

Psychological Contract Breach and Creativity: Examination of Linkages*

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This study focused on individual creativity in workplace. The aim was to identify the role of breach in psychological contract, the mediating variables (scouting behavior and perceived organizational support), and a moderating variable (employee's belief in just world) on creativity. We surveyed 157 employees and their coworkers and supervisors to measure different variables thereby reducing common source bias. Analysis with multiple regression showed that the effect of psychological contract breach on creativity (supervisor-rated) was completely mediated by scouting behavior (coworker-rated) and perceived organizational support. Belief in just world had a moderating effect on the relationship between psychological contract breach and creativity, thereby supporting the betrayal hypothesis.

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I. Introduction

Individual creativity has received significant attention because of its implications for organizational innovation (Rigby, Gruver, & Allen, 2009; Sternberg, 1999). Creativity may be defined as generation of new and useful ideas by employees concerning different aspects of work. The determinants of individual behaviors can be broadly classified into two main categories, individual characteristics and situational factors. Accordingly, researchers have identified several antecedents of individual creative behavior in organizations by focusing on individual dispositional traits such as openness to experience, conscientiousness, and creative personality, and contextual factors such as rewards, goals, and organizational support (e.g., Amabile, 1996; Amabile, Conti, Coon, Lazenby, & Herron, 1996; George & Zhou, 2001; Madjar, Oldham, & Pratt, 2002; Oldham & Cummings, 1996; Perry-Smith & Shalley, 2003; Shalley & Gilson, 2004; Shalley, Zhou, and Oldham, 2004). While this body of research has significantly enhanced our understanding of how and when creative behavior is more likely to occur in organizations, there are several areas which need further attention and research. Our study examines the linkages between psychological contract breach and individual creativity.

An important concept in the research on employer–employee relationship is psychological contract. Psychological contract may be defined as employee’s perceptions about what the organization has promised to do in return for the employee’s efforts and other contributions (Rousseau, 1995). If the employee perceives that the organization has failed to fulfill its promises, then it is a situation of psychological contract breach (Morrison & Robinson, 1997). A meta–analysis of the outcomes of psychological contract breach (PCB) shows that PCB is a very important phenomenon (Zhao, Wayne, Glibkowski, & Bravo, 2007). According to this meta–analysis, PCB has an association with several job attitudes and behaviors such as job satisfaction, organizational commitment, turnover intentions, organizational citizenship behavior, and in–role performance. Our study aims to contribute to the PCB literature by examining its effect on another important outcome, creative behavior of employees.

Our research examines two possible mechanisms that link PCB with creativity. Firstly, we investigate the mediating role of scouting behavior, which refers to employee's exploration of the external environment for any information and ideas relevant for one's tasks or for the company as a whole. Despite its importance for knowledge acquisition, there has been limited research on the role of scouting behavior in creativity. Secondly, we examine the role of perceived organizational support as a mediator of the relationship between PCB and creativity. Perceived organizational support is the employees' belief about "how much the organization values their contributions and cares about their well-being" (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001: 42). While perceived organizational support has been found associated with several important outcomes related to job attitudes and performance (Liu, 2003), its role in facilitating creativity has been sparsely researched.

In addition, we also examine whether the relationship between psychological contract breach and creativity is moderated by employee's belief in just world, an important individual disposition that affects employee attitudes and behaviors (Otto, Glaser, & Dalbert, 2009).

II. Literature Review and Hypotheses

Creativity may be defined as "production of novel and useful ideas" (Amabile et al., 1996: 1155). Over the past two decades, there is a consistent trend in the organizational behavior literature examining creativity as individual behavior or performance rather than an individual trait in itself. In terms of the research on organizational context affecting creativity, an important study identifying several creativity stimulants and creativity obstacles was done by Amabile and colleagues (Amabile et al., 1996). While supervisory encouragement, fair evaluation of new ideas, work group support, availability of resources, challenging work, and job freedom aided creativity, factors such as high work load, internal political problems, and a climate marked by harsh criticism of new ideas and overemphasis on the status quo impeded the creative behavior of employees. In a review article, Shalley, Zhou, and Oldham (2004) listed the following categories of contextual factors that could affect individual

creativity: job complexity, nature of supervision, relationships with coworkers, rewards, evaluation, goals, and spatial configuration of work setting. Of these factors, our research focuses on a concept that is broadly related to employer–employee exchange relationship, psychological contract. Psychological contract may be defined as “the terms of an exchange agreement between individuals and their organizations” (Rousseau, 1995: 9). It refers to the employee’s perceptions of promises made by the organization. Psychological contract breach (PCB) may be defined as the “cognition that one’s organization has failed to meet one or more obligations within one’s psychological contract in a manner commensurate with one’s contributions” (Morrison & Robinson, 1997: 230). In a recent work, Dulac, Coyle–Shapiro, Henderson, and Wayne (2008) argued that PCB is perhaps the most important part of literature on psychological contract because it explains most of the negative outcomes in the workplace that are associated with psychological contract. In a meta–analysis, Zhao et al. (2007) found 16 studies on the relationship between PCB and in–role performance. The estimated population effect size, after correcting for measurement error, was $-.24$. Since individual creative behavior relates to task on hand and at an aggregate level, could lead to organizational innovation (Rigby, Gruver, & Allen, 2009), it is worth examining whether PCB affects creativity. In the research linking PCB and performance, mediators such as LMX and affective commitment have been identified (Restubog, Bordia, Krebs, & Tang, 2005; Restubog, Bordia, & Tang, 2006). This research aims to examine the mediating roles of scouting behavior and perceived organizational support. For theory advancement, it is also useful to examine the boundary conditions – when do the relationships hold true or how the nature of relationships between two concepts differ across situations? Accordingly, we examine the moderating role of belief in just world in the relationship between PCB and creativity. Our research aims to link two well–established fields of research: psychological contracts and creativity.

1. Psychological Contract Breach (PCB) and Creativity

When an employee perceives that the organization has failed to fulfill its promises, one of the likely reactions is reduced trust in the organization (Orvis, Dudley, & Cortina,

2008). Contribution of new and useful ideas by the employee assumes that the employee trusts the organization. If the employee does not trust the organization, he/she might fear not getting credit for the ideas and the creative ideas being stolen by others. Therefore, when an employee has less trust in the organization, he/she is less likely to generate new and useful ideas.

An employee is likely to display creative behavior when he/she is intrinsically motivated (Shalley & Perry-Smith, 2001). Accordingly, one of the prominent theories to explain the occurrence of creative behavior in organizations is the cognitive evaluation theory of intrinsic motivation (Amabile, 1979; Deci & Ryan, 1985). The cognitive evaluation theory argues that competence and self-determination are innate needs of everyone. Any contextual factor that affects one's perceived competence or perceived self-determination will thus impact intrinsic motivation. Such factors influence perceived self-determination via their "controlling" aspect and the perceived competence via their "informational" aspect. Deci and Ryan asserted that the controlling aspect diminishes people's self-determination by pressuring them to think or believe in particular ways. When an event is experienced as "controlling", it promotes an externally perceived locus of causality and undermines intrinsic motivation. PCB might signal to the employee that he/she is not competent or cannot be trusted to handle a task autonomously thereby reducing intrinsic motivation.

Hypothesis 1. PCB is negatively related to creativity.

2. Scouting Behavior and Creativity

The open systems view of organizations has been very well accepted since the early work of organizational theorists (Buckley, 1967). Briefly, in order to succeed, an organization has to continually interact with its external environment. Subsequent research has found evidence for the importance of external networks and linkages for coming up with new products, entering new markets, and making internal process improvements (Mothe & Link, 2002). Therefore, creativity, defined as generation of new and useful

ideas for various tasks in the organization would also benefit from the scouting behavior of employees. Everything else remaining the same, compared to an employee who does not engage in scouting behavior, someone who explores the external environment for information and ideas relevant for the organization is more likely to come up with new and relevant ideas. Interaction with external sources of knowledge can provide intellectual stimulation and information on developments in one's professional discipline, industry or the local economy. Also, communication with people from outside the organization may provide a different perspective to an employee with possibilities of novel ideas. Therefore, we expect the following.

Hypothesis 2. Scouting behavior is positively related to creativity.

3. Psychological Contract Breach (PCB) and Scouting Behavior

Scouting behavior refers to “general scanning for ideas and information about the competition, the market, or the technology” (Ancona & Caldwell, 1992: 841). If the organization has not fulfilled its promise, there is little incentive for the employee to go above and beyond the tightly defined job roles while searching for new ideas because the organization is not likely to reciprocate with recognition or reward. According to Orvis, Dudley, and Cortina (2008), PCB is likely to cause a negative emotional reaction of anger and possible revenge, and holding off any discretionary behavior. If an employee reacts with anger, he/she is less likely to focus on task performance. Scouting behavior is usually not a job requirement though it could potentially help in finding useful information and thus, improving performance. If the employee holds off any discretionary behavior, he/she might do the bare minimum in order to avoid getting into trouble and is unlikely to do anything extra such as engage in scouting behavior.

Hypothesis 3. PCB is negatively related to scouting behavior.

Hypotheses 1, 2, and 3 taken together imply that the relationship between PCB and creativity is mediated by scouting behavior.

4. Perceived Organizational Support and Creativity

Thibaut and Kelley (1959) and Blau (1964) were some of the early researchers to differentiate between interactions based on social exchange and those based on economic exchange. Both forms of exchange are based on expectation of returns commensurate with individual contributions. In case of economic exchange, it is easier to quantify and exchange the contributions for the receipts and so, the system can work on a quid pro quo basis. Because knowledge sharing and generation of creative ideas are behaviors that are beyond what is typically included in job descriptions, the norms of social exchange would operate and employees must believe that the organization will discharge its obligations in some form or the other in the long run (Homans, 1961). While in economic exchange the currency is money, one of the important resources required to facilitate social exchange is the employee's perception of organizational support (Eisenberger et al., 2001; Liu, 2003). Eisenberger et al. (2001) empirically found that "felt obligation" of the employee was a mediator in the relationship between perceived organizational support and outcomes such as employee's commitment and job performance. Based on norms of reciprocity (Gouldner, 1960), employees who perceive that the organization cares for their well-being and values their contributions will feel obligated to share what they know and attempt to think of and contribute novel ideas.

Hypothesis 4: Perceived organizational support is positively related to creativity.

5. Psychological Contract Breach (PCB) and Perceived Organizational Support

Although PCB and perceived organizational support both relate to employer-employee relationship, past research has shown that the two are empirically distinct concepts (Coyle-Shapiro & Conway, 2005). PCB is likely to have a negative relationship with perceived organizational support because PCB sends a signal to the employee that the organization does not appreciate the efforts, knowledge, contribution, and loyalty of the employee (Zagenczyk, Gibney, Kiewitz, & Restubog, 2009). If the organization truly

valued the employee's contributions, it would have fulfilled its promises. By not fulfilling its promises, the organization is also conveying the message that it does not care much for the feelings and welfare of the employee. Therefore, employee who perceives a breach of psychological contract is likely to perceive less support from the organization.

In a longitudinal study where PCB was measured at time 1 and perceived organizational support was measured at time 2, Zagenczyk et al. (2009) found a negative impact of PCB on perceived organizational support, after statistically controlling for baseline perceived organizational support measured at time 1. On the other hand, it may be noted that Dulac, Coyle-Shapiro, Henderson, and Wayne (2008) found support for the hypothesis that perceived organizational support (measured at time 1) affects PCB (measured at time 2). A resolution of what comes first (PCB or perceived organizational support) is beyond the scope of this study. Quite possibly, the relationship is reciprocal. While not ruling out the position of Dulac et al. (2008), we take the stand that PCB would lead to reduced perceptions of organizational support. For example, a high performing software engineer perceives that the organization has promised to send him/her for training programs in new programming languages once every two years. The company fails to fulfill this promise causing a breach of psychological contract. Consistent with the arguments of Zagenczyk et al. (2009) stated earlier, this broken promise might convey the signal to the employee that the organization does not value his/her contributions or care for his/her professional development, thereby lowering the perception of organizational support.

Hypothesis 5: PCB is negatively related to perceived organizational support.

Hypotheses 1, 4, and 5 together imply that the relationship between PCB and creativity is mediated by perceived organizational support.

6. Moderating Role of Belief in Just World

Belief in just world is a stable view of the world that an individual holds wherein people get rewarded or punished, by and large, based on what they deserve (Lerner, 1980;

Rubin & Peplau, 1975). When people high on this belief encounter a situation where their belief is violated, for example, a situation of breach in psychological contract, they are likely to react more strongly. People who do not believe that the world is just or fair would be mentally better prepared for breach of contracts, agreements, and trust. In case of breach in psychological contract, people with a strong belief in just world would not find their expectations being met and this would lead to a feeling of betrayal (Elangovan & Shapiro, 1998; Reina & Reina, 2006). An employee who feels betrayed will be less focused on work and would hold feelings of grudge and vengeance (Finkel, Rusbult, Kumashiro, & Hannon, 2002; Reina & Reina, 2006). Therefore, employees with stronger belief in just world are less likely to contribute their novel and useful ideas to the organization. There is empirical support from prior research on PCB and other outcomes for a related moderator effect. Zagenczyk et al. (2009) found that the negative effect of PCB on perceived organizational support was stronger in the case of employees who had good relationships with their role models. In another study, Restubog et al. (2005) found that the relationship between PCB and extra-role behaviors was more negative when LMX was high. Therefore, we argue the following.

Hypothesis 6. The relationship between PCB and creativity would be moderated by employee's belief in just world such that the relationship between PCB and creativity would be more strongly negative when the employee scores higher on belief in just world.

III. Methods

1. Participants

We surveyed employees at two companies. We got a response from 157 employees giving us a response rate of 71.36%. Employees responded to the items related to PCB, perceived organizational support, belief in just world, and demographic characteristics. The employee who participated in our research also handed a survey to his/her supervisor and

another version of the survey to a coworker who was familiar with the focal employee. The supervisor version of the questionnaire had items measuring the employee's creativity and the coworker version included items measuring the scouting behavior of the focal employee. Of the 157 employees, we received matching response from the supervisor for 133 employees and matching response from coworker for 128 employees.

2. Measures

Creativity. The information on the creativity of employees was collected from their supervisors. Each employee respondent was evaluated by his or her supervisor, who was quite familiar with the employee's performance and behaviors. We used the thirteen-item scale used by George and Zhou (2001). A sample item is "The subordinate suggests new ways to achieve goals or objectives." The reliability coefficient (Cronbach's alpha) was .97.

Scouting behavior. The information on scouting behavior was provided by a coworker who was working closely with the focal employee. It was measured by the four-item scale developed by Ancona and Caldwell (1992). A sample item is "The coworker scans the environment outside the organization for organization process ideas/expertise." The reliability coefficient (Cronbach's alpha) was .94.

Perceived organizational support. We used nine items from the scale developed by Eisenberger, Huntington, Hutchinson, and Sowa (1986). The information was provided by the focal employee. A sample item is "The organization really cares about my well-being." The reliability coefficient (Cronbach's alpha) was .91.

Psychological contract breach. PCB was measured by a 6-item scale developed by Robinson and Morrison (2000). The information was provided by the focal employee. A sample item is "The organization has done a good job of meeting its obligations to me." The reliability coefficient (Cronbach's alpha) was .91.

Belief in just world. We measured this variable with a 7-item scale developed by Lipkus (1991). The information was provided by the focal employee. A sample item is "I feel that people get what they are entitled to have." The reliability coefficient (Cronbach's

alpha) was .79.

Control variables. We used a dummy variable to control for the organization to which the individual belonged. In addition, we also statistically accounted for the education, job tenure, and organizational position of the respondent.

IV. Results

〈Table 1〉 gives the descriptive statistics and correlations among the variables in our study. We followed the method proposed by Baron and Kenny (1986) to test the

〈Table 1〉 Descriptive Statistics and Correlations between Variables

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Creativity (S)	5.05	1.18	.97								
2. Scouting behaviors (C)	4.59	1.31	.30**	.94							
3. Perceived organizational support (E)	5.05	1.00	.26**	.07	.91						
4. Belief in just world (E)	2.89	.63	.09	.04	.37**	.79					
5. Psychological contract breach (E)	3.05	1.23	-.22*	-.21*	-.64**	-.41**	.91				
6. Organization (dummy variable)	--	--	.13	.25**	-.15	-.02	-.02	--			
7. Job tenure	44.83	45.07	-.02	.24*	-.03	-.05	.01	.35**	--		
8. Education	2.99	.75	.15	.23*	-.06	.05	.08	.06	-.01	--	
9. Position in organization	4.07	2.03	.00	.14	.16*	.01	-.14	.07	.19*	-.12	--

Notes. The diagonal elements are scale reliabilities, wherever appropriate.

The sample size varies from 128 to 157 for different pairs of variables.

** $p < .01$ (two-tailed); * $p < .05$ (two-tailed).

C – The data source was coworker

E – The data source was employee

S – The data source was supervisor

mediating effects of scouting behavior and perceived organizational support on the relationship between PCB and creativity. According to the recommendation of Baron and Kenny (1986), PCB should be related to creativity, PCB should be related to scouting behavior (perceived organizational support), Scouting behavior (perceived organizational support) should be related to creativity, and the relationship between PCB and creativity should reduce in strength when the mediator is added to the regression equation.

〈Table 2〉 gives the result of hierarchical regression with creativity (supervisor-rated) as the dependent variable.

As shown in 〈Table 2〉, supervisor-rated creativity was negatively related to PCB ($\beta = -.27, p < .01$), over and above the effect of control variables entered in step 1, thereby supporting Hypothesis 1. After accounting for the effects of the control variables and psychological contract, creativity was positively related to coworker-rated

〈Table 2〉 Summary of Hierarchical Regression Analysis for the Effects of Psychological Contract, Scouting Behavior (Coworker rated), and Perceived Organizational Support on Creativity (Supervisor rated)

Variable	Creativity		
	B	std. error	β
Step 1			
Control variables Organization(dummy)	.29	.29	.10
Job tenure	.00	.00	-.02
Education	.16	.17	.09
Position in organization	.02	.06	.03
Step 2 ^a			
Psychological contract breach	-.27	.09	-.27**
Step 3 ^a			
Psychological contract breach	-.04	.11	-.05
Scouting behavior	.25	.09	.27**
Perceived organizational support	.38	.14	.31**

Note, R^2 for step 1 = .02, ns; ΔR^2 for step 2 = .07, $p < .01$; ΔR^2 for step 3 = .11, $p < .01$.

** $p < .01$ (two-tailed), * $p < .05$ (two-tailed).

^a The coefficients of control variables are not shown in Steps 2 and 3.

scouting behavior ($\beta = .27, p < .01$). Thus, Hypothesis 2 was also supported. Creativity was positively related to perceived organizational support ($\beta = .31, p < .01$) and so, Hypothesis 4 was supported.

⟨Table 3⟩ gives the hierarchical regression results with scouting behavior and perceived organizational support as dependent variables in separate regressions and PCB as the independent variable. In ⟨Table 3⟩, scouting behavior was negatively related to PCB ($\beta = -.22, p < .01$) thereby supporting Hypothesis 3. Perceived organizational support was also negatively related to PCB ($\beta = -.63, p < .01$) thereby supporting Hypothesis 5.

It may also be noted that in ⟨Table 2⟩, the significant relationship between PCB and creativity in step 2 became non-significant in step 3 when the two mediators were added. Taken together, the results imply that the effect of PCB on creativity is completely mediated by scouting behavior and perceived organizational support.

Hypothesis 6 states the moderating effect of belief in just world on the relationship between PCB and creativity. We tested it by mean centering the variables and entering

⟨Table 3⟩ Summary of Hierarchical Regression Analysis for the Effect of Psychological Contract Breach on Scouting Behavior(Coworker rated) and Perceived Organizational Support

Variable	Scouting Behavior (Coworker rated)			Perceived Organizational Support		
	B	std. error	B	B	std. error	β
Step 1: Control variables						
Organization(dummy)	.51	.26	.17	-.36	.19	-.16
Job tenure	.00	.00	.13	.00	.00	.00
Education	.35	.16	.19*	-.04	.11	-.03
Position in organization	.09	.06	.14	.08	.04	.17*
Step 2 ^a						
Psychological contract breach	-.24	.09	-.22**	-.52	.05	-.63**

Note. Scouting behavior as dependent variable: R^2 for step 1 = .14, $p < .01$; ΔR^2 for step 2 = .05, $p < .01$; Perceived organizational support as dependent variable: R^2 for step 1 = .05, ns; ΔR^2 for step 2 = .39, $p < .01$.

** $p < .01$ (two-tailed).

* $p < .05$ (two-tailed).

^a The coefficients of control variables are not shown in Step 2.

the product of the mean-centered variables after accounting for the main effects (Aiken & West, 1991). In Step 3 in <Table 4>, we found a significant relationship between the interaction term and creativity ($\beta = -.18, p < .05$). The interpretation of the moderating effect is aided by a visual plot shown in <Figure 1>.

As can be seen from <Figure 1>, for both the conditions of low and high belief in just world, the relationship between PCB and creativity is negative. However, there is a steeper decline in the value of creativity in the case of high belief in just world. A clearer interpretation emerges when we conduct independent samples t-test to compare the means of creativity between the two groups (low and high PCB) in each of the two scenarios of low and high belief in just world. In the scenario of low belief in just world, the difference in mean creativity (5.18–5.00) between low and high PCB is not

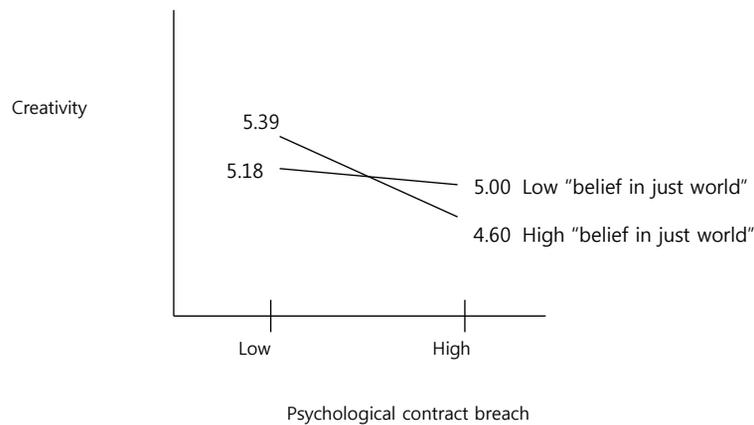
<Table 4> Summary of Hierarchical Regression Analysis for the Moderating Effect of Belief in Just World on the Relationship between Psychological Contract Breach and Creativity

Variable	Creativity		
	B	std. error	β
Step 1: Control variables			
Organization(dummy)	.34	.28	.12
Job tenure	.00	.00	-.08
Education	.23	.16	.13
Position in organization	.01	.05	.02
Step 2 ^a			
Psychological contract breach	-.22	.09	-.23*
Belief in just world	-.01	.17	-.01
Step 3			
Psychological contract breach	-.29	.09	-.30**
Belief in just world	-.02	.17	-.01
Psychological contract breach X Belief in just world	-.23	.11	-.18*

Note. R^2 for step 1 = .04, ns; ΔR^2 for step 2 = .05, $p < .05$; ΔR^2 for step 3 = .03, $p < .05$.

** $p < .01$ (two-tailed). * $p < .05$ (two-tailed).

^a The coefficients of control variables are not shown in Steps 2 and 3.



〈Figure 1〉 Moderating Effect of Belief in Just World on the Relationship between Psychological Contract Breach and Creativity

significant ($t = .51$, ns). When we consider the scenario of high belief in just world, the difference in mean creativity ($5.39 - 4.60$) between low and high PCB is significant ($t = 3.10$, $p < .01$). Thus, the effect of PCB on creativity is more pronounced when the belief in just world is high, thereby supporting Hypothesis 6.

V. Discussion

Our study focused on the relationship between psychological contract breach (PCB) and creativity. More importantly, we hypothesized scouting behavior and perceived organizational support as mediators of the relationship between PCB and creativity. We collected information from employees in two organizations along with a matching response from their coworkers and supervisors. We found the relationships of PCB with creativity to be completely mediated by scouting behavior and perceived organizational support. The relationship between PCB and creativity was moderated by employee's belief in just world. The implications of our findings and the limitations of our research are discussed below.

1. Theoretical Implications

As illustrated by a recent review of the antecedents of creativity (Shalley et al., 2004), while researchers have identified several individual dispositions and contextual factors that influence creativity, there is comparatively more emphasis on identifying the main and interactive effects rather than the mediating mechanisms of such relationships (e.g., George & Zhou, 2001; Oldham & Cummings, 1996; Shalley, Gilson, & Blum, 2000; Zhou, 2003). In the context of the negative relationship between PCB and creativity, the explanation is two fold: perceived organizational support ties into the vast research on employer–employee exchange relationship; and more interestingly, the mediating role of scouting behavior highlights a relatively less examined area in creativity. Yet, scouting behavior is important conceptually because it explains how employees may be able to combine their existing knowledge with new information to create new and useful ideas. Much of knowledge discovery in organizations is conversion of knowledge to another form through combination and exchange (Nahapiet & Ghoshal, 1998). Thus, reduced scouting behavior is an important explanation for why PCB would adversely affect creativity.

Our study also extends the understanding of the contextual factors that affect creativity by examining the role of procedural justice. While Shalley et al. (2004) in their review of contextual factors acknowledged the role of organizational climate in facilitating creativity of employees, authors indicated that not much research has been done in this area. In addition to finding a negative effect of PCB on creativity, we also found perceived organizational support to be positively related to creativity. Thus, employees who feel obligated toward the organization because of its concern and support toward them are more likely to make an effort to come up with novel and useful ideas.

As Dulac et al. (2008) argued, there are three most common exchange–based concepts used in organizational research. Our study focused on psychological contract (breach) and perceived organizational support. Yet another exchange–based concept that could be used to explain creativity is leader–member exchange (LMX). In line with the research by Restubog, Bordia, Krebs, and Tang (2005), future research may examine the mediating

and/or moderating role of LMX in the relationship between PCB and creativity.

We also found that employee's belief in just world moderated the relationship between PCB and creativity. Our findings indicate that the relationship between PCB and creativity is more strongly negative when employees score higher on belief in just world. On similar lines, Zagenczyk et al. (2009) found that the negative effect of PCB on perceived organizational support was stronger in the case of employees who had good relationships with their role models. In another study, Restubog et al. (2005) found that the relationship between PCB and extra-role behaviors was more negative when LMX was high. In all the cases, a common element is that the feeling of betrayal would be stronger when the expectation is higher that a promise would be kept, that the other party would not go back on its word. In the research linking PCB with other outcomes, it is possible that belief in just world might play a similar moderating role.

Yet another contribution of our study relates to improving on the existing research methodology by using information from three different sources. While many scholars have heeded the advice of avoiding common source bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and have typically relied on collecting information on the outcome variable from a different source, several causal relationships continue to be examined in our field through information collected from the same source. For example, the distal (independent) variables and the mediating variables are often measured from the same survey completed by the focal individual. It is well known that collecting data from the same source may bias the findings and typically inflate the degree of association due to the effects of consistency, leniency, acquiescence, mood, and social desirability (Podsakoff et al., 2003). Our research provided a more stringent test of some of the hypothesized relationships. Specifically, by measuring PCB through employee's response, scouting behavior of employee through coworker's response, and creativity through supervisor's response, we corrected for the inflated correlations often found between independent variables and mediators due to common source bias (i.e., data collected from the same individual). Our results, therefore, provide a more stringent test of the mediating role of scouting behavior.

2. Practical Implications

Given the importance of perceived organizational support for creativity, a practical question that arises is “can supervisors be trained to avoid PCB and to improve the employee’s perception of organizational support?” There is prior research to indicate that training is possible to improve the perception of organizational justice (Skarlicki & Latham, 1996). On similar lines, it might be possible to train the supervisors to be more sensitive to the perceptions of employees regarding psychological contract fulfillment. In addition to being aware of explicit promises made by agents of the organization, supervisors should also be careful of implicit promises interpreted by employees. Involvement of supervisors and employees in organizational communication forums and in social networking situations would help increasing the sensitivity of the supervisors to the perceptions of employees. Once this awareness and sensitivity is developed, supervisors must do their best to communicate to the employees the compelling reasons because of which certain promises could not be fulfilled.

The role of scouting behavior in creativity emphasizes the advantage of providing access to information search tools and virtual communities within and outside the organization. Scouting behavior is important for all categories of employees. It is just that the sources of information and the content of what one scouts for would differ across various categories of employees. Business process improvement cuts across all departmental boundaries and scouting behavior of employees is important in increasing the environmental awareness of the organization as a whole.

This study has a few limitations. First, we utilized a cross-sectional design. Therefore, causality has to be carefully interpreted. Though we used three different sources of information, ultimately all variables were measured through the survey approach thereby leaving open the possibility of common method bias. Wherever possible, objective measures of creativity must also be used for comparison.

References

- Amabile, T. M. 1979. Effects of external evaluation on artistic creativity. *Journal of Personality and Social Psychology*, 37: 221-233.
- Amabile, T. M. 1996. *Creativity in context*. Boulder, CO: Westview Press.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. 1996. Assessing the work environment for creativity. *Academy of Management Journal*, 39: 1154-1184.
- Ancona, D. G., & Caldwell, D. F. 1992. Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly*, 37: 634-665.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.
- Blau, P. M. 1964. *Exchange and power in social life*. New York: Wiley.
- Buckley, W. 1967. *Sociology and modern systems theory*. Upper Saddle River, NJ: Prentice-Hall.
- Coyle-Shapiro, J. A. M., & Conway, N. 2005. Exchange relationships: Examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*, 90: 774-781.
- Coyle-Shapiro, J. A. M., & Kessler, I. 2000. Consequences of the psychological contract for the employment relationship: a large scale survey. *Journal of management studies*, 37: 903-930.
- Deci, E. L., & Ryan, R. M. 1985. *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Dulac, T., Coyle-Shapiro, J. A.M., Henderson, D. J., & Wayne, S. J. (2008). Not all responses to breach are the same: A longitudinal study examining the interconnection of social exchange and psychological contract processes in organizations. *Academy of management journal*, 51: 1079-1098.
- 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., Fasolo, P., & Davis-LaMastro, V. 1990. Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75: 51-59.
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. 1986. Perceived organizational support. *Journal of Applied Psychology*, 71: 500-507.
- Elangovan, A. R., & Shapiro, D. L. 1998. Betrayal of trust in organizations. *Academy of Management Review*, 23: 547-566.
- Finkel, E. J., Rusbult, C. E., Kumashiro, M., Hannon, P. A. 2002. Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology*, 82: 956-974.
- George, J. M., & Zhou, J. 2001. When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86: 513-524.
- Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25: 161-178.
- Homans, G.C. 1961. *Social behavior: Its elementary forms*. New York: Harcourt Brace Jovanovich.
- House, R. J., & Mitchell, T. R. 1974. Path goal theory of leadership. *Journal of Contemporary Business*, 3: 81-98.
- Huber, G. P. 1991. Organizational learning: The contributing processes and the literature. *Organization Science*, 2: 88-115.
- James, K., Clark, K., & Cropanzano, R. 1999. Positive and negative creativity in organizations: A model and theoretical extensions. *Creativity Research Journal*, 12: 211-226.
- Lerner, M. J. 1980. *The belief in a just world: A fundamental delusion*. New York: Plenum.
- Lipkus, I. 1991. The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences*, 12: 1171-1178.
- Liu, W. 2003. *Perceived organizational support: Linking human resource management practices with important work outcomes*. Unpublished doctoral dissertation, University of Maryland, College Park.

- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. 2002. A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7: 83-104.
- Madjar, N., Oldham, G. R., & Pratt, M. G. 2002. There's no place like home? The contributions of work and non-work creativity support to employees' creative performance. *Academy of Management Journal*, 45: 757-767.
- 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.
- Morrison, E. W., & Robinson, S. L. 1997. When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22: 226-256.
- Mothe, J. D., & Link, A. N. 2002. *Networks, alliances, and partnerships in the innovation process*. New York: Springer.
- Nahapiet, J., & Ghoshal, S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23: 242-266.
- Oldham, G. R., & Cummings, A. 1996. Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39: 607-634.
- Orvis, K. A., Dudley, N. M., & Cortina, J. M. 2008. Conscientiousness and reactions to psychological contract breach: A longitudinal field study. *Journal of Applied Psychology*, 93: 1183-1193.
- Otto, K., Glaser, D., & Dalbert, C. 2009. Mental health, occupational trust, and quality of working life: Does belief in a just world matter? *Journal of Applied Social Psychology*, 39: 1288-1315.
- Perry-Smith, J. E., & Shalley, C. E. 2003. The social side of creativity: A static and dynamic social network perspective. *Academy of Management Review*, 28: 89-106.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88: 879-903.
- Reina, D. S., & Reina, M. L. 2000. *Trust and betrayal in the workplace: Building effective relationships in your organization* (2nd ed.). San Francisco, CA: Berrett-Koehler.

- Restubog, S. L. D., Bordia, P., Krebs, S. A., & Tang, R. L. 2005. *The role of leader-member exchange in the psychological contract breach – subordinates' performance relationship*. Best Papers Proceedings of the Academy of Management Meetings, Honolulu, HI.
- Restubog, S. L. D., Bordia, P., & Tang, R. L. 2006. Effects of psychological contract breach on performance of IT employees: The mediating role of affective commitment. *Journal of Occupational and Organizational Psychology*, 79: 299-306.
- Rigby, D. K., Gruver, K., & Allen, J. 2009. Innovation in turbulent times. *Harvard Business Review*, 87 (6): 79-86.
- Robinson, S.L., & Morrison, E.W. 2000. The development of psychological contract breach and violation: A longitudinal study. *Journal of Organizational Behavior*, 21: 525-46.
- Rousseau, D. M. 1995. *Psychological contracts in organizations*. Thousand Oaks, CA: Sage.
- Rubin, Z., & Peplau, L. A. 1975. Who believes in a just world? *Journal of Social Issues*, 31: 65-89.
- Shalley, C. E., & Gilson, L. L. 2004. What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *Leadership Quarterly*, 15: 33-53.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. 2000. Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. *Academy of Management Journal*, 43: 215-223.
- Shalley, C. E., & Perry-Smith, J. E. 2001. Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modeling experience. *Organizational Behavior and Human Decision Processes*, 84: 1-22.
- Shalley, C. E., Zhou, J., & Oldham, G. R. 2004. The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30: 933-958.
- Shore, L. M., & Shore, T. H. 1995. Perceived organizational support and organizational justice. In R. Cropanzano & K. M. Kacmar (Eds.) *Organizational politics, justice, and support: Managing social climate at work*: 149-164. Westport, CT: Quorum Press.

- Skarlicki, D. P., & Latham, G. P. 1996. Increasing citizenship behavior within a labor union: A test of organizational justice theory. *Journal of Applied Psychology*, 81: 161-169.
- Sternberg, R. 1999. *Handbook of creativity*. New York: Cambridge University Press.
- Tekleab, A. G., Takeuchi, R., & Taylor, M.S. 2005. Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal*, 48: 146-157.
- Thibaut, J. W., & Kelley, H. H. 1959. *The social psychology of groups*. New York: Wiley.
- Zagenczyk, T. J., Gibney, R., Kiewitz, C., & Restubog, S. L. D. 2009. Mentors, supervisors and role models: Do they reduce the effects of psychological contract breach? *Human Resource Management Journal*, 19: 237-259.
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60: 647-680.
- Zhou, J. 2003. When the presence of creative coworkers is related to creativity: Role of supervisor close monitoring, developmental feedback, and creative personality. *Journal of Applied Psychology*, 88: 413-422.