trust lies at the heart of relationships and influences how each party behaves toward the other. Robinson's (1996) empirical study clearly demonstrates the importance of trust in

determining whether individuals perceive contract breach and how individuals respond to that breach. An individual's trust in his/her employer may also moderate the relationship between perceived employer obligations and OCB. As previously mentioned, employer obligations may not be fully discharged at any one point in time—obligations may be ongoing for much of the duration of the exchange relationship (e.g. good career prospects, job security). Hence, there is an inherent risk for employees that these obligations may not be fulfilled in the future. As trust is based on judgments about integrity, an individual will hold a probabilistic belief about another person's future actions based on their previous experience with that person (Lewis & Weigart, 1985; Good, 1988). When an employee has high trust in their employer, they will have greater confidence that their employer will fulfill its obligations in the future and hence, the employee is more likely to invest further in that relationship by engaging in citizenship behaviors.

Hypothesis 2b: An employee's trust in their employer will moderate the relationship between perceived employer obligations and OCB in such a manner that the relationship will be stronger for employees who have high levels of trust in their employer

Contextual Sidebar

The organizational context

Since the election of the Thatcher Government in 1979, the public sector has been subjected to efficiency drives pursued by the introduction of market forces into the sector, the break-up of integrated public service providers and the devolution of operational responsibilities to these providers in the context of tighter financial control and a battery of organizational performance measures and targets. These broader changes had a profound effect on the regulation of the employment relationship. In structural terms, the national system of employment regulation fragmented in important respects, allowing for greater variation in terms

and conditions of employment and the introduction of new criteria in pay determination such as individual performance. In substantive terms, pay levels became depressed as public service organizations sought to reduce labor costs in the more competitive environment while job security was compromised by the growing use of precarious forms of employment such as temporary and fixed term contract working.

The organization

The research was carried out in a local authority in the South East of England. Centered on a relatively affluent part of the country, the authority was responsible for the provision of a wide range of public services including education, social services, highways maintenance, home care for the elderly and fire fighting. Following a period of political and financial stability and indeed relative economic well being throughout the 1980s, the authority was subject to a range of pressures and difficulties in the succeeding decade. These included a period of political uncertainty as the ruling party on the council lost overall control, an economic crisis with a looming financial deficit and a pressing need to respond to performance measures imposed by central government. The authority's response to these combined pressures saw a fairly radical change in the general structure and operation of the council as well as in the more specific management of employment relationship. A small number of integrated service-providing departments regulated by established administrative procedures were broken up into myriad of almost 900 quasi-autonomous business units driven by internal market mechanisms. Moreover, the authority was one of the few authorities, which chose to opt out of national terms and conditions for its manual and white-collar staff developing its own pay and grading system.

As an employer, the authority prided itself on adopting 'good practice' not least in response to local labor market realities. In the case of white-collar workers, for example, the

need to recruit and retain staff in an area where the cost of living and certainly housing were relatively high, had encouraged the introduction of car leasing and flexible benefits schemes.

Profile of employees

The employees participating in this study cover the range of occupations found in local authorities from street cleaners, home care assistants to teachers and social workers. Specifically, the occupational grouping included 33.6% teachers, 8.3% firefighters, 7.7% social workers, 4% engineers, 15.5% other professionals, 12.3% administration, 1.1% technicians, 1.9% manual, 8.5% supervisors and 7.2% other. The sample included 480 employees, primarily female (67.5%) and the majority of employees belonged to a trade union (62.5%). The average age of the sample was 43 years with an average tenure of 10.5 years. 9.1% of the sample received less than £10,000 salary p.a., 47.1 % earned between £10-£20,000 p.a., 41.4% earned between £20-£30,000 and 2.4% earned between £30-£40,000 p.a.

Methodology

Procedure and sample

The data used here are part of a broader study on the psychological contract. Participants were surveyed three times over a three-year period. At time 1, 21,000 surveys were mailed and 6,900 respondents returned completed surveys. At time 2, of the 20,000 surveys mailed, approximately 6000 were returned yielding a response rate of 33% and 30% respectively. A random subsample of 1400 employees was selected from the respondent sample at time 2 to complete a third survey (this was due to the financial constraints of administering an organization-wide survey). 660 responded to the third survey yielding a response rate of 47%. Only those employees (excluding managers) who completed all three surveys (n=480) were included in the analysis because the dependent variables were measured in the third time period.

t-tests were conducted to examine whether there were any significant differences between those who responded to the first two surveys and those who responded to all three surveys. No significant differences were found between the two groups in perceived employer obligations, inducements, procedural justice, interactional justice, norm of reciprocity and trust in the employer. Consequently, the selection of participants for the time 3 survey did not create a significant bias.

Measures

The first survey assessed the two elements of the psychological contract: perceptions of employer obligations and inducements, and trust in the employer. The second survey (2.5 years later) assessed procedural and interactional justice and, the third survey (6 months later) captured employees' reported citizenship behavior and their acceptance of the norm of reciprocity.

Perceived employer obligations. At time 1, respondents were asked to indicate the extent to which they believed their employer was obligated to provide a range of items along a five point scale (not at all to a very great extent). These nine items tapped typical aspects of the employment relationship investigated in previous research (Rousseau, 1990) and included long term job security, good career prospects, interesting work, involvement in decision making, support to learn new skills, pay increases to maintain standard of living, fair pay in comparison to employees doing similar work in other organizations, fair pay for responsibilities in the job and fringe benefits that are comparable to employees doing similar work in other organizations. I substituted the following of Rousseau's items: high pay and pay based on current level of performance for items relating to fairness of pay and benefits to ensure appropriateness for the public sector. As previous research suggests that some terms of the psychological contract may be of greater importance to specific employees and consequently should be weighted more

heavily than others (Robinson, 1996). Consequently, employees were asked to indicate how important they felt it was for the employer to provide the same list of obligations along a 7-point scale ranging from 'not at all important' to 'extremely important'. To create an overall measure of perceived employer obligations, I multiplied each individual item by its corresponding importance. Therefore, an item that was highly obligated and of great importance would have greater weighting than an item that was weakly obligated and of less importance.

Perceived employer inducements. At time 1, respondents were asked to indicate the extent to which they in practice had been provided with the same list of employer obligations (along a five point Likert scale ranging from 'not at all' to 'a very great extent'). The list of employer obligations were reworded in order to capture what employees perceive they have actually received from the employer. For example, 'good career prospects' as an employer obligation was modified to 'my career prospects are good here'. To create an overall measure of perceived employer inducements, I multiplied each individual item by its corresponding importance. Therefore, an item that was highly delivered and of great importance would have greater weighting than an item that was poorly delivered and of less importance.

To assess the construct validity of perceived employer obligations and inducements, I examined their independent correlations with an explicit measure of contract fulfillment commonly used in other studies (c.f. Robinson and Morrison, 1995) that ask respondents to indicate the extent to which the employer has fulfilled or failed to fulfill a list of promises. Perceived employer obligations and inducements were correlated (.40 and .84 respectively) with contract fulfillment. I subtracted perceived employer inducements from perceived employer obligations to create a measure of contract breach. This measure was negatively related ($r = -$

.60) with the contract fulfillment measure. The latter correlation is similar to that reported ($r = -.53$) by Robinson and Rousseau (1994) between contract fulfillment and contract violation.

Norm of reciprocity. At time 3, an individual's general acceptance of the norm of reciprocity was measured with the four-item scale developed by Eisenberger, Cotterell and Marvel (1987) using a seven point Likert scale (1='strongly disagree'; 7='strongly agree').

Trust in employer. An individual's trust in their employer was measured at time 1 with six items taken from Cook and Wall (1980) and Robinson and Rousseau (1994).

Procedural justice. At time 2, employee perceptions of procedural justice regarding the introduction of change were examined with six items based on the work of Folger and Konovsky (1989). Responses were on a seven-point scale (1='strongly disagree'; 7='strongly agree').

Interactional justice. Interactional justice was measured at Time 2 with eight items adapted from Moorman (1991). Participants were asked to respond to a number of statements regarding the behavior of the person they normally report to using a seven point scale ranging from 'strongly agree' to 'strongly disagree'.

Organizational citizenship behavior. Organizational citizenship behavior was measured at Time 3 with twenty five items to capture the dimensions outlined by Katz (1964). Specifically, co-operating with others was captured using the five-item helping scale developed by Smith, Organ and Near (1983). The remaining dimensions from the work of Katz (1964) were captured with the loyalty, obedience, advocacy, social and functional participation from Van Dyne, Graham and Dienesch (1994). Participants were presented with a list of twenty five statements and were asked to indicate the extent to which the behaviors were typical of their own behavior at work. Respondents used a five-point scale ranging from 'not at all' to 'a very great extent'.

Analysis

Hierarchical regression analysis was used to test the hypotheses. The control variables were entered in step 1 of the equation. These included gender, age, organizational tenure and trade union membership. For example, gender has been linked to OCB (Kidder, 1998), age and organizational tenure have also been linked to some dimensions of OCB (Morrison, 1994). Trade union membership was included as a control variable as it could potentially affect employees' psychological contract and willingness to engage in OCB.

Hypothesis 1 and 2 were tested by regressing the dimensions of OCB on the control variables, perceived employer obligations and employer inducements. A usefulness analysis (Darlington, 1968) was conducted to examine the unique contribution of perceived employer obligations and employer inducements to predicting variance in the dependent variable. Specifically, perceived employer obligations and inducements were separately entered into a hierarchical regression equation in separate steps and in reverse ordering. This permits an examination of the variance explained by perceived employer obligations in excess of the explanatory capacity of employer inducements and vice versa.

To test hypothesis 1b, 1c and 2b, moderated regression was performed. Each respective independent variable and the interaction terms were entered in steps 3, 4 and 5 (the control variables, perceived employer obligations and inducements were entered in step 1 and 2 respectively). The interaction terms are likely to be highly correlated with the variables from which they were created. In order to reduce the multicollinearity associated with the use of interaction terms, the independent variables were centered around zero before creating the interaction terms (Aiken & West, 1991).

<INSERT TABLE 1 ABOUT HERE>

Results

The items measuring OCB were factor analyzed (principal components, varimax rotation) and the results are presented in Table 1. Five factors emerged that respond to different substantive categories of citizenship behavior having eigenvalues greater than 1, which combined accounted for 55.4% of the variance. Factor 1 represents advocacy participation although it contains one item measuring social participation. Factor 2 contains five items measuring helping behavior. Factor 3 represents functional participation and contains items measuring the extent to which an individual engages in extra activities that add values to the functioning of the organization. Two items from this factor were dropped due to their low factor loadings. Factors 4 and 5 represent the dimensions of loyalty and obedience. The results of the factor analysis of the items capturing the independent and moderator variables are presented in Appendix 1. Overall, the results support the factorial independence of the constructs.

<INSERT TABLE 2 ABOUT HERE>

Scale means, standard deviations, reliabilities, and correlations are reported in Table 2. The majority of measures have alpha coefficients ranging from .74 to .95 with the exception of obedience and norm of reciprocity, which have alpha coefficients of .63 and .60 respectively, that are deemed acceptable (Hair, Anderson, Tatham and Black, 1992).

As Table 3 shows, perceived employer inducements were positively related to two dimensions of citizenship behavior; functional participation ($\beta = .10, p < .05$) and loyalty ($\beta = .30, p < .01$) providing some support for hypothesis 1. Hypothesis 1b predicted that greater

acceptance of the norm of reciprocity would strengthen the relationship between employer inducements and OCB. As Table 4 shows, this was supported for two dimensions of OCB. The interaction term (norm of reciprocity * inducements) was significant in predicting advocacy participation ($\beta = .12, p < .05$) and functional participation ($\beta = .12, p < .05$). Hypothesis 1c was not supported by the data. Neither procedural justice nor interactional justice moderated the relationship between inducements and OCB.

<INSERT TABLE 3 ABOUT HERE>

Hypothesis 2 predicted that perceived employer obligations would be positively related to employees' reported citizenship behavior. As Table 3 shows, perceived obligations were positively related to advocacy participation ($\beta = .21, p < .01$), helping ($\beta = .18, p < .01$), functional participation ($\beta = .12, p < .05$) but not to loyalty or obedience. The results of the usefulness analysis reveals that the inclusion of perceived employer obligations explains unique variance in three of the five dimensions of OCB when the effects of perceived employer inducements were accounted for. Specifically, perceived employer obligations explained additional variance in advocacy participation ($\Delta F 11.95, \Delta R^2 .02, p < .001$), helping ($\Delta F 13.82, \Delta R^2 .03, p < .001$), and functional participation ($\Delta F 11.63, \Delta R^2 .02, p < .001$). Hypothesis 2b was supported for two dimensions of OCB in which the relationship between perceived employer obligations and advocacy participation and functional participation was stronger when employees' trust in their employer was high (Table 4).

<INSERT TABLE 4 ABOUT HERE>

Discussion

The results of this study support the contention that the psychological contract is distinctive from other social exchange constructs that focus exclusively on the inducements received in the exchange relationship. Specifically, the anticipation of future inducements is important in explaining employees' willingness to engage in OCB beyond the motivational influence of present inducements. Second, the difference between perceived obligations and inducements is supported in terms of their respective relationship with OCB; trust in the employer strengthens the relationship between employer obligations and OCB; acceptance of the norm of reciprocity strengthens the relationship between employer inducements and OCB. Finally, the psychological contract framework had a differential effect on the substantive categories of OCB.

The motivating effect of perceived employer obligations can be understood if one considers the nature of what is being exchanged in most employment relationships. Some promises made by the employer may be specific and discrete thereby having a clear end point in which a promise is judged to be fulfilled or broken. However, some promises (e.g. career prospects, job security) may be ongoing for the duration of the relationship and may be temporarily discharged at points throughout the relationship (a promise to promote based on performance is temporarily discharged when the promotion is given but an employee may perceive an obligation on the part of the employer to promote further based on future performance). There is empirical evidence suggesting that managers take into account employees' citizenship behavior when determining evaluation ratings (Podsakoff et al., 2000), which in turn may affect whether promises made by the employer are fulfilled. Therefore, by engaging in OCB, employees may be increasing the probability that future inducements are forthcoming.

Consistent with the inducement-contribution framework, employees engage in OCB as a form of reciprocation contingent upon the inducements received. This suggests that employee reciprocity could be conceptualized as operating on a twin track: reactive reciprocation for present inducements and proactive reciprocation for future inducements. The distinction between reactive and proactive reciprocation is further supported by the moderating effects of the norm of reciprocity and trust in the employer. Not surprisingly, the relationship between existing employer inducements and OCB is stronger for employees who are more accepting of the norm of reciprocity. Individuals who accept the norm of reciprocity to a greater degree are more likely to behave contingent upon the inducements they receive from their exchange partner. The acceptance of the norm of reciprocity that underlies exchange relationships is likely to vary across individuals and influence the contributions they are willing to make in that relationship. On the other hand, an individual's trust in his/her employer helps strengthen the relationship between future anticipated inducements and proactive reciprocation. The existence of trust has been highlighted as central to exchange relationships (Blau, 1964) in terms of how employees interpret and respond to perceived employer behavior (Robinson & Rousseau, 1994; Robinson, 1996). Employees who have greater trust in their employer are more likely to invest in the future of that relationship based on their belief that the employer will continue to maintain the relationship by delivering on future promises.

The absence of a moderating role for procedural and interactional justice is contrary to the hypothesis yet consistent with other research (Turnley & Feldman, 1999). One possible explanation concerns the foci of the measurement of procedural justice that captures organizational change rather than perceived fairness of the procedures adopted to distribute organizational inducements. In addition, perceived inducements were measured at time 1 and

justice perceptions at time 2. Therefore, no account was taken of the potential change in inducements between time 1 and time 2 when justice perceptions were measured. Alternatively, the moderating role for procedural and interactional justice may play a stronger role in predicting negative behaviors such, as retaliation (cf. Skarlicki & Folger, 1997). Organ and Paine (1999) suggest that injustice may have a stronger negative relationship with organizational retaliatory behavior (ORB) than the positive relationship between justice and OCB. Thus, when employees experience an unfavorable outcome with unfair treatment, they may be more likely to engage in proactive behaviors (e.g. ORB) than reactively withdrawing OCB. Future work is needed to explore what may be a potential asymmetry in the moderating role of justice in explaining OCB and negative discretionary behaviors.

Third, the psychological contract framework has a differential effect on the substantive categories of OCB. Consistent with Van Dyne, Graham and Dienesch (1994), the obedience dimension is not influenced by an individual's relationship with his/her employer. In this particular context, obedience may stem from an individual's public service ethos and adherence to norms governing the delivery of services to the public rather than predicated on an exchange-based framework. Of the dimensions of OCB, loyalty behaviors seem to be firmly embedded in how an individual feels that they have been treated within the exchange relationship. From the employee perspective, loyalty behaviors are earned by the employer and not based on anticipatory employer behavior. The anticipation of future inducements seems to provide a strong motivational basis for employees' engagement in helping and change oriented citizenship behavior. This suggests that employees engage in these types of citizenship behaviors not to reciprocate the employer for present inducements but as a proactive step to facilitate the realization of future inducements.

Implications

Results of this study highlight the importance of promissory obligations in predicting employees' citizenship behavior. It is the inclusion of obligations that distinguishes the psychological contract from social exchange constructs that exclusively capture perceived employer treatment without taking into account potential future treatment by the employer. As the psychological contract captures anticipated inducements (e.g. obligations) alongside present inducements, it may provide a more comprehensive basis to examine employee reciprocity in exchange relationships. The distinction between present inducements and anticipated future inducements give rise to different bases for employee reciprocation and in doing so provides a framework for integrating past and anticipated future employer inducements to the exchange relationship with employees. Sahlins (1972) conceptualizes the timing by which the recipient must reciprocate to discharge the obligation as ranging from instantaneous to the longer term. However, this study suggests that employees may engage in reciprocation based on the anticipation of receiving benefits from the employer and concurrently increasing the perceived likelihood that they will be the recipient of those benefits.

The implications for managers are as follows. First, the effect of perceived promises on subsequent employee behavior carries with it a health warning for managers. In the short term, the anticipation of future inducements facilitates organizationally desirable behaviors, in the longer term if not fulfilled could lead to perceptions of contract breach and the undermining of trust that is central to the development of exchange relationships. Therefore, managers need to be careful about what they promise particularly in the context of organizational change when renegeing of promises may be more prevalent. Second, managers need to be aware that employees may differ in the extent to which they accept the norm of reciprocity in their

exchange relationship with the employer. The extent to which employees respond to organizational inducements is influenced by the strength of the reciprocity norm governing the relationship.

Strengths and Weaknesses

An important strength of this study is its sample of diverse public sector employees, which remains under-researched from a psychological contract perspective. The nature of public sector work is distinctly different from the private sector and prior findings based on private sector samples may not generalize to public sector employees. Another strength of this study is that it provides a complementary motivational base to that provided by contract breach in understanding the consequences of exchange relationships.

The sample is from the public sector and this setting may be unique enough to limit the external validity of the findings. Future research should examine the effects of perceived employer obligations on OCB using a private sector sample. In addition, the study has a number of methodological limitations. First, all the variables were measured with self-report survey measures. Consequently, the observed relationships may have been artificially inflated as a result of respondents' tendencies to respond in a consistent manner. However, the measurement of the independent and dependent variables over three measurement occasions reduces the potential for common method bias. Furthermore, Spector (1987) points out that concerns about common method bias have not been empirically substantiated. Second, no account was taken of the potential change in perceived employer obligations and inducements from time 1 to time 3 when OCB was measured. If the terms of the psychological contract have changed, this may have introduced a measurement error into the results. This limitation may be difficult to overcome, as it would require the measurement of the psychological contract just before the

measurement of the dependent variables. Third, the amount of variance explained for the OCB dimensions is small. This may be partly a consequence of multiple measurement points but is nonetheless consistent with other OCB research (Moorman, Blakely and Niehoff, 1998; Stamper and Van Dyne, 2001).

Future Research

Several avenues for future research could be pursued. In terms of replication, further studies with different samples should examine the independent consequences of the components of contract breach and hence lend further support to or question the distinctive contribution of psychological contracts in our understanding of the exchange relationship. With respect to extension, additional research could explore other hypothesized determinants of proactive or anticipatory reciprocation as well as potential moderating variables in this relationship. The relationship between justice and psychological contracts merits additional examination. Perceptions of justice have been treated as an antecedent of contract violations (Tekleab & Taylor, 2000) and also as an outcome of contract breach/fulfillment (Liao-Troth, 1999). The possibility of a reciprocal relationship between justice and the psychological contract has been suggested (Cropanzano & Prehar, 2001) – contract fulfillment should maintain a sense of justice but contract breach may give rise to perceptions of injustice. Future longitudinal research is needed to investigate the direction of influence between justice and psychological contracts. Finally, the motivational basis of OCB is firmly grounded in social exchange. Future research could expand the theoretical basis of OCB by examining a communal exchange perspective. Clark and Mills (1979) posit that the norm governing prosocial acts under communal exchange has a different motivational basis to an exchange relationship in that the primary concern is the welfare of the other party. Blader and Tyler (2000) find empirical support for a communal

exchange perspective to understanding OCB that may provide a gateway to exploring OCB beyond social exchange.

References

- Aiken, L.S. West, S.G. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Sage: Newbury Park, CA.
- Armeli, S. Eisenberger, R. Fasolo, P. Lynch, P. 1998. Perceived organizational support and police performance: The moderating influence of socioemotional needs. *Journal of Applied Psychology*, **83**: 288-297.
- Arnold, J. 1996. The psychological contract: A concept in need of closer scrutiny?. *European Journal of Work and Organizational Psychology* **5**: 511-520.
- Barnard, C.I. 1938. *The Functions of the Executive*. Harvard University Press: Cambridge, MA.
- Bies, R.J. and Moag, J.S. 1986. Interactional justice: Communication criteria for fairness. In B. Sheppard (Ed.), *Research on Negotiation in Organizations*, Vol 1, pp. 43-55. Greenwich, CT: JAI Press.
- Blader, S.L. Tyler, T.R. 2000. Beyond reciprocity: the role of relationship orientation in explaining cooperative organizational behavior. In J. Neuman & J. Coyle-Shapiro (Chairs), *Employee-Employer Reciprocity: Within and Beyond the Employment Relationship*. Symposium conducted at the meeting of the Society for Industrial and Organizational Psychology, New Orleans, Louisiana.
- Blancero, D.M. Kreiner, G.E 2000. The "anticipatory psychological contract": Employer/employee obligations and job choice. Paper presented at the annual meeting of the Academy of Management, Toronto.
- Blau, P. 1964. *Exchange and power in social life*. Wiley: New York.

Brockner, J., Dewitt R.L., Grover, S. Reed, T. 1990. When it is especially important to explain why: factors affecting the relationship between managers' explanations of a layoff and survivors' reactions to a layoff. *Journal of Experimental Social Psychology*, **26**: 289-407.

Brockner, J. Weisenfeld, B.M. 1996. An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin* **120**: 189-208.

Clark, M.S. Mills, J. 1979. Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology* **37**: 12-24.

Cook, J., & Wall, T. 1980. New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology* **53**: 39-52.

Colquitt, J.A. 2001. On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology* **86**: 386-400.

Coyle-Shapiro, J. Kessler, I. 2000. Consequences of the psychological contract for the employment relationship: A large scale survey. *Journal of Management Studies* **37(7)**: 903-930.

Cropanzano, R. Prehar, C.A. 2001. Emerging justice concerns in an era of changing psychological contracts. In R. Cropanzano (Ed.) *Justice in the Workplace* (Vol 2 245-269). Lawrence Erlbaum Associates: Mahwah, NJ.

Darlington, R.B. 1968. Multiple regression in psychological research and practice. *Psychological Bulletin*, **69**: 161-182.

Eisenberger, R. Armeli, S. Rexwinkel, B. Lynch, P.D Rhoades, L. 2001. Reciprocation of perceived organizational support. *Journal of Applied Psychology* **86**: 42-51.

Eisenberger, R. Cotterell, N. Marvel, J. 1987. Reciprocation ideology. *Journal of Personality and Social Psychology* **4**: 743-750.

Folger, R. 1993. Reactions to mistreatment at work. In J.K. Murnighan (Ed.) *Social psychology in organizations: Advances in theory and research* (pp161-183). Englewood cliffs, NJ: Prentice Hall.

Folger, R. Konovsky, M.A. 1989. The effects of procedural justice, distributive justice, and reactions to pay raise decisions. *Academy of Management Journal* **32**: 115-130.

Good, D.1988. Individuals, interpersonal relations and trust. In Gambetta, D. (Ed.) *Trust*. Basil Blackwell: New York.

Gould, S. 1979. An equity-exchange model of organizational involvement. *Academy of Management Review* **4**: 53-62.

Gouldner, A.W. 1960. The norm of reciprocity. *American Sociological Review* **25**: 161-178.

Greenberg, J. 1993. Justice and organizational citizenship behavior: A commentary on the state of the science. *Employee Responsibilities and Rights Journal* **6**: 249-256.

Guest, D. 1998. Is the psychological contract worth taking seriously?. *Journal of Organizational Behavior* **19**: 649-664.

Hair, J.F. Anderson, R.E. Tatham, R.L. Black, W.C. 1992. *Multivariate Data Analysis*. (3rd edition) Macmillan: New York.

Irving, P.G Gellatly, I.R. 2001 Psychological contracts and performance: The role of social exchange. Paper presented at the Annual Meeting of the Academy of Management, Washington D.C.

Katz, D. 1964. The motivational basis of organizational behavior. *Behavioral Science* **9**: 131-133.

Kidder, D.L. 1998. Temporary, part-time and full-time nurses: Psychological contracts and the performance of extra-role behaviors. Paper presented at the annual meeting of the Academy of Management, San Diego.

Konovsky, M.A. Cropanzano, R. 1991. Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. *Journal of Applied Psychology*, **76**: 698-707.

Konovsky, M.A. Pugh, S.D. 1994. Citizenship and social exchange. *Academy of Management Journal* **37**: 656-669.

Lewis-McClear, K. and Taylor, S. 1998. Psychological contract breach and the employment exchange: Perceptions from employees and employers. Paper presented at the annual meeting of the Academy of Management, San Diego.

Leventhal, G.S. Karuza, J. Fry, W.R. 1980. Beyond fairness: A theory of allocation preferences. In G. Mikula (Ed.), *Justice and social interaction* (pp167-218). New York: Springer-Verlag.

Lewis, D.J. Weigert, A. 1985. Trust as a social reality. *Social Forces* **63**: 967-985.

Liao-Troth, M. 1999. The effects of psychological contract strength and violation on organizational commitment and organizational justice. Paper presented at the annual meeting of the Academy of Management, Chicago.

Malatesta, R.M. Byrne, Z.S. 1997. The impact of formal and interactional procedures on organizational outcomes. Paper presented at the 12th annual conference of the Society for Industrial and Organizational Psychology, St Louis, MO.

March, J.G. Simon, H.A. 1958. *Organizations*. Wiley: New York.

McLean Parks, J., & Kidder, D.L 1994. "Till death us to part..." Changing work relationships in the 1990s". In C.L. Cooper and D.M. Rousseau (Eds.) *Trends in Organizational Behavior*. London: John Wiley & Sons, Vol 1, pp. 111-136.

Moorman, R.H. 1991. Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology* **76**: 845-855.

Moorman, R.H. Blakely, G.L. Niehoff, B.P. 1998. Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal* **41**: 351-357.

Moorman, R.H. Niehoff, B.P. Organ, D.W. 1993. Treating employees fairly and organizational citizenship behavior: Sorting out the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal*, **6**: 209-225.

Morrison, E.W. 1994. Role definitions and organizational citizenship behavior: The importance of the employees' perspective. *Academy of Management Journal* **37**: 1543-1567.

O'Leary-Kelly, A. M. Schenk, J.A. 1999. An examination of the development and consequences of psychological contracts. Paper presented at the annual Meeting of the Academy of Management, Chicago.

Organ, D.W. 1988. *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington Books: Lexington, MA.

Organ, D.W. 1990. The motivational basis of organizational citizenship behavior. In B.M. Staw & L.L. Cummings (Eds.), *Research in Organizational Behavior*. Greenwich, CT: JAI Press, Vol 12, pp. 43-72.

Organ, D.W. and Moorman, R.H. 1993. Fairness and organizational citizenship behavior: What are the connections? *Social Justice Research*, **6**, 5-18.

Organ, D.W. Paine, J.B. 1999. A new kind of performance for industrial and organizational psychology: Recent contributions to the study of organizational citizenship behavior. In C.L. Cooper & I.T. Robertson (Eds), *International Review of Industrial and Organizational Psychology*. John Wiley & Sons, Vol 14, pp337-368.

Podsakoff, P.M. MacKenzie, S.B. Hui, C. 1993. Organizational citizenship behaviors and managerial evaluations of employee performance: A review and suggestions for future research. In G.R. Ferris (Ed.) *Research in Personnel and Human Resources Management*. Greenwich, CT: JAI Press, Vol 11, pp. 1-40.

Podsakoff, P.M MacKenzie, S.B Paine, J.B. Bachrach, D.G. 2000. Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management* **26**: 513-563.

Porter, L.W. Pearce, J.L. Tripoli, A.M. Lewis, K.M. 1998. Differential perceptions of employers' inducements: implications for psychological contracts. *Journal of Organizational Behavior* **19**: 769-782.

Rhoades, L & Eisenberger, R. (in press) Perceived organizational support: A review of the literature, *Journal of Applied Psychology*.

Robinson, S.L. 1996. Trust and breach of the psychological contract. *Administrative Science Quarterly* **41**: 574-599.

Robinson, S.L., Morrison, E.W. 1995. Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue. *Journal of Organizational Behavior*, **16**: 289-298.

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. 1990. New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior* **11**: 389-400.

Rousseau, D.M. 1995. *Psychological Contracts in Organizations*. Sage: Thousand Oaks, CA.

Sahlins, M. 1972. *Stone Age Economics*. New York: Aldine De Gruyter.

Shore, L.M. Tetrick, L.E. Lynch, P. Barksdale, K. 2002. *Social and economic exchanges as mediators between commitment and performance*. Unpublished manuscript.

Skarlicki, D.P. Folger, R. 1997. Retaliation in the workplace: The role of distributive, procedural, and interactional justice. *Journal of Applied Psychology* **82**: 434-443.

Skarlicki, D.P. Folger, R. Tesluk, P. 1999. Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal* **42**: 100-108.

Smith, C.A. Organ, D.W. Near, J.P. 1983. Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, **68**: 653-663.

Spector, P.E. 1987. Method variance as an artifact in self-reported affect and perceptions at work: myth or significant problem. *Journal of Applied Psychology* **72**: 438-443.

Stamper, C.L. Van Dyne, L. 2001. Work status and organizational citizenship behavior: A field study of restaurant employees. *Journal of Organizational Behavior* **22**: 517-536.

Tekleab, A.G Taylor, M.S. 2000. Easing the pain: Determinants and effects of psychological contract violations. Paper presented at the Annual Meeting of the Academy of Management, Toronto.

Taylor, E.C. Tepper, B.J. 1999. Mediating and moderating effects of role definitions on relationships between organizational justice and organizational citizenship behavior. Paper presented at the annual meeting of the Academy of Management, August, Chicago.

Turnley, W.H. Feldman, D.C. 1999. The impact of psychological contract violations on exit, loyalty and neglect. *Human Relations*, **52**: 895-922

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.

Van Dyne, L., Graham, J.W., & Dienesch, R.M. 1994. Organizational citizenship behavior: Construct redefinition, measurement and validation. *Academy of Management*, **37**: 765-802.

Van Dyne, L. Ang, S. 1998. Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, **41**: 692-703.

TABLE 1
Results of factor analysis of OCB items

| Items | Factor | | | | |
|--|--------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 |
| Uses professional judgment to assess what is right/wrong for the organization | .71 | .10 | .01 | .09 | .03 |
| Makes creative work related suggestions to co-workers | .71 | .23 | .29 | .01 | .06 |
| Makes innovative suggestions to improve the functioning of the department | .71 | .19 | .24 | .11 | .11 |
| Shares ideas for new projects or improvements widely | .69 | .14 | .19 | .15 | .09 |
| Encourages others to speak up at meetings | .64 | .24 | .04 | .11 | -.02 |
| Participates in outside groups for the benefit of the organization ‡ | .50 | .07 | .45 | .17 | -.05 |
| Helps others who have heavy workloads | .19 | .80 | .17 | .03 | .09 |
| Helps others who have been absent | .22 | .75 | .07 | .04 | .11 |
| Goes out of the way to help colleagues with job related problems | .24 | .72 | .19 | .04 | .09 |
| Readily assists supervisor with his/her work | .11 | .69 | .21 | .08 | -.05 |
| Tries to avoid creating problems for others | .16 | .50 | -.01 | .05 | .32 |
| Works beyond what is expected | .18 | .21 | .74 | .02 | .16 |
| Exceeds formal requirements of the job | .23 | .20 | .67 | -.02 | .19 |
| Goes the 'extra mile' for the organization | .31 | .20 | .54 | .31 | .14 |
| Only attends work related meetings if required by the job | .00 | .05 | -.52 | -.29 | .04 |
| Participates in activities that are not required but that help the image of the organization | .32 | .17 | .50 | .30 | .02 |
| Avoids extra duties and responsibilities at work † ‡ | -.02 | .18 | .46 | .29 | .30 |
| Personally pursues additional training to improve performance ‡ | .32 | .14 | .42 | .04 | .08 |
| Tells outsiders that the organization is a good place to work | .05 | .04 | .14 | .87 | .00 |
| Defends the employer when other employees criticize it | .19 | .00 | .15 | .75 | .02 |
| Represents the organization favorably to outsiders | .16 | .12 | .11 | .73 | .10 |
| Neglects aspects of job responsibilities † | -.05 | .05 | .06 | -.11 | .76 |
| Wastes time while at work on personal matters † | .10 | -.09 | .13 | .01 | .72 |
| Regardless of circumstance, produces the highest quality work | .13 | .27 | .15 | .13 | .57 |
| Follows work rules and instructions with extreme care | .01 | .32 | .04 | .21 | .53 |
| Eigenvalue | 7.3 | 2.18 | 1.85 | 1.39 | 1.12 |
| Percentage of variance explained | 29.2 | 8.7 | 7.4 | 5.6 | 4.5 |

‡ Item dropped † item reversed scored

TABLE 2
Descriptive statistics and intercorrelations of main study variables

| | Mean | S.D | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-------|------|------|------|------|------|-------|-------|-------|
| 1. Gender T ₁ | 0.65 | 0.48 | | | | | | | |
| 2. Age T ₁ | 42.92 | 8.69 | -.01 | | | | | | |
| 3. Organizational Tenure T ₁ | 10.51 | 7.89 | -.25 | .37 | | | | | |
| 4. Trade union membership T ₁ | 1.97 | 0.18 | -.11 | .16 | .25 | | | | |
| 5. Employer obligations T ₁ | 24.69 | 5.52 | .05 | -.01 | .01 | .06 | (.84) | | |
| 6. Employer inducements T ₁ | 16.70 | 4.20 | .06 | .04 | .04 | .00 | .41 | (.74) | |
| 7. Norm of reciprocity T ₃ | 3.65 | 1.34 | -.21 | -.12 | -.03 | .02 | .06 | -.03 | (.60) |
| 8. Trust in employer T ₁ | 4.29 | 1.37 | .19 | .04 | -.07 | -.10 | -.06 | .38 | -.16 |
| 9. Procedural justice T ₂ | 4.44 | 1.30 | .14 | -.04 | -.02 | -.03 | -.07 | .19 | -.10 |
| 10. Interactional justice T ₂ | 5.24 | 1.44 | .04 | -.05 | .00 | -.05 | .01 | .26 | -.08 |
| 11. Advocacy participation T ₃ | 3.71 | 0.64 | .06 | .09 | .05 | .05 | .22 | .17 | -.09 |
| 12. Helping T ₃ | 3.77 | 0.60 | .18 | .06 | -.02 | -.03 | .18 | .11 | -.13 |
| 13. Functional Participation T ₃ | 4.16 | 0.71 | .15 | .07 | -.08 | .07 | .16 | .17 | -.16 |
| 14. Loyalty T ₃ | 3.51 | 0.76 | .05 | .02 | .04 | .02 | .10 | .30 | -.11 |
| 15. Obedience T ₃ | 5.25 | 0.48 | .25 | .13 | .00 | .01 | .05 | .02 | -.17 |

Correlations > .13 are statistically significant at $p < .01$. Correlations > .09 are statistically significant at $p < .05$.

Gender (1=F, 0=M), Trade union membership (1=member, 0=nonmember)

TABLE 2 (continued)
Descriptive statistics and intercorrelations of main study variables

| | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Gender T ₁ | | | | | | | | |
| 2. Age T ₁ | | | | | | | | |
| 3. Organizational Tenure T ₁ | | | | | | | | |
| 4. Trade union membership T ₁ | | | | | | | | |
| 5. Employer obligations T ₁ | | | | | | | | |
| 6. Employer inducements T ₁ | | | | | | | | |
| 7. Norm of reciprocity T ₃ | | | | | | | | |
| 8. Trust in employer T ₁ | (.90) | | | | | | | |
| 9. Procedural justice T ₂ | .38 | (.91) | | | | | | |
| 10. Interactional justice T ₂ | .27 | .42 | (.95) | | | | | |
| 11. Advocacy participation T ₃ | .07 | .09 | .11 | (.81) | | | | |
| 12. Helping T ₃ | .10 | .09 | .05 | .49 | (.80) | | | |
| 13. Functional Participation T ₃ | .16 | .13 | .13 | .57 | .46 | (.80) | | |
| 14. Loyalty T ₃ | .34 | .32 | .29 | .32 | .18 | .45 | (.79) | |
| 15. Obedience T ₃ | .06 | .02 | .09 | .22 | .34 | .37 | .16 | (.63) |

Correlations >.13 are statistically significant at p< .01. Correlations >.09 are statistically significant at p< .05.

Table 3
Regression results predicting OCB

| | Advocacy Participation T ₃ | | | | Helping | | Functional participation | | | Loyalty | | | Obedience | | |
|---|---------------------------------------|---------|---------|--------|---------|---------|--------------------------|---------|---------|---------|---------|---------|-----------|--------|--------|
| Step 1 | | | | | | | | | | | | | | | |
| Gender T ₁ | .05 | .03 | .26 | .16** | .15** | .15** | .11* | .10* | .09* | .04 | .03 | .02 | .25** | .25** | .25** |
| Age T ₁ | .08 | .08 | .08 | .08 | .08 | .08 | .09 | .09 | .09 | .02 | .02 | .01 | .12* | .12* | .13* |
| Organizational tenure T ₁ | .02 | .01 | .01 | -.01 | -.01 | -.01 | -.12* | -.12* | -.12* | .02 | .02 | .01 | .01 | .01 | .01 |
| Union membership T ₁ | .03 | .03 | .02 | -.04 | -.05 | -.05 | .10* | .09 | .09* | .01 | .01 | .00 | -.02 | -.03 | -.02 |
| Step 2 | | | | | | | | | | | | | | | |
| Perceived employer obligations T ₁ | | .24** | .21** | | .19** | .18** | | .17** | .12* | | .11* | -.01 | | .05 | .06 |
| Step 3 | | | | | | | | | | | | | | | |
| Perceived employer inducements T ₁ | | | .07 | | | .02 | | .10* | | | | .30** | | | -.05 |
| Adjusted R ₂ | .00 | .06 | .06 | .03 | .06 | .06 | .03 | .06 | .07 | .00 | .00 | .08 | .07 | .07 | .07 |
| F | .28 | 6.49** | 5.80** | 4.45** | 7.27** | 6.06** | 4.63** | 6.50** | 6.19** | .29ns | 1.39ns | 7.65** | 9.84** | 8.08 | 6.89** |
| Δ R ₂ | .01 | .05** | .00 | .03 | .04 | .00 | .04 | .03 | .01 | .00 | .01 | .08 | .07 | .00 | .00 |
| F for Δ R ₂ | 1.25 | 27.17** | 2.24 | 4.45** | 17.91** | .10ns | 4.63** | 13.52** | 4.38* | .29ns | 5.77** | 38.41** | 9.84 | 1.05ns | .91ns |
| Reversing Step 2 and 3 | | | | | | | | | | | | | | | |
| Δ R ₂ | --- | .03 | .02 | --- | .00 | .03 | --- | .01 | .02 | --- | .09 | .00 | --- | .00 | .00 |
| F for Δ R ₂ | --- | 17.12** | 11.95** | --- | 4.04 | 13.82** | --- | 6.24** | 11.63** | --- | 44.67** | .07ns | --- | .20ns | 1.76ns |

Table 4
Moderated Regression results

| | Advocacy Participation T ₃ | | | Helping | | | Functional participation | | | Loyalty | | | Obedience | | |
|--------------------------------------|---------------------------------------|--------|--------|---------|--------|--------|--------------------------|--------|--------|---------|--------|--------|-----------|--------|--------|
| Steps 1-2 entered | | | | | | | | | | | | | | | |
| Step 3 | | | | | | | | | | | | | | | |
| Norm of reciprocity T ₁ | -.08+ | | | -.11* | | | -.12** | | | -.08+ | | | -.10* | | |
| Norm * obligations | -.05 | | | -.01 | | | -.02 | | | .03 | | | -.04 | | |
| Norm * inducements | .12* | | | .01 | | | .12* | | | .00 | | | .04 | | |
| Step 4 | | | | | | | | | | | | | | | |
| Procedural justice T ₂ | .06 | | | .10* | | | .08 | | | .25** | | | -.05 | | |
| Interactional justice T ₂ | .03 | | | .00 | | | .08 | | | .11* | | | .11* | | |
| PJ*obligations | .06 | | | -.05 | | | .11 | | | -.03 | | | .01 | | |
| PJ*inducements | -.03 | | | -.02 | | | -.06 | | | -.03 | | | -.06 | | |
| IJ*obligations | -.01 | | | .06 | | | .00 | | | .07 | | | .02 | | |
| IJ*inducements | -.05 | | | .09 | | | .03 | | | -.05 | | | .02 | | |
| Step 5 | | | | | | | | | | | | | | | |
| Trust in employer T ₁ | -.02 | | | .01 | | | .08 | | | .17** | | | .02 | | |
| Trust*obligations | .13* | | | .06 | | | .12* | | | .04 | | | .02 | | |
| Trust* inducements | -.03 | | | -.01 | | | -.01 | | | -.06 | | | .00 | | |
| Δ R ₂ | .02 | .01 | .01 | .01 | .02 | .01 | .02 | .02 | .01 | .00 | .10 | .02 | .01 | .01 | .00 |
| F for Δ R ₂ | 2.82* | 1.16ns | 1.81ns | 1.78ns | 1.79+ | 1.31ns | 3.16* | 2.31* | 1.82ns | 1.09ns | 9.99** | 5.01** | 2.44 | .99ns | .16ns |
| Adjusted R ₂ | .07 | .07 | .07 | .06 | .07 | .08 | .07 | .09 | .10 | .08 | .18 | .20 | .08 | .07 | .07 |
| F | 4.70** | 3.29** | 3.06** | 4.43** | 3.41** | 3.06** | 5.11** | 4.04** | 3.69** | 5.36** | 7.60** | 7.34** | 5.23** | 3.53** | 2.96** |

For ease of clarity, steps 1 (demographic variables) and 2 (perceived employer obligations and inducements) are not shown.

Appendix 1
Results of factor analysis of independent and moderating variables

| Items | Factor | | | | | |
|--|--------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Takes steps to deal with me in an open and honest manner | .92 | .07 | .17 | .01 | -.03 | -.06 |
| Treats me fairly, overall | .89 | .13 | .17 | .00 | -.03 | -.05 |
| Takes steps to deal with me in a truthful manner | .89 | .06 | .17 | .01 | -.01 | -.05 |
| Treats me with kindness and respect | .89 | .08 | .11 | .01 | .01 | -.05 |
| Gives me adequate explanations for decisions taken | .88 | .18 | .18 | .03 | -.04 | -.05 |
| Considers my viewpoints | .87 | .16 | .15 | .02 | .01 | -.06 |
| Provides me with timely feedback about decisions taken | .81 | .18 | .20 | -.02 | -.02 | .03 |
| Is able to suppress personal bias | .81 | .07 | .09 | -.03 | -.04 | -.04 |
| In general, I believe my employer's motives and intentions are good | .14 | .85 | .14 | .01 | -.04 | -.03 |
| My employer is open and upfront with me | .12 | .85 | .18 | -.03 | -.02 | -.08 |
| I am quite confident that my employer will always try to treat me fairly | .14 | .83 | .16 | .02 | -.03 | -.11 |
| My employer can be trusted to make sensible decisions for the future of this organization | .09 | .83 | .21 | -.03 | .01 | -.04 |
| My employer would be quite prepared to gain advantage by deceiving employees † | .09 | .77 | .15 | -.05 | -.11 | .00 |
| My employer is sincere in its attempts to meet employees' points of view | .16 | .76 | .08 | -.06 | -.02 | -.01 |
| I feel that the changes introduced are fair | .10 | .09 | .81 | -.05 | -.01 | .05 |
| In the introduction of changes, my views are heard | .24 | .19 | .80 | -.02 | -.03 | .00 |
| I was provided with a good explanation for the changes being introduced | .14 | .20 | .80 | -.07 | .01 | -.11 |
| My requests for clarification or additional information about the change are answered | .21 | .19 | .76 | .01 | -.03 | -.11 |
| I have been treated fairly during the introduction of changes | .27 | .28 | .74 | -.08 | -.03 | -.10 |
| I understand why changes are being introduced | .16 | .05 | .72 | -.01 | -.04 | .00 |
| Fair pay compared to employees doing similar work in other organizations | -.02 | -.04 | .03 | .82 | .00 | -.06 |
| Fair pay for the responsibilities I have in my job | .04 | -.02 | .03 | .80 | -.07 | .00 |
| Pay increases to maintain my standard of living | -.02 | -.09 | -.03 | .75 | .09 | -.14 |
| Fringe benefits that are fair compared to what employees doing similar work in other organizations get | .00 | .00 | .06 | .72 | .07 | .10 |
| Good career prospects | -.03 | -.03 | -.06 | .64 | .10 | -.07 |
| Support when I want to use new skills | .07 | .06 | -.03 | .63 | -.07 | .16 |
| Opportunity to be involved in decisions that affect me | .00 | .04 | -.01 | .62 | -.08 | -.08 |
| Long term job security | -.03 | -.06 | -.20 | .51 | .05 | -.04 |
| My behavior toward my employer should be unaffected by their behavior towards me † | -.02 | -.12 | .00 | -.01 | .82 | .17 |
| How much you do for your employer should depend on how well they treat you | -.06 | -.02 | -.08 | .06 | .82 | -.08 |
| My employer will do a lot for me, even if I do little in return ‡ | -.07 | -.11 | -.05 | -.01 | .17 | .83 |
| I don't like to feel that I am obligated to my employer ‡ | -.19 | -.17 | -.16 | .01 | -.18 | .38 |
| Eigenvalue | 8.88 | 3.96 | 3.43 | 3.35 | 1.39 | 1.00 |
| Percentage of variance explained | 29.6 | 13.2 | 11.4 | 7.9 | 4.6 | 3.1 |

‡ Item dropped † item reversed scored

Author biography

Jacqueline A-M. Coyle-Shapiro is a lecturer in Industrial Relations at the London School of Economics and Political Science where she received her PhD. Her current research interests include the employment relationship, psychological contracts and organizational citizenship behavior.