Collectivism as a Moderator of the Relationships among Work-Family Conflict, Perceived Job Stress and Counterproductive Work Behavior

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Abstract

The objectives of this study were (1) to investigate how work-family conflict, perceived job stress, and collectivism are related to engagement in counterproductive work behavior (CWB), and (2) to examine how collectivism moderates work-family conflict and perceived job stress in predicting CWB. The sample comprised of 851 employees working in government offices and private organizations in the north of Thailand. Of the participants, 32.0% were private school teachers, 28.1% were university staff, 21.6% were narcotic suppression officers, and the remaining 18.3% were commercial bank staff. The research instruments comprised of 5 questionnaires. Hypotheses testing were performed by using Pearson product moment correlation analyses and moderated hierarchical regression analyses. The results indicate that as work-family conflict and perceived job stress increase, so does the level of CWB. The result also shows that individuals high on collectivism engage in CWB less than individuals low on collectivism. More importantly, the present study found that collectivism interacts with work-family conflict and perceived job stress to predict CWB. That is, in situations where work-family conflict and perceived job stress are high, the occurrences of CWB among individuals high on collectivism are lower than those of individuals low on collectivism.

Keywords: counterproductive work behavior, collectivism, work-family conflict, job stress.

Introduction

Counterproductive work behavior (CWB) has found itself to be the focus of extensive research recently due to the pervasive and costly consequence of such behavior which affects both the organizations and their employees. As suggested in many theoretical reviews, both personal factors (e.g., personality traits) and situational factors (e.g., organizational constraints) influence the manifestation of CWB (Martinko, Gundlach, & Douglas, 2002; Spector & Fox, 2005). Research has also provided evidence of the relationship between these factors and CWB (e.g., Berry, Ones, & Sackett, 2007; Smithikrai, in press). Nonetheless, a great deal is needed for research on the relationships between other variables and CWB. According to an emotion-centered model (Spector & Fox, 2005), deviant behaviors are responses to job stressors at work. That is, certain events that are seen as threats to well-being are job stressors (e.g., organizational constraints, role conflict) that induce negative emotional reactions (e.g., anger or anxiety) which in turn increase the likelihood that CWB will occur.

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Thus, work-family conflict, a form of interrole conflict in which engaging in one role interferes with engaging in another role (Greenhaus & Beutell, 1985), could be one of these job stressors. In the face of job stressors, individuals might choose to deal with the situation by withdrawing from work or displaying inappropriate actions. Thus, perceived job stress often results in CWB, for example, withdrawal (Leiter & Robichaud, 1997), sabotage (Storms & Spector, 1987), and turnover intention (Jamal, 1990).

Literatures have also suggested that collectivism is a central cultural value with important influences on social behavior (Triandis, 1989), and plays an important role in the contemporary workplace (Perrewé & Spector, 2002). A collectivist would greatly value membership in a group and would look out for the well-being of the group even at the expense of his/her own personal interest (Wagner & Moch, 1986). Research has found that collectivism was positively related to organizational citizenship behavior (e.g., Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000). Nonetheless, questions still remain unexplored: Does collectivism predict counterproductive work behavior? Does it moderate the relationships among work-family conflict, perceived job stress, and CWB?

The purpose of the present study, therefore, is to extend previous research in two ways. First, it investigates how work-family conflict, perceived job stress, and collectivism are related to engagement in CWB. Second, it examines how collectivism moderates work-family conflict and perceived job stress in predicting CWB. The findings will have implications for the management of CWB, potentially developing ways to reduce the occurrence of CWB, and contribute to overall organizational performance.

The Nature of CWB
CWB is commonly defined as any behavior that violates organizational norms in a way that is harmful to either the organization itself, to the members of the organization, or to both (Robinson & Bennett, 1995). CWB has been described as deviance (Robinson & Bennett, 1995), antisocial behavior (Giacalone, Riordon, & Rosenfeld, 1997), and destructive and hazardous behaviors (Murphy, 1993). Examples of CWB may include playing cruel pranks, bullying/swearing at colleagues, falsifying expense reports, sabotaging others’ work, and even theft.

Work-Family Conflict
Work-family conflict is defined as “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respects” (Greenhaus & Beutell, 1985, p. 77). Researchers have conceptualized work-family conflict as a two-dimensional construct where work interferes with family and family interferes with work (e.g., Frone, Russell, & Cooper, 1992; Netemeyer, Boles, & McMurrian, 1996). The present study conceptualizes work-to-family conflict (WFC) as conflict due to work interfering with family, and family-to-work conflict (FWC) as conflict due to family interfering with work. Both WFC and FWC are interrole conflicts on the work/family interface, the distinction lies in the direction or cause/effect of the conflict. The underlying
assumption is that high levels of interference from one role to the other makes meeting the demands of the second role more difficult (Frone et al., 1992).

Research has found that high levels of work-family conflict are related to lower job satisfaction (Boles, Johnston, & Hair, 1997), and citizenship behavior (Bragger, Rodriguez-Srednicki, Kutcher, Indovino, & Rosner, 2005), and to higher levels of cigarette use and alcohol-related drinking (Frone, Barnes, & Farrell, 1994), hostility at work (Judge, Scott, & Ilies, 2006), absenteeism (Goff & Mount, 1991), and turnover (Boles et al., 1997). Thus, work-family conflict should have a negative relationship to CWB, such that those who have high levels of work-family conflict originating from the home or office will be more likely to commit CWB.

Hypothesis 1a: Family-to-work conflict will be positively related to CWB.

Hypothesis 1b: Work-to-family conflict will be positively related to CWB.

Perceived Job Stress

Job stress (also known as occupational stress/work stress) is the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources or needs of the worker (National Institute of Occupational Safety and Health, 1999). It is a consequence of perceiving an inconsistency between a stressor rising from the workplace and the individual’s ability to cope with it. The work experiences that give rise to stress are referred to as stressors, while the effects of stress are referred to as strain. The present study focuses on “perceived job stress” since how an individual perceives a demand and reacts to a stressor is a determinant of the degree of stressfulness of a situation (Parasuraman & Alutto, 1984). Thus, perceived job stress is considered to be an individual psychological state, which has to do with the person’s perception of the work environment and the emotional experience of it (Cox, 1985). In other words, the process of stress depends on the person’s appraisal of the situation which is what determines whether the situation is stressful or not. High levels of perceived job stress are found to be related to occurrence of CWB such as violence, substance abuse, unexcused absence, and theft (Jones & Boye, 1994). Thus, the present study expects that individuals with high levels of perceived job stress would engage in CWB more than individuals with low levels of perceived job stress.

Hypothesis 2: Perceived job stress will be positively related to CWB.

Collectivism

Collectivism is a construct where collectivists would allow the interest of the group to take precedence over those of the individual (Earley, 1989). While most of the studies have examined collectivism as a cultural dimension, there is evidence that differences in this construct exist at the individual level too (Early, 1989). Triandis (1995) argued that in countries or cultures characterized as collectivist there are people who are more individualistic in nature and vice versa. Thus, in addition to the cultural variance among nations regarding this construct, there is a variance in collectivism among people in the same culture. Thus, the present study casts collectivism as a personal characteristic. The present study also follows an emerging consensus in the literature that collectivism and individualism are not polar
opposites but rather orthogonal, independent constructs (Oyserman, Coon, & Kemmelmeier, 2002).

Researchers have suggested that collectivism could enhance an individual’s tendency to cooperate in group contexts (Chen, Chen, & Meindl, 1998). This is because collectivists see themselves as members of one or more in-groups, are primarily motivated by the norms of those in-groups, prioritize the goals and well-being of those in-groups, and emphasize their connectedness to other in-group members (Triandis, 1995). Research also found that collectivists performed their group tasks better, contributed more discretionary citizenship, and were less likely to engage in counterproductive behaviors (Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006). Thus, the present study hypothesizes that individuals high on collectivism would commit less CWB than individuals low on collectivism.

**Hypothesis 3:** Collectivism will be negatively related to CWB.

While previous literature suggests negative relationships between work-family conflict and CWB and between perceived job stress and CWB, these relationships are likely to be moderated by collectivism. From the perspective of collectivists, collective or group interests should take precedence over individual self-interest. This may cause them trying to control and inhibit any deviant behavior when facing with work-family conflict and job stress. As a result, in situations where work-family conflict and perceived job stress are high, the occurrences of CWB among individuals high on collectivism should be lower than those of individuals low on collectivism.

**Hypothesis 4a:** Collectivism will moderate the relationship between family-to-work conflict and CWB such that the relationship will be stronger when collectivism is low.

**Hypothesis 4b:** Collectivism will moderate the relationship between work-to-family conflict and CWB such that the relationship will be stronger when collectivism is low.

**Hypothesis 5:** Collectivism will moderate the relationship between perceived job stress and CWB such that the relationship will be stronger when collectivism is low.

**Method**

**Sample**

The research sample consisted of 851 persons working in government offices and private companies in the north of Thailand. Of the participants, 32.0% were private school teachers, 28.1% were university staff, 21.6% were narcotic suppression officers, and the remaining 18.3% were bank staff. Four-hundred and thirty-one (50.6%) of the sample were male, with a mean age of 37.7 years. Most of them (66.9%) earned a bachelor degree. Most of the sample (83.4%) were in operation-level positions. The average tenure in their present organizations was 12.2 years.
Measures*

1. **Counterproductive work behaviors scale.** Counterproductive work behaviors were assessed with a behavioral checklist compiled from a number of existing measures (Gruys & Sackett, 2003; Robinson & Bennett, 1995; Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006). The resulting 22 items, asking participants to indicate how often they had done each of the behaviors on their present job. The five response choices range from 0 (*never*) to 4 (*always*), with high scores representing high incidence of CWB. The coefficient alpha of the scale was .85.

2. **Work-family conflict.** Work-family conflict was assessed by two subscales (i.e., the work-to-family conflict (WFC) scale and the family-to-work conflict (FWC) scale) developed by Netemeyer et al. (1996). Each scale consists of 5 items. Using a 5-point Likert scale, participants are asked to indicate to what extent they agree with each item. Responses range from 0 (strongly disagree) to 4 (strongly agree). Reliability coefficients for the WFC and FWC scales were .90 and .87, respectively.

3. **Perceived job stress.** Perception of job stress was measured with a four-item scale developed by Motowidlo, Packard, and Manning (1986). Responses were made on a 5-point scale ranging from 0 (*strongly disagree*) to 5 (*strongly agree*). Cronbach’s alpha for the scale was .72.

4. **Collectivism.** Collectivism was measured with eight items adapted from Triandis and Gelfand (1998). Using a 5-point Likert scale, participants were asked to indicate to what extent they agree with each item. Responses range from 0 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha for the scale was .75.

5. **Demographic information.** A demographic information sheet developed for this study asked participants to indicate their gender, age, educational level, job tenure, and job rank.

**Results**

Table 1 shows descriptive statistics, reliabilities, and intercorrelations among the study variables. In support of Hypothesis 1a, 1b and 2, this correlation matrix indicates that significant positive relations were found between two dimensions of work-family conflict and CWB (*r* = .34, .30, *p* < .01) and between perceived job stress and CWB (*r* = .31, *p* < .01). Hypothesis 3 was also supported, there was a negative relation between collectivism and CWB (*r* = -.34, *p* < .01).

* All of the scales used in the present study, except a demographic information sheet, were translated from English into Thai with back-translation to ensure language equivalence.
Table 1

Descriptive Statistics for All Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Counterproductive behavior</td>
<td></td>
<td></td>
<td>.50</td>
<td>.35</td>
<td>(.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Family to work conflict</td>
<td>1.34</td>
<td>.74</td>
<td>.34**</td>
<td>(.90)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work to family conflict</td>
<td>1.61</td>
<td>.84</td>
<td>.30**</td>
<td>.61**</td>
<td>(.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceived job stress</td>
<td>2.07</td>
<td>.74</td>
<td>.31**</td>
<td>.21**</td>
<td>.43**</td>
<td>(.72)</td>
<td></td>
</tr>
<tr>
<td>5. Collectivism</td>
<td>3.11</td>
<td>.47</td>
<td>-.34**</td>
<td>-.25**</td>
<td>-.14**</td>
<td>-.15**</td>
<td>(.75)</td>
</tr>
</tbody>
</table>

Note: **p < .01; n=851; Cronbach’s α reliability estimates appear in parentheses

Hypothesis 4a and 4b predicted that collectivism would moderate the relationships between the two dimensions of work-family conflict and CWB such that the relationships would be stronger when collectivism is low. To test these hypotheses, moderated hierarchical regression analyses were conducted. At the first step, the demographic variables (i.e., gender, age, educational level, and tenure) and the remaining variables were entered first as control variables. The two main effects were entered at Step 2, and the two-way, cross-product term was entered at Step 3. Support for the hypotheses would be indicated by a significant change in $R^2$ at Step 3.

The results of Analysis 1 in Table 2 shows a significant interaction between collectivism and family-to-work conflict ($\beta = -.70$, $t(842) = -3.70$, $p<.01$, supporting Hypothesis 4a. This interaction accounted for a small 2% ($p<.01$) of the variance. Similarly, Analysis 2 in Table 2 shows that there was a significant interaction between collectivism and work-to-family conflict ($\beta = -.74$, $t(842) = -3.47$, $p<.01$), supporting Hypothesis 4b. This interaction accounted for a small 1% ($p<.01$) of the variance. To examine the nature of this interaction, the relations between the two dimensions of work-family conflict and CWB for low and high levels of collectivism were plotted for high and low levels (±1 standard deviation from the mean) of collectivism (Aiken & West, 1991). As illustrated in Figure 1 and 2, family-to-work conflict and work-to-family conflict had stronger, negative relations to CWB under low collectivism, supporting Hypothesis 4a and 4b.

Hypothesis 5 predicted that collectivism would moderate the relationship between perceived job stress and CWB such that the relationship would be stronger when collectivism is low. A moderated hierarchical regression analysis was conducted to test this hypothesis. The result of Analysis 3 in Table 2 shows a significant interaction between collectivism and perceived job stress ($\beta = -.48$, $t(842) = -1.97$, $p<.05$) with a significant increase in overall explained variance ($\Delta R^2 = .01; \Delta F(1, 842) = 3.90, p<.05$).
To examine the nature of this interaction, the relation between perceived job stress and CWB for low and high levels of collectivism was plotted. As illustrated in Figure 3, perceived job stress had a stronger, negative relation to CWB under low collectivism, supporting Hypothesis 5.

Table 2
Results of Moderated Hierarchical Regression Analyses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Counterproductive work behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td><strong>Analysis 1a:</strong></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
</tr>
<tr>
<td>Family to work conflict (FWC)</td>
<td>.26**</td>
</tr>
<tr>
<td>Collectivism (C)</td>
<td>-.25**</td>
</tr>
<tr>
<td>FWC x C</td>
<td>-.70**</td>
</tr>
<tr>
<td>R²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔF</td>
<td>8.77**</td>
</tr>
<tr>
<td>F value</td>
<td>8.77**</td>
</tr>
<tr>
<td><strong>Analysis 2b:</strong></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
</tr>
<tr>
<td>Work to family conflict (WFC)</td>
<td>.25**</td>
</tr>
<tr>
<td>Collectivism (C)</td>
<td>-.28**</td>
</tr>
<tr>
<td>WFC x C</td>
<td>-.74**</td>
</tr>
<tr>
<td>R²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔF</td>
<td>8.77**</td>
</tr>
<tr>
<td>F value</td>
<td>8.77**</td>
</tr>
<tr>
<td><strong>Analysis 3c:</strong></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
</tr>
<tr>
<td>Perceived Job stress (PJS)</td>
<td>.27**</td>
</tr>
<tr>
<td>Collectivism (C)</td>
<td>-.27**</td>
</tr>
<tr>
<td>PJS x C</td>
<td>-.48*</td>
</tr>
<tr>
<td>R²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.05**</td>
</tr>
<tr>
<td>ΔF</td>
<td>8.77**</td>
</tr>
<tr>
<td>F value</td>
<td>8.77**</td>
</tr>
</tbody>
</table>

Note: *p < .05; **p < .01; N = 851; Standardized beta (β) are reported.

The control variables for Moderated Hierarchical Regression are gender, age, educational level, tenure, job rank, and work to family conflict.
Figure 1. The Interaction of Collectivism and Family-to-Work Conflict on CWB

![Graph showing the interaction of Collectivism and Family-to-Work Conflict on CWB.]

Figure 2. The Interaction of Collectivism and Work-to-Family Conflict on CWB

![Graph showing the interaction of Collectivism and Work-to-Family Conflict on CWB.]

Figure 3. The Interaction of Collectivism and Perceived Job Stress on CWB

![Graph showing the interaction of Collectivism and Perceived Job Stress on CWB.]
Discussion

The results of the present study indicate that as work-family conflict and perceived job stress increase, so does the level of CWB. The result also indicates that individuals with high levels of collectivism commit less CWB than ones with low levels of collectivism. More importantly, the present study found that collectivism interacts with work-family conflict and perceived job stress to predict CWB. That is, in situations where work-family conflict and perceived job stress are high, the occurrences of CWB among individuals high on collectivism are lower than those of individuals low on collectivism. Thus, the results highlight the importance of collectivism as a cultural value that influences the relationships of work-family conflict and perceived job stress to CWB.

It is possible that collectivism moderates the relationships among work-family conflict, perceived job stress, and CWB at two points. First, it might influence individuals’ perceptions of work-family conflict and job stress. At the first point, compared with individuals high on collectivism, low collective individuals would be prone to perceive work-family events (e.g., heavy workload, demands from family, etc.) as stressful events. As seen in Table 1, the results of the present study indicate that collectivism was negatively related to both FWC and WFC ($r = -.25, -.14, p < .01$) and perceived job stress ($r = -.15, p < .01$). This might be because for collectivists, work is seen not as a means of enhancing the self, but as a means of supporting the family. Collectivists thus work to live, regarding family prosperity as prerequisite for the meaning in life and personal happiness (Lu & Gilmour, 2004). Since collectivists are less inclined to view home and work as independent domains, they are more immune to experience conflict when there are demands made by both. As a result, even when work demands are high, collectivists will experience less WFC; and when family demands are high, they will experience less FWC than are individualists.

In terms of perceived job stress, Gaziel (1993) asserts that cultural values have an impact on both the perception of job stress and the strategies that individuals choose for coping with stress. Stress, therefore, is a learned perception that appears to be culturally based.
Triandis (1990) suggested that less stress is perceived among collectivists due to some cultural factors, such as social support. Collectivists’ emphasis on social relationships leads to strong social support systems (family, friends, tribe), which serve as buffers to help individuals cope with difficult situations. Research also found that educators in collectivist countries (i.e., Asia-Pacific countries) experienced less stress and burnout than educators in the continental U.S. (Pacific Resources for Education and Learning R & D Cadre, 1998).

At the second point, collectivism might influence how individuals react to work-family conflict and job stress. The present study found that individuals high on collectivism engage in CWB less than individuals low on collectivism. This phenomenon could be explained in two ways. First, according to Robinson and Bennett’s (1997) model of workplace deviance, CWB is triggered by provocations such as inequity and poor work conditions. These provocations create two forms of motivation for engaging in CWB: (a) instrumental-to resolve the unfair relationship, and (b) expressive-to vent one’s negative emotion. Nonetheless, a number of constraints can offset these motivations, including internalization of norms and bonds to a social system. Collectivism should foster these constraints given that collective members are more likely to internalize the norms of the group and possess strong bonds to the social system (Oyserman et al., 2002; Triandis, 1995). The second explanation is based on theory of reasoned action (Fishbein & Ajzen, 1975). According to this theory, behavioral intention is normally the best predictor of how a person will behave, and behavioral intentions are a weighted additive function of a person’s attitude toward the behavior and his/her subjective norms about others think he/she should do. It is likely that collectivists have low intention to engage in CWB due to their negative attitudes toward CWB and their beliefs that other group members disapprove any deviant behavior.

The results of the present study have several important practical implications. First, this study suggests that there is clearly a role for cultural value assessment. Specifically, selecting individuals who are predisposed to avoid deviant behaviors, such as those with high levels of collectivism should be a good human resource management practice. Second, organizations should try to create a collectivist-oriented organizational culture. Since collectivists are more likely to believe they can be a valued part of the organization, and because of this belief, engage in productive behaviors and avoid counterproductive behaviors. Third, organizations could decrease the occurrences of CWB by helping employees solve their work-family conflicts and by providing employees support in coping with job-related stress. Examples of support programs include flexible work schedules, day care for children, stress workshops, and other employee assistance programs.

This research is not without limitations. First, the use of self-reports in this study is subjected to social desirability effects. Respondents might tend to give socially desirable responses even though their anonymites are guaranteed. Research on self-reported performance, however, suggests that it is comparable to ratings from other sources (Facteau & Craig, 2001), and that self-report data are useful in measuring employee’s perceptions.
Psycho-Behavioral Science and Quality of Life

The current study’s focus on CWB, it is often difficult and unreliable to use others’ ratings such as supervisors or peers. Since CWB tends to be behavior that is carefully hidden, in many, if not most cases, only the perpetrator has knowledge of what was done. Thus, questions asking about employees’ behaviors which are hardly observed by others (e.g., “Used an illegal drug on the job”) cannot be reliable if using others’ ratings. The current study, therefore, asserts that anonymous self-reports are still able to provide the closest available approximation of CWB. Another limitation is the possibility of common methods bias. Thus, to provide an additional check that the relationships found in this study were not a function of common method, a Harmon's one-factor test was conducted (Podsakoff & Organ, 1986). No single factor accounted for the majority of the covariance, suggesting that common method variance is not solely responsible for the findings.

In terms of future research, it would be useful to replicate this study using different samples and in different cultural contexts. It would also be interesting to conduct research using sample in individualistic cultures (e.g., countries in Europe and America). There is definitely a need for more research on this construct in its relationship to CWB in a variety of cultures and occupational settings. Moreover, there still are others variables that might be associated with CWB. For example, relations with superiors and coworkers, and stress coping strategies are possible correlates of CWB. Thus, there is ample work to be done to enhance our knowledge on the antecedents of CWB.

References


