論文題目

Investigating Mediated and Moderated Mechanisms between Psychological Contract Breach and Counterproductive Work Behaviors

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Abstract

Counterproductive work behaviors cost employers billions of dollars annually worldwide, however, rare studies concerning with anti-production in the literature have not been able to truly reflect the situation. In this article, we do not only investigate the relationships between psychological contract breach and counterproductive work behaviors, but also utilize the work withdrawal intention as a mediator to explore the mediating effect between psychological contract breach and counterproductive work behaviors. In addition, we suggest spiritual leadership may buffer the relationships between work withdrawal intention and counterproductive work behaviors.

Consequently, this study takes 245 military leaders and 398 subordinates from 106 military units in Taiwan as subjects, and the questionnaire contained a self-report form, assessed the facet measures of the psychological contract breach, work withdrawal intention, spiritual leadership, and a supervisor rating form contained the measure of counterproductive work behaviors. After establishing the psychometric properties of the measurements, hypotheses were tested by using hierarchical regression analysis.

Results show that psychological contract breach is positively related to counterproductive work behaviors. Further, work withdrawal intention partial mediates the relationship between psychological contract breach and counterproductive work behaviors. Finally, spiritual leadership buffers their relationship. Future research and implications for psychological contract breach, work withdrawal intention and spiritual leadership on counterproductive work behaviors are discussed.

Keywords: counterproductive work behaviors, psychological contract breach, work withdrawal intention, spiritual leadership

1. Introduction

In general, all employers would expect that companies work regularly and gain rational benefits through employee's productive. Thus, most of our managerial research has concentrated on how to enhance performance. Nevertheless, in addition to productive behaviors, some employees may hurt the organization with negative behaviors (Penney & Spector, 2005). In fact, not only non-productive behaviors but also counterproductive behaviors can cause the damage of both the company and colleagues (Spector & Fox, 2002). Although, some studies (Bing, et al., 2007; Cohen-Charash & Mueller, 2007; Dilchert, Ones, Davis, & Rostow, 2007) concerning with counterproductive work behaviors (CWB) in the literature still have not been able to truly reflect the mechanism, hence CWB has given us new opportunities and challenges.

Counterproductive work behaviors, which included a number of negative behaviors

such as lying, absenteeism, withholding of effort, theft, verbal abuse, drug and alcohol abuse, sexual harassment, physical assault, cost employers billions of dollars annually worldwide (Ones, 2002; Penney & Spector, 2005). It has been growing importance placed on research in CWB in last decade. Several psychologists have paid increasing attention to these behaviors, aiming to explore their antecedents (Lau, Au, & Ho, 2003; Marcus & Schuler, 2004) and reduce their frequency in the work (Bordia, Restubog, & Tang, 2008). Nevertheless, there has been relatively little progress in the investigation of the mechanism of CWB.

Based on equity theory (Adams, 1963), employees who experience unfairness or injustice will attempt to restore balance with engaging in negative attitude and behaviors such as withdrawal and CWB (Restubog, Hornsey, Bordia, & Esposo, 2008). For more specific, employees may have the expectations that their employers would provide reasonable salaries, rewards, respects, applause, and training opportunities. If the employers failed to fulfill the expectations or neglected employees' welfare, the breach of psychological contract might occur. However, rare studies have investigated the relationships between CWB and psychological contract breach. Thus, the purpose of this study is to examine the relationship and the mechanism between psychological contract breach and CWB.

Prior research suggested that psychological contract breach (PCB) may affect employees engaging in negative behaviors such as withdrawal and CWB (Restubog, et al., 2008). According to the theory of reasoned action (Fishbein & Ajzen, 1975), an individual's belief may influence his or her attitude, this attitude is viewed as one major determinant of an individual's intention to perform concerning behavior. In this study, we thus argue that PCB will induce the withdrawal intention and further result in CWB. In other words, PCB yields withdrawal intention as an antecedent to CWB. This study may fulfill the gap of literature in PCB, withdrawal intention, and CWB.

However, linking up PCB and CWB together is not the only contribution of this study. Another purpose of this paper is to find how spiritual leadership buffers the relationship between work withdrawal intention (WWI) and CWB. It should be noted, however, that there have been rare research of spiritual leadership concerned with WWI or CWB. As earlier study proposed, spiritual leadership may positively influence on employees' job satisfaction and organizational commitment (Duchon & Plowman, 2005; Fry, 2003; Fry & Cohen, 2009; Fry, Vitucci, & Cedillo, 2005). In other words, spiritual leadership may compensate employees' job dissatisfaction toward the company. Thus, we suggest rationally spiritual leadership may lessen employees' distrust and job dissatisfaction, reduce the relationship between WWI and CWB, lead them to uncover meanings of their work, hence advance employees' productivity and organizational performance.

2. Literature Review and Hypothesis

2.1 Psychological Contract Breach

Social exchange theory has usually been used as a foundation to illustrate how employees may react to PCB (Bordia, et al., 2008; Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008; Restubog, et al., 2008; Rosen, Chang, Johnson, & Levy, 2009). According to the theory, employees are motivated by a desire to maintain a reciprocal or balanced relationship with their organization in terms of incentives and contributions (Blau, 1964), as a mental model of the mutual obligations, namely, a psychological contract, which refers to comprise a set of beliefs that employees hold concerning with the reciprocal obligations and exchange agreements between the employees and their organization (Rousseau, 1995). In other words, employees agree to perform their role in exchange for the fulfillment of the promises that were made by their employing organization. However, PCB may take place when employees perceive that their organization have failed to adequately fulfill that contract (Robinson & Morrison, 2000). For instance, in order to balance out the perceived inequity resulting from contract breach, employees who are not working with their preferred schedules will engage in lower levels of job performance than those working with their preferred schedules under conditions of lower contract fulfillment (Webster & Adams, 2010). Conversely, employees will engage in higher levels of job performance under higher levels of contract fulfillment because there is less perceived inequity. However, employees perceiving PCB do not only engage in lower levels of job performance but also engage in counterproductive behaviors (Restubog, et al., 2008), which attempt to restore psychological balance.

2.2 Counterproductive Work Behaviors

What are counterproductive work behaviors (CWB)? Varied definitions have defined by Different researchers. For example: Marcus, Schuler, Quell, and Humpfner (2002) defined CWB as any act by a member of an organization that is very likely to do harm but no benefit to other members of the organization or the organization as a whole. And Lau, et al (2003) argued that CWB was defined as any voluntary organizational behaviors that affected an individual's job performance or undermine organizational effectiveness. Then Penney and Spector (2005) hold that CWB referred to behaviors by employees that harmed an organization or its members and included acts such as theft, sabotage, verbal abuse, withholding of effort, lying, refusing to cooperate, and physical assault. One conclusion which can be drawn from the definitions mentioned above would be: CWB is an intentional employee behavior that is harmful to colleagues and organization.

How does CWB occur in an organization? As Adams (1963) predicted in the equity

theory, we could properly suppose that employees respond to PCB by the organization in a variety of negative ways, especially including CWB. For instance, employees perceive PCB negatively related to trust (Deery, Iverson, & Walsh, 2006), job satisfaction (Robinson & Rousseau, 1994), organizational citizenship behaviors (Morrison & Robinson, 1997; Restubog, Bordia, & Tang, 2006, 2007; Restubog, et al., 2008), and job performance (Restubog, et al., 2006; Webster & Adams, 2010). Along similar lines, several studies evidence that PCB is positively related to absenteeism (Deery, et al., 2006), anticitizenship behaviors (Restubog, et al., 2008), and turnover intentions (Robinson & Rousseau, 1994). On the basis of these studies, we propose the following hypothesis:

Hypothesis 1: Employees' perceptions of psychological contract breach are positively associated with employee's counterproductive work behaviors.

2.3 Work Withdrawal Intention

Over the past few decades, a considerable number of studies have been made on work withdrawal. Adler and Golan (1981) argued that job satisfaction and work tedium were generally significant predictors of lateness as a withdrawal behavior. Hulin and his associates stated that employees have played an important role in an employee's avoidance of a dissatisfying work situation through withdrawal while perceiving unfairness (Hanisch & Hulin, 1990, 1991). Subsequently, Boswell and Olson-Buchanan (2004) demonstrated that employees have engaged in withdrawal intention and behaviors when they experienced mistreatment. Recently some researchers have pointed out that stress was related to work withdrawal via job satisfaction and organizational commitment (Boyd, Lewin, & Sager, 2009; Podsakoff, LePine, & LePine, 2007). We may, therefore, reasonably conclude that the variables above such as job satisfaction, organizational justice, and organizational commitment are all antecedents of work withdrawal.

According to the definition of Hulin and Hanisch (1990), work withdrawal refers to the situation which employees feel dissatisfied as to pose avoidable aspects of their specific work-role or minimize the time spent on their specific tasks while sustaining their organizational and work-role memberships. Variables such as unfavorable job behaviors, lateness and absenteeism are defined as work withdrawal behaviors. Based on the theory of reasoned action (Fishbein & Ajzen, 1975), an individual's belief may affect his or her attitude, this attitude is viewed as one major determinant of an individual's intention to engage in concerning behavior. Thus, we would concentrate on work withdrawal intention (WWI) to investigate the correlation with other observable variables, hence understand the phenomenon CWB causing by PCB to fulfill the gap in the literature.

As discussed above, job dissatisfaction and unfairness are antecedents of work withdrawal intention. What makes employees reacting work withdrawal intention to express dissatisfaction, there has been growing interest in investigating WWI in an organizational context. Montes and Zweig (2009) observed that a person would feel violated and withdraw his or her contributions when an organization broke promises made to an employee. Webster and Adams (2010) also found one possible outcome of low psychological contract fulfillment was that an employee may lessen his or her contributions via reduced task performance. This standpoint is in agreement with equity theory (Adams, 1963), employees who experience unfairness or injustice will attempt to restore balance engaging in negative behavior. Viewed in this light, PCB is positively related to WWI.

It is noteworthy that an employee appeared withdrawal intention when he or she experienced PCB, hence minimizing spent time of task work or reducing job performance and organizational citizenship behaviors (Burton, Holtom, Sablynski, Mitchell, & Lee, 2010), or perhaps it would be more accurate to say that an employee who has posed psychological withdrawal would probably engage in destructive behaviors to the company. This suggests that WWI would be positively related to counterproductive behaviors, which means WWI may be treated as a motivational antecedent, that is, CWB results from WWI. For those reasons mentioned above, we can logically consider that WWI would mediate the relationship between PCB and CWB. Thus, we propose the following hypothesis:

Hypothesis 2: The relationship between psychological contract breach and counterproductive work behaviors is mediated by work withdrawal intention.

2.4 Spiritual Leadership

The theory of spiritual leadership has gradually become the object of study in recent years (Benefiel, 2005; Fry & Cohen, 2009; Reave, 2005), nevertheless, it is an area which still undergoes research and discussion. Spiritual leadership consists of the values, attitudes, and behaviors required to intrinsically motivate both leader and follower in order to have a sense of spiritual survival through calling and membership (Fry, et al., 2005). For example, employees, if experiencing the meaning in their jobs, will have a sense of making a difference, and also feel understood and appreciated.

Spiritual leadership incorporates vision, hope, and altruistic love, theories of work spirituality, and spiritual survival (Fry, 2003), it creates vision and congruent value across the strategic, empowered team, and individual levels, hence promotes organizational commitment, productivity, and employees' welfare (Duchon & Plowman, 2005; Harter, Schmidt, & Hayes, 2002). Along similar lines, we would believe that spiritual leadership may both increase employees' job satisfaction and organizational

citizen behaviors as well as decrease the effect on the relationship between WWI and CWB when employees experience high levels of spiritual leadership. However, when employees experience low levels of spiritual leadership, the effect on them would be stronger than high levels. Thus, we propose the following hypothesis:

Hypothesis 3: Spiritual leadership moderates the relationship between work withdrawal intention and counterproductive work behaviors such that the relationship is stronger when spiritual leadership is low.
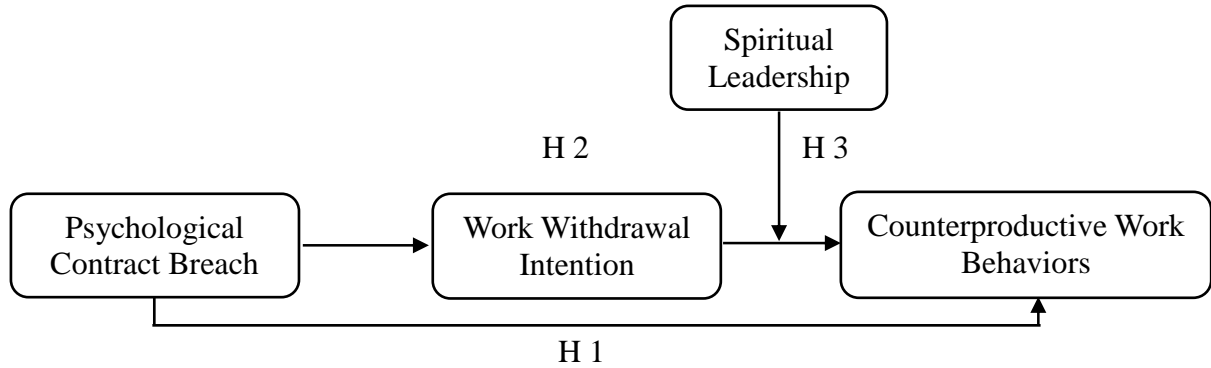
Research Framework

3. Methodology

3.1 Research Design

The research design was a correlational design utilizing survey methodology, the participants were expected to respond anonymously. The original questionnaire was designed in English, however, the native language of Taiwan residents is Chinese. Thus, in order to strengthen the representative reliability of samples, we translated the content of the questionnaire into Chinese. And two associated professors confirm that the translated version was not ambiguous or difficult to understand.

To reduce the possible result of common method variance (CMV), which resulted in all analysis subjects being received from the same source, we collected our data by asking both subordinates and supervisors with two questionnaires, a self-report questionnaire and a supervisor evaluation questionnaire. The self-report questionnaire assessed the facet measures of the psychological contract breach, work withdrawal intention, and spiritual leadership and the supervisor rating questionnaire contained the measure of counterproductive work behaviors.

In addition, the questionnaire adopted the even-numbered scale in order to avoid the respondents' neutrality-prone responses (Chiu & Yang, 1987). Supervisors were requested to provide an assessment of the frequency with which their employees demonstrated counterproductive work behaviors on a six-point Likert-type scale ranging from (1) never to (6) always. Subordinates indicated the extent to which they disagreed

or agreed with each item of psychological contract breach, work withdrawal intention, and spiritual leadership on a six-point Likert-type scale ranging from (1) strongly disagree to (6) strongly agree.

3.2 Measurement

3.2.1 Psychological Contract Breach (PCB)

We use Robinson and Morrison's (2000) definition of psychological contract breach as the "employees' perceptions of the extent to which their organization has failed to adequately fulfill that psychological contract." Perceptions of psychological contract breach were measured with by 5-item scales developed by Robinson and Morrison (2000) as it provides an overall measurement of the extent to which the employees' psychological contract has been fulfilled. Sample items include "Almost all the promises made by my employer during recruitment have been kept so far (reversed)", and "I have not received everything promised to me in exchange for my contributions". The Cronbach's alpha coefficient for the items was .86.

3.2.2 Counterproductive Work Behaviors (CWB)

This study defined the CWB dimension as intentional behaviors are destructive to the lawful interests of an organization. That is adopted from Marcus, et al.(2002), Lau, et al.(2003), and Penney and Spector (2005). CWB was measured using the 10-item Workplace Behavior Questionnaire (WBQ) developed by Ashton (1998). The questionnaire was designed to ask respondents to indicate quantitatively the frequency with which they performed various counterproductive. After we delete 2 items that is inappropriate, and slightly modify remaining 8 items for supervisors indicating how often it is that his or her subordinate performed counterproductive in the organization , such as "On the scheduled work, your subordinate has ever called in sick and/or with a family crisis, when you actually were not currently sick and did not have an immediate family crisis" and "Your subordinate has ever caused damage or lost production at your workplaces through deliberate vandalism or sabotage". This scale yielded a reliability coefficient of .83.

3.2.3 Work Withdrawal Intention (WWI)

This study defined the WWI dimension as employees feel unfulfilled to pose avoidable intentions of their specific work-role or minimizing the time spent on their specific tasks while sustaining their organizational and work-role memberships. That is adopted from Hanisch and Hulin (1990). We used the 10-item scales developed from Hanisch and Hulin (1990); assessing work withdrawal intention by asking individuals about their behavioral and psychological withdrawal from their work roles including unfavorable job behaviors, lateness, absenteeism. Sample items are: "I often think of using the work

phone for personal calls"; "I often think of being late for work"; and "I often think of being absent from work". The Cronbach's alpha was .86.

3.2.4 Spiritual Leadership

Fry (2003) defined spiritual leadership as comprising the values, attitudes, and behaviors that are necessary to intrinsically motivate one's self and others so that they have a sense of spiritual survival through calling and membership. Spiritual leadership was measured with the 17-item scales from Fry, et al. (2005). The purpose of this questionnaire was designed to ask respondents to indicate the extent to which they experience vision, hope, and altruistic love from their supervisors and organizations. Sample items include "I understand and am committed to my organization's vision.", "I always do my best in my work because I have faith in my organization and its leaders.", and "My organization really cares about its people." The Cronbach's alpha coefficient for the items was .97.

3.2.5 Control Variables

Because of the potential effects of various demographic variables on this study, we controlled for gender, matrimony, age, education, tenure and length of the subordinate-supervisor relationship. Spielberger (1996) indicated that gender was controlled because there is evidence to suggest that men tend to exhibit overt angry reactions more frequently than do women. In addition, Bordia, et al. (2008) pointed out that age and tenure were controlled because older employees are less likely to engage in negative and disruptive behaviors than are younger employees. Gender and matrimony were dummy-coded (0 = "female," 1 = "male"; 0 = "single," 1 = "married").

3.3 Sampling Procedures

This study attempts to examine the relationships between psychological contract breach, work withdrawal intention, counterproductive work behaviors, and spiritual leadership in a military organization. In order to strengthen the representativeness of samples, we included subjects from the Army, Navy, Air Force, United Logistics Command, Reserved Command and Military Policeman Command and distributed 500 pairs of questionnaires to volunteer military personnel. Furthermore, questionnaires were distributed to respondents of each unit in person, the respondents were assured of confidentiality and informed that the information would be used for research purposes only.

In this study, we used two sets of questionnaire: one for supervisors and another for their immediate subordinates. Questionnaires were administered to supervisors and their subordinates separately. We visited the supervisors and their subordinates in person separately, to brief them about the purpose of this study and to explain the procedures

for respond to the questionnaire. The participants received a sealed envelope explaining the study, a questionnaire, and a return envelope. In addition, we coded each questionnaire with an identification number to ensure the linkage between the supervisors and their immediate subordinates. In order to ensure confidentiality, we requested that participants signed across the flap of the sealed envelope that contained the completed questionnaire and returned them directly to us.

Subjects were chosen with convenience sampling in this study, a total of 500 pairs of questionnaires were distributed to 106 units (companies or above) in July of 2009, and 485 pairs of responses were received. After we deleted invalid questionnaires, 398 pairs of questionnaires were remained, hence resulted in a valid rate of 82.1 percent.

4. Data Analysis and Results

4.1 Reliability and Correlation Analysis

The reliabilities, means, standard deviations, and zero-order Pearson correlations for all the key variables are presented in Table 4-1. All internal consistencies (Cronbach's alpha) are above the recommended level of 0.7 (Nunnally, 1978) , which indicates that all constructs in this study have good reliabilities. The pattern of correlations consisted with our prediction. As we predicted above, PCB was positively related to CWB (r = .42, p < .001) and WWI (r = .48, p < .001). And WWI was positively associated with CWB (r = .37, p < .001). Finally, spiritual leadership was negatively related to CWB (r = -.31, p < .001).

Table 4-1 Means, Standard Deviations, and Correlations

Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10
1. Gender	.88	.33		.								
2. Matrimony	.16	.36	-.01									
3. Age	2.36	.98	.01	.52***								
4. Education	13.73	1.99	-.04	.10*	.39***							
5. Length of subordinate -supervisor relationship	1.47	.70	.02	.20***	.40***	.01						
6. Tenure	1.89	1.31	-.02	.56***	.79***	.22***	.42***					
7. Psychological contract breach	2.53	.97	-.02	.08	.03	.02	-.01	.08	(.86)			
8. Work withdrawal intention	2.38	.84	.02	.05	.06	.04	.05	.06	.48***	(.86)		
9. Counterproductive work behaviors	2.05	.80	.01	.04	-.06	.09	-.08	-.04	.42***	.37***	(.83)	
10. Spiritual leadership	4.25	.95	.01	.02	-.02	-.08	.11*	-.02	-.66***	-.44***	-.31***	(.97)

Note: 1. N=398, *p < .05, **p < .01, ***p < .001; The numbers in parentheses represent aspects of Cronbach's alpha.

2. Gender and matrimony were dummy-coded (0 = "female," 1 = "male"; 0 = "single," 1 = "married").

4.2 Factor Analysis

Before experimenting with the hypotheses, we conducted a confirmatory factor analysis

(CFA) on 26 items of the study variables, using STATISTICA 8.0. For spiritual leadership, we used scale scores of specific subdimensions (vision, hope, and altruistic love) to form the factor. The analysis of our proposed model showed $\chi^2 = 1019.11$, $df = 293$, goodness of fit index (GFI) = 0.82, adjusted goodness of fit index (AGFI) = 0.79, comparative fit index (CFI) = 0.86, non-normed fit index (NNFI) = 0.84, root mean square error of approximation (RMSEA) = 0.08, root mean square residual (RMR) = 0.06. Excluding RMSEA and RMR, it was obvious that each index was below the recommended level. For instance, GFI and AGFI should be all above the recommended level of 0,90 (Hair Jr., Black, Babin, Anderson, & Tatham, 2006); CFI and NNFI should be all above the recommended level of 0.95 (Hu & Bentler, 1999). Furthermore, the ratio of chi-square to degrees of freedom was 3.48, which did not result a good fit. A value of less than 3 for the ratio indicated a good fit (Carmines & McIver, 1981).

According to Hall, Snell, and Foust (1999) suggestion that item parcels are more reliable and likely to be normally distributed relative to individual items and hence preferred as CFA indicators. Subsequently, we conducted Gilman, Huebner, and Laughlin's (2000) procedure to randomly create two parcels of items for psychological contract breach, three parcels of items each for work withdrawal behavior intention and counterproductive work behaviors. The results of CFA using item parcels showed $\chi^2 = 111.13$, $df = 38$, GFI = 0.95, AGFI = 0.92, CFI = 0.98, NNFI = 0.97, RMSEA = 0.06, RMR = 0.04. All indices achieved the recommended level. Thus, our hypothesized measurement model has a good fit.

Finally, we followed the procedures of Lam, et al (2007) to conduct a series of alternative models to test the discriminant validity of our measures. In the three factor model, moving work withdrawal intention and counterproductive work behaviors onto one latent factor significantly reduced model fit, $\Delta\chi^2(3) = 496.48$. Then we combined psychological contract breach and spiritual leadership in the one factor model, that is, all items linked to one construct, which also largely and significantly reduced model fit, $\Delta\chi^2(3) = 779.73$. To summarize the results, we found that the hypothesized measurement model fit is better than each of the two alternative models tested. Hence, these results support the discriminant validity of the measures used in this study. Results of the analysis of the discriminant validity of our measures are presented in Table 4-3.

Table 4-3 Analysis of Discriminant Validity of Predictor Variables

Category	χ^2	d/f	$\Delta\chi^2$	RMSEA	GFI	AGFI	CFI	NNFI
Four-factor	111.13	38		0.06	0.95	0.92	0.98	0.97
Three-factor	607.606	41	496.48***	0.20	0.76	0.62	0.82	0.76
One-factor	1387.34	44	779.73***	0.29	0.58	0.38	0.57	0.46

***$p < .001$

4.4 Hierarchical Regression Analysis

We conducted a hierarchical regression analysis to examine Hypotheses 1, 2 and 3 with SPSS 17.0. The results reflected in Table 4-4, which indicated that PCB was positively associated with CWB ($\beta = .42, p < .001$). Thus, Hypotheses 1 was supported. This result is in line with those reported for negative organizational outcomes of PCB in previous studies (Bordia, et al., 2008; Deery, et al., 2006; Dulac, et al., 2008). To test Hypotheses 2, we followed Baron and Kenny's (1986) procedure in hierarchical regression analysis. First, the independent variable must be shown to be significantly related to both the hypothesized mediator and the dependent variable. Thus, we regressed PCB on WWI ($\beta = .49, p < .001$) and CWB ($\beta = .42, p < .001$). Second, it must be shown that the mediator is related to the dependent variable while controlling for the independent variable, we therefore regressed WWI on CWB ($\beta = .37, p < .001$). Finally, the direct path from the independent variable to the dependent variables is either zero (complete mediation) or reduced in absolute size (partial mediation). As the result of our study indicated that the relationship between PCB and CWB ($\beta = .31, p < .001$) was significantly reduced when WWI was controlled for, that is, the relationship between PCB and CWB was partially mediated by WWI. Thus, Hypotheses 2 was supported, as shown in the Table 4-4.

Table 4-4 Results of Hierarchical Regression Analysis for Mediated Model[1]

Variables	WWI	Counterproductive work behaviors (CWB)			
		Model 1	Model 2	Model 3	Model 4
Control variables					
Gender[2]	.03	.02	.03	.01	.02
Matrimony[2]	-.01	.12	.09	.11	.09
Age	.07	-.19*	-.14	-.20*	-.16
Education	.02	.15**	.14**	.14*	.13**
Length of subordinate-supervisor relationship	.06	-.05	-.03	-.06	-.04
Tenure	-.06	.04	-.03	.03	-.02
Independent variable					
Psychological contract breach (PCB)	.49***		.42***		.31***
Mediator					
Work withdrawal intention (WWI)				.37***	.22***
R^2	.24	.03	.20	.17	.24
$\triangle R^2$	.23***		.17***	.14***	.04***
Adj R^2	.23	.02	.19	.15	.22
F	17.47***	2.20*	14.13***	11.28***	15.33***

Note: 1. N=398, *$p < .05$, **$p < .01$, ***$p < .001$

2. Gender and matrimony were dummy-coded (0 = "female," 1 = "male"; 0 = "single," 1 = "married").

However, methodologists have identifies potential shortcomings in Baron and Kenny's approach (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). For instance, several researchers argued whether it is necessary to examined (step 1) that the independent variable must be significantly related to the dependent variable (Cole, Walter, & Bruch, 2008; MacKinnon, Krull, & Lockwood, 2000; Shrout & Bolger, 2002). Thus, we performed the Sobel test (Sobel, 1982) to demonstrate the mediation in this study, which provides a direct test of the indirect effect of independent variable on the dependent variable through the mediator (Preacher & Hayes, 2004). Results revealed that indirect effect of PCB on CWB through WWI was significant ($z = 4.21$, $p < .001$). The result again supported Hypotheses 2.

To further test Hypotheses3, we followed Preacher, Rucker, and Hayes' (2007) procedures to examine moderation of spiritual leadership in this study. We considered that the significant indirect effect moderated by the interactive effect. In addition, according to Aiken and West's (1991) suggestions by mean-centering the mediated and moderated variables and using their product as the interaction effect. In order to assure the completeness of causal relation, we added PCB to control in hierarchical regression models. Table 4-5 shows that spiritual leadership moderated the indirect effect ($\beta = -.32$, $p < .001$). Thus, Hypotheses 3 was supported.

Table 4-5 Results of Hierarchical Regression Analysis for the Moderated Model[1]

Variables	Counterproductive work behaviors (CWB)		
	Model 1	Model 2	Model 3
Control variables			
Gender[2]	.03	.02	.02
Matrimony[2]	.09	.09	.12*
Age	-.14	-.16	-.20**
Education	.14**	.13**	.15**
Length of subordinate -supervisor relationship	-.03	-.04	.02
Tenure	-.03	-.02	-.05
Independent variable			
Psychological contract breach (PCB)	.42***	.31***	.24***
Mediator			
Work withdrawal intention (WWI)		.22***	.10*
Moderator			
Spiritual leadership (SL)		.01	-.05
Interactive effect			
WWI × SL			-.32***
R^2	.20	.24	.32
$\triangle R^2$		.04***	.08***
Adj R^2	.188	.22	.30
F	14.13***	13.59***	18.25***

Note: 1. N=398, *$p < .05$, **$p < .01$, ***$p < .001$

    2. Gender and matrimony were dummy-coded (0 = "female," 1 = "male"; 0 = "single," 1 = "married").

To gain further insight into the nature of the interaction effect, we also adopted Aiken and West's (1991) suggestions to plot the slopes for high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of work withdrawal intention and spiritual leadership. With CWB as the dependent variable, the slope for high spiritual leadership was not significant (t = -.1.84, $n.s.$). However, the slope for low spiritual leadership was statistically significant (t = 6.17, p < .001). Figure 4-1 indicates that there is a stronger positive association between WWI and CWB for employees with low levels of spiritual leadership than for employees with high levels of spiritual leadership.
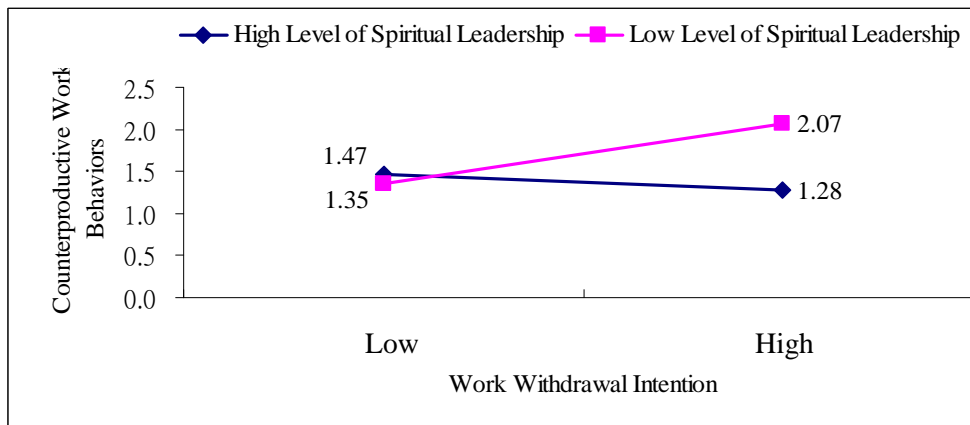

Figure 4-1 Interactive relationship between WWI and spiritual leadership in predicting CWB.

5. Discussion

In this study, we found that PCB was positively associated with CWB (Hypotheses 1), and also had a partially mediating effect of WWI between PCB and CWB (Hypotheses 2). As we predicted above, spiritual leadership moderated the relationship between WWI and CWB (Hypotheses 3).

5.1 Theoretical Implications

First, the finding of relationship between PCB and CWB seems compatible with the research of Restubog, et al. (2008). Their study found that PCB have a negative effect on willingness to engage in organizational citizenship behaviors. However, we further found that PCB results in counterproductive behaviors. This highlights the importance of avoiding PCB. However, the research of Restubog, et al. (2008) had not investigated that PCB may cause damages to the interests of employees and organizations. And our study provides an empirical support to fulfill the gap in the literature. Furthermore, we could think that CWB regards as a revengeful behavior, this standpoint is similar to what Bordia, et al. (2008) called revenge cognitions. No matter CWB or revenge may be used to restore equity when the employees have feelings of betrayal in the workplace.

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This viewpoint is agreement with Adams' (1963) equity theory. Because these studies complete each other, the compatibility of the results is all the more impressive.

Second, one of the purposes of this study is to examine WWI that mediated the relationship between PCB and CWB. The result showed that WWI had a partial mediated role between PCB and CWB. These findings imply that when promises to employees are broken, the employees likely to perform counterproductive behaviors, or to yield withdrawal intention and, in turn, to carry it out in the form of CWB. This perspective seems compatible with the argument of Lau, et al. (2003). Their study indicated that employees were dissatisfied with their job engaged in more CWB, that is, satisfied employees were less likely to steal, engage in production deviance, and be absent from work. This is consonant with our literature review indicating that PCB caused employees perceiving distrust and dissatisfaction, hence, yielded negative intention and behaviors. On the other hand, our study determines PCB and WWI both could be antecedents of CWB, which makes an important contribution to the wider literature on counterproductive behaviors in the workplace, and this point is distinct from the research of Lau, et al. (2003). Accordingly, the present study enhances the previous studies' findings by providing a different aspect of CWB generation.

Third, previous research in medicine and positive psychology provides evidence that altruistic love can overcome negative feelings such as fear, anxiety, anger, guilt, hatred, pride, envy, and resentment (Yukl, 2010). However, altruistic love is a facet measure of spiritual leadership, which can not reflect completely the effects of improvement on negative feelings and behaviors. The results of our study can provide a demonstration that supports taking an interactional perspective to explain spiritual leadership; a test of the moderator contributes to our understanding of how and why spiritual leadership moderated the relationship between WWI and CWB. We can say with fair certainly that spiritual leadership may increase employees' job satisfaction (Duchon & Plowman, 2005) and organizational commitment (Harter, et al., 2002) as well as weaken the effect on WWI and CWB when employees experience high levels of spiritual leadership. From this viewpoint one may can say that employees perceiving of high levels of spiritual leadership are less likely to engage in CWB. Also, high levels of spiritual leadership seem to have kept people from acting on WWI. This finding adds to the growing literature on WWI, CWB, and spiritual leadership in particular, in minimizing destructive cognition and harmful behavior in an organizational context.

5.2 Practical Implications

The findings of this study have practical implications for the management of CWB as well as for employees' PCB. Because CWB is a result of PCB, thus, the most important thing for organizations is to prevent PCB, fulfill the obligations and consider employees' welfare. However, it may not be possible to fulfill every promises made by

employees in the workplace. In such circumstances, organizations should strive to reduce the feelings of breach by providing adequate explanation for the causes of breach (Morrison & Robinson, 1997). As Deery, et al. (2006) argued that organizations can go some way to lessen the harmful consequences of PCB by providing employees with credible explanations of the circumstances that led to the nonfulfillment of those contracts. In addition, Bordia, et al. (2008) indicated that training in regulation of emotions and negative ruminations may help employees and organizations better manage the consequences of breach.

5.3 Limitations and Directions of the Future Research

Inevitably the present research still has its limitations. First, the mean levels of psychological contract breach ($M = 2.53$, on 6-point scales), counterproductive work behaviors ($M = 2.05$, on 6-point scales), and work withdrawal intention ($M = 2.38$, on 6-point scales) are low. However, previous research have reported similar means for psychological contract breach ($M = 2.30$, on 5-point scales (Dulac, et al., 2008)), and for counterproductive work behaviors (German sample, $M = 1.39$; Canadian sample, $M = 1.70$, on 5-point scales (Marcus, Lee, & Ashton, 2007)), and for work withdrawal ($M = 2.06$, on 8-point scales (Wang & Walumbwa, 2007)). Due to social desirability, respondents may cover true appearances of these negative cognitions and behaviors, thus, require continued research attention.

Second, in order to avoid common method variance, we use the supervisor rating form to measure counterproductive work behaviors. However, our data are cross-sectional, and causal inference can not be drawn. Perhaps future research could use a longitudinal design and provided stronger evidence of a directional relationship between the variables. In addition, the data were collected from the military organizations, therefore, the results may not generalize to other kinds of organizations. Nevertheless, there are some practical applications in the public organizations.

We acknowledge that the relationships among the variables in our study, however, we did not provide an empirical improvement to solve those negative behaviors. Future work will hopefully clarify this important improvement concern such as positive communication, training, and recent leaderships. We are also hopeful that future research will provide more detailed results which may differentiate these views from one another.

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