

Differential Effect of Inter-Role Conflict on Proactive Individual's Experience of Burnout

I.M. Jawahar¹

Jennifer L. Kisamore²

Thomas H. Stone³

Douglas L. Rahn⁴

Author's Note:

Correspondence concerning this article can be sent to I. M. (Jim) Jawahar at Department of Management and Quantitative Methods, 250 College of Business Building, Illinois State University, Normal, IL 61790. Phone: (309) 438-5701; Fax: (309) 438-8201; Email: jimoham@ilstu.edu.

An earlier version of this manuscript was presented at the 2008 annual meeting of the Administrative Sciences Association of Canada (ASAC), Nova Scotia, Canada.

The version of record of this article, first published in the *Journal of Business and Psychology*, is available online at Publisher's website: <https://link.springer.com/article/10.1007/s10869-011-9234-5>

Jawahar, I.M., Kisamore, J.L., Stone, T.H., & Rahn, D.L. (2012). Differential effect of inter-role conflict on proactive individual's experience of burnout. *Journal of Business and Psychology*, 27(2), 243-254. <https://doi.org/10.1007/s10869-011-9234-5>

¹ Department of Management and Quantitative Methods, Illinois State University, Normal, IL.

² Department of Psychology, University of Oklahoma-Tulsa, Tulsa, OK.

³ Department of Management, Oklahoma State University, Stillwater, OK.

⁴ Memorial Health System

Differential Effect of Inter-Role Conflict on Proactive Individual's Experience of Burnout

Abstract

Purpose: This study examined how proactive personality interacts with inter-role conflict, measured as work-family conflict and family-work conflict, to predict burnout, measured as emotional exhaustion, depersonalization, and reduced personal accomplishment.

Design/methodology/approach: Participants were 171 clerical employees. Hierarchical multiple regression was used to test whether proactive personality moderated the relationship between inter-role conflict and forms of burnout.

Findings: Family-work conflict was not associated with burnout, but work-family conflict explained 30% of unique variance in emotional exhaustion and 9% in depersonalization. Proactive personality explained 12% of variance in personal accomplishment. Three-way interactions indicated that at high levels of work-family conflict and family-work conflict proactive individuals reported lower levels of emotional exhaustion and personal accomplishment and higher levels of depersonalization than less proactive individuals.

Implications: While previous research has generally documented the virtues of proactive personality, our research indicates that when simultaneously faced with work-family and family-work conflict, individuals with proactive personality experience more depersonalization and less personal accomplishment relative to less proactive individuals. Overall, results of three-way interactions imply that while a certain level of proactive personality may be necessary to buffer feelings of emotional exhaustion, beyond a certain level, proactive personality may lead one to experience higher levels of depersonalization and reduced personal accomplishment.

Originality/value: This study extends previous research by examining the influence of two types of inter-role conflict on all three dimensions of burnout. It also responds to calls for additional

research on potential moderators, buffers, or even antidotes to stress by examining how proactive personality interacts with stressors.

Keywords: burnout; proactive personality; inter-role conflict; work-family conflict; family-work conflict

Differential Effect of Inter-Role Conflict on Proactive Individual's Experience of Burnout

The prevalence of stress and burnout is rising (e.g., Kahn & Langlieb, 2003) due to conflicting demands of work and family experienced by most working adults. Burnout occurs when mental/emotional resources are drained (Schaufeli & Enzmann, 1998). It manifests itself in the form of emotional exhaustion, depersonalization of others, and lack of felt accomplishment in working with others (Maslach, 1982). The negative consequences of burnout are well documented. For instance, burnout is associated with decreased organizational commitment (e.g., Lee & Ashforth, 1996; Leiter & Maslach, 1988), poor job performance (e.g., Tubre & Collins, 2000), team performance (Garman, Corrigan, & Morris, 2002), and contextual performance (Cropanzano, Rupp & Byrne, 2003) as well as increased turnover intentions (Cropanzano et al., 2003). These negative consequences of burnout are estimated to cost organizations billions of dollars in employee disability claims, employee absenteeism and lost productivity (Spector, Chen & O'Connell, 2000; Xie & Schaubroeck, 2001). Stress, and burnout in particular, is consequential for organizations and for individuals and their families. It is, therefore, important to continue searching for mechanisms that reduce the negative effects of inter-role conflict.

Resources are central to models of stress (e.g., Bakker & Demerouti, 2007; Hobfoll, 1989; Lazarus, 1991, 1999), and in general, research suggests that resources deter strain (e.g., Brotheridge, 2001). Proactive personality is a personality construct that has been used to explain differences in peoples' tendency to take actions to influence their environment (Bateman & Crant, 1993; Crant, 2000). Proactive personality could be construed as a resource (Hobfoll, 1989). Based on previous theoretical models of stress (e.g., Bakker & Demerouti, 2007; Hobfoll, 1989; Lazarus, 1991, 1999) and research (e.g., Brotheridge, 2001; Cunningham & De La Rosa, 2008), we assert that it has the potential to deter forms of burnout and also to moderate the

relationship between inter-role conflict (measured as work-family conflict and family-work conflict) and forms of burnout.

This study makes several contributions to the literature. First, unlike previous studies that examined the association of inter-role conflict and one or two dimensions of burnout, this study examined the influence of inter-role conflict on the prediction of all three dimensions of burnout. Second, this study responds to the call for more research on factors that may serve as moderators, buffers, or even antidotes to stress and its effects (Kahn & Byosiere, 1992; Stamper & Johlke, 2003). Given that resources are central to most models of the stress-strain relationship (e.g., Hobfoll, 1989; Lazarus, 1991), examination of the role of proactive personality, a “personal” resource, has both theoretical relevance and practical significance.

Theoretical Models of Stress-Strain Relationship

Resources play a key role in most theoretical models of the stress-strain relationship. For instance, in Lazarus’ (Lazarus, 1991, 1999; Lazarus & Folkman, 1984) two-phase transactional model of stress, stress results in strain only when a stressor that is perceived as a threat exists in conjunction with insufficient coping resources. Similarly, in the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007; Bakker, Demerouti & Euwema, 2005), resources serve as buffers of strain resulting from a stressor.

Resources are also central to the Conservation of Resources (COR) theory (Hobfoll, 1989). The basic tenet of COR theory is that people strive to acquire, maintain and protect resources; they perceive potential or actual loss of resources, or even a lack of an expected gain in resources as stressful (Hobfoll, 1989, 2002). Resources include objects, conditions, and personal characteristics. Loss of resources or even the threat of a loss of resources may result in the experience of stress (Hobfoll, 1989, 2002). Inter-role conflict usurps energy or resources and

limits the opportunity to recoup resources. This occurs because multiple, major life domains (e.g., work and family) are competing for many of the same resources an individual has (e.g., time, energy) leaving little opportunity to replenish resources and disengage from inter-role conflict. This inability to disengage leads to feelings of stress and burnout.

Inter-Role Conflict: Work-Family Conflict and Family-Work Conflict

Role theory suggests that people generally seek to behave in ways consistent with their role definitions (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). Increasingly, employers are asking employees to put forth more effort, work longer hours and be more accessible (Bolino & Turnley, 2005; Bond, Galinsky & Swanberg, 1997). Such work schedules interfere with the ability to meet family obligations.

In addition to work organizations, the family unit has also undergone tremendous change over the last few decades (Halpern, 2005). As the number of dual-earner and single-parent households grows, adults are increasingly faced with the task of both meeting work-related demands and family obligations (Halpern, 2005). Balancing the demands of work and family roles has become a principal daily task for many working adults (van Emmerik & Jawahar, 2006; Williams & Alliger, 1994). Indeed, the increased demands in the workplace coupled with the changing demographics of the U.S. workforce have altered the relationship between work and family thus increasing the potential for conflicts between work and family demands (Halpern, 2005).

Work-family conflict and family-work conflict are forms of inter-role conflict that occur when pressures associated with performance of one role interfere with performance in the other role (Kahn et al., 1964). Greenhaus and Beutell (1985) define work-family conflict as a “form of inter-role conflict in which the role pressures from the work and family domain are mutually

incompatible in some respect (p. 77).” Research by Netemeyer, Boles, and McMurrian (1996) refined the construct by separately defining work-family conflict and family-work conflict. Work-family conflict occurs when job responsibilities and demands interfere with meeting family-related responsibilities whereas family-work conflict is the converse. Role theory posits that inter-role conflict often results as individuals find it increasingly difficult to successfully execute multiple roles because of constrained resources (e.g., time, energy) or incompatibility among different roles. Consistent with the conceptual definition of work-family conflict (Frone, Russell & Cooper, 1992; Greenhaus & Beutell, 1985), several researchers have reported a reciprocal relationship between work-family conflict and family-work conflict such that these conflicts often give rise to and perpetuate each other (Boyar, Maertz, Pearson & Keough, 2003; Carlson & Kacmar, 2000).

Previous research indicates that work-family conflict and family-work conflict are related to a number of undesirable outcomes. Such outcomes include depression (Frone et al., 1992), heavy alcohol abuse (Frone, Russell & Barnes, 1996) and psychological distress (Little, Simmons & Nelson, 2007); increased turnover intentions (Boyar et al., 2003; Netemeyer et al., 1996), absenteeism (Goff, Mount & Jamison, 1990) and burnout (Burke, 1989; Burke & Greenglass, 2001; Cinamon, Rich & Westman, 2007; Peeters, Montgomery, Bakker & Schaufeli, 2005); as well as lower family satisfaction (Beutell & Wittig-Berman, 1999), job satisfaction (Netemeyer et al., 1996), and life satisfaction (Adams, King & King, 1996).

Burnout

Burnout is an extreme form of stress that manifests itself in several forms including emotional exhaustion, depersonalization of others, and lack of felt accomplishment in working with others (Boles, Dean, Ricks, Short & Wang, 2000; Maslach, 1982; Worley, Vassar, Wheeler,

& Barnes, 2008). Emotional exhaustion involves feelings of depleted energy and loss of sensation that can result in deterioration of work, family and social relationships.

Depersonalization is characterized by negative, callous or excessively detached behavior toward others. Finally, reduced personal accomplishment involves repeated efforts that fail to produce results, leading to a feeling of inefficacy and reduced motivation (Maslach, 1982).

In accordance with the COR theory (Hobfoll, 1989, 2002), work-family conflict and family-work conflict represent a loss of perceived or real resources resulting in stress and burnout. Along the same lines, the scarcity hypothesis introduced by Goode (1960) posits that individuals have a finite amount of energy; when energy is devoted to one role it becomes depleted and thus unavailable for use in other roles. Underlying the theory is the notion that individuals have limited resources and that strain, negative affect and frustration may result from an individuals' inability to meet the competing demands from personally important domains of work and home. The scarcity hypothesis is based on the adage "something has got to give." Research by Williams, Suls, Alliger, Learner and Wan (1991) and MacEwen and Barling (1994) support the scarcity hypothesis.

Research has shown that work-family conflict and to a lesser extent family-work conflict result in burnout in the forms of emotional exhaustion (Brotheridge & Lee, 2005; Peeters et al., 2005) and depersonalization (also referred to as cynicism) (Peeters et al., 2005). Previous research has not investigated how work-family conflict or family-work conflict is related to the burnout dimension of reduced personal accomplishment. A sense of personal accomplishment is derived from the contributions one makes to the work domain and to the family domain (Maslach, 1982). When work interferes with family or when family obligations interfere with the time and energy required for work-related obligations, one's sense of personal accomplishment

is likely to be negatively affected. Thus, inter-role conflict is likely to affect all three dimensions of burnout, such that individuals who experience high levels of either form of inter-role conflict will feel emotionally exhausted, report high levels of depersonalization and lower levels of personal accomplishment as compared to individuals who do not experience such conflict.

Even after an exhaustive review of the relevant literature we were unable to locate a single study that examined how work-family conflict and family-work conflict is associated with all three dimensions of burnout, that is, emotional exhaustion, depersonalization and reduced personal accomplishment. Second, it is worth noting that most of the research on burnout has been conducted with participants in the human service occupations, such as nurses, teachers, police officers, and social service workers (cf. Boles et al., 2000, p. 13). The current study uses a sample of employees who are not human service professionals. While we do not expect to find unique relationships with burnout due to the type of sample used in this study, use of a different type of sample will further assess the generalizability of previous research beyond helping and social service professions (see also Boles et al., 2000). Third, and more importantly, these hypotheses serve as a foundation for our subsequent hypotheses.

Hypothesis 1: Work-family conflict will be positively related to (a) emotional exhaustion and (b) depersonalization and negatively related to (c) personal accomplishment.

Hypothesis 2: Family-work conflict will be positively related to (a) emotional exhaustion and (b) depersonalization and negatively to (c) personal accomplishment.

Proactive Personality

Investigations of individual differences influencing the stress-strain relationship have a long tradition in the job stress literature as it is widely believed they can act as a deterrent as well as mediate and/or moderate the stress-strain relationship (Brotheridge, 2001). For example,

previous research has examined the influence of individual differences including locus of control (Rahim & Psenicka, 1996), self-efficacy (Schaubroeck, Jones & Xie, 2001), Type A behavior pattern (Froggatt & Cotton, 1987), political skill (Jawahar, Stone & Kisamore, 2007; Perrewé et al., 2005), core self-evaluations (Harris, Harvey & Kacmar, 2009) and proactive personality (Cunningham & De La Rosa, 2008) on the stress-strain relationship. Proactive personality is particularly relevant to how individuals perceive stressors and manage stress. We contend that proactive personality will not only be directly related to burnout but that it will also moderate the relationship between inter-role conflict (i.e., the two-way conflict between work → family and family → work) and the three dimensions of burnout.

Highly proactive people identify opportunities and act on them, show initiative and persevere until they succeed whereas less proactive people are passive and reactive; they tend to adapt to circumstances rather than change them (Bateman & Crant, 1993; Seibert, Crant & Kraimer, 1999). Researchers have shown that proactive personality is differentially associated with the Big Five personality traits and positively predicts a number of important criterion variables including job performance (e.g., Thomas, Whitman, & Viswesvaran, 2010; Thompson, 2005) and career success (Crant, 1995; Crant & Bateman, 2000). Proactive individuals are resourceful and are better at networking and leveraging their social capital than less proactive individuals (Thompson, 2005). Proactive personality is an example of the type of resources that are a vital component of many models of stress (Hobfoll, 2002).

Employees experiencing family-work conflict may come to believe that they cannot successfully fulfill their work and family obligations. Consequently, they may be forced to invest additional resources into their work role for fear of losing their job. This additional investment of resources into the work role represents a loss of resources that could lead to work-family

conflict, setting the stage for more family-work conflict. Increases in work-family conflict and family-work conflict contribute to feelings of burnout. Based on the COR theory and the scarcity hypothesis, we assert that resource loss resulting from work-family conflict and family-work conflict will likely drain mental and emotional resources and lead to feelings of burnout.

Work-family conflict and family-work conflict usurp energy in two major life domains, leaving very little, if any, opportunity for individuals to restore important resources. Hobfoll (2002) suggested that personal characteristics, such as proactive personality, could act as resources and buffer against stress. Indeed, in one study conducted with 268 production employees, Parker and Sprigg (1999) reported a negative relationship between proactive personality and job strain, measured as job-related anxiety. We contend that, because of their nature, proactive individuals might well act in ways to minimize work interference with family and family interference with work, and thus, experience lower levels of inter-role conflict compared with less proactive individuals. Consequently, proactive individuals are likely to experience lower levels of emotional exhaustion and depersonalization and higher levels of personal accomplishment than less proactive individuals.

Hypothesis 3: Proactive personality will be negatively related to (a) emotional exhaustion and (b) depersonalization and positively related to (c) personal accomplishment.

As discussed previously, models of the stress-strain relationship propose that resources could act as a buffer and moderate the relationship between stress and strain (Bakker et al., 2005; Hobfoll, 1989; Lazarus, 1991). For instance, in the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007; Bakker, Demerouti & Euwema, 2005), resources buffer strain

resulting from a stressor. Thus, a weaker relationship between demands and strain will be evident when resources are high, and a stronger relationship will prevail when resources are low.

Highly proactive individuals are resourceful, like to take charge and control their environment, better cope with inter-role conflict and preserve valued resources. Those less proactive will experience or at least perceive more resource loss. Thus, it is reasonable to expect proactive personality, as a resource, will likely interact with inter-role conflict influencing feelings of burnout. Results of a study by Parker and Sprigg (1999), however, suggest that predicting the precise nature of the moderating effect of proactive personality on the relationship between inter-role conflict and dimensions of burnout may not be as straightforward as it first appears. They tested a central tenet of the classic Job Demands-Control model (Karasek, 1979) and reported a lack of demands-control interaction for less proactive individuals, such that job demands were strongly associated with job strain, regardless of the degree of job control. In contrast, for proactive employees, higher job demands were strongly associated with job strain when control was low, but demands had a significantly attenuated association with strain when job control was high. Their job strain measure is similar to emotional exhaustion. Thus, one could argue that when faced with inter-role conflict (i.e., two-way conflict between work → family and family → work), proactive individuals are likely to report lower levels of emotional exhaustion.

Recent research by Cunningham and De La Rosa (2008) corroborates the adaptive aspect of proactive personality, showing that it interacts with a controllable inter-role stressor, time-based family-to-work interference, to predict life satisfaction. On the other hand, in the same study, proactive personality did not moderate strain-based work-to-family and family-to-work interference, as well as behavior-based work-to-family interference prompting the authors to

propose that when stressors have lower levels of controllability, as in the case of strain-based and behavior-based work-to-family and family-to-work conflict, proactive personality may actually be maladaptive. Thus, high levels of proactive personality may be both adaptive and maladaptive, depending on the strategies the individuals employ to cope with work-family conflict and family-work conflict and the controllability of the stressors involved. Proactive individuals' tendency to use problem-based rather than emotion-based means of coping might cause them to disengage emotionally, interact in a detached manner, and experience feelings of depersonalization. Thus, proactive personality can be expected to moderate the influence of inter-role conflict on burnout, such that proactive individuals experience higher levels of depersonalization.

Proactive personality is related to performance (Thompson, 2005) and career success (Seibert et al., 1999). Given their performance/success orientation, highly proactive individuals may be more affected by the simultaneous experience of work-family conflict and family-work conflict. If inter-role conflict diminishes actual or perceived control, proactive individuals will likely be more affected by lack of control than less proactive individuals who have a dispositional tendency to accept the environment and adapt to it. Alternatively, a proactive person's tendency to indiscriminately exert controlling behaviors when confronting complex inter-role stressors that are beyond the direct personal control might actually result in feelings of reduced personal accomplishment. A proactive individual's tendency to indiscriminately attempt to control stressors if also accompanied by low levels of self-efficacy (Schaubroeck & Merritt, 1997; Jex & Bliese, 1999) or poor situational judgment (Chan, 2006) could result in increased strain and lack of personal accomplishment. For example, Chan (2006) reported that proactive personality was negatively related to a number of work-related perceptions and outcomes for

individuals who exhibited poor situational judgment. Indeed, proactive personality can be expected to moderate the influence of inter-role conflict on burnout, such that proactive individuals experience lower levels of personal accomplishment relative to less proactive individuals.

Hypothesis 4: Proactive personality will interact with work-family conflict and family-work conflict, such that when faced with both high work-family conflict and family-work conflict, relative to less proactive individuals, highly proactive individuals will report (a) lower emotional exhaustion, (b) higher depersonalization, and (c) lower personal accomplishment.

Method

Sample and Procedure

Data were collected from office/clerical employees of a medical company ($n = 125$) and a manufacturing company ($n = 46$), both located in the midwestern United States. Surveys were distributed to 156 employees in the medical company (response rate 80%) and to 68 employees in the manufacturing company (response rate 67.6%) via each company's internal mail system. Participation was voluntary and anonymous. One hundred seventy-one employees returned completed surveys for a combined response rate of 76%. Independent samples t-tests indicated no statistically significant difference between the two samples in terms of the focal variables (i.e., work-family conflict, family-work conflict, dimensions of burnout, proactive personality), thus, the two samples were combined for data analysis. Participants were primarily white-collar, office/clerical employees, and were employed in a variety of jobs, such as clerk, billing specialist, accounts specialist, office manager, and accountant. Of the participants, 95% were married or had a partner and 80% had one or more dependent children. The majority of the

participants were female (81.9%; $n = 140$). Males accounted for 15.2 % ($n = 26$) of the sample while five participants (2.9%) did not indicate their sex. On average, participants were 34.06 ($SD = 11.02$) years of age, and worked 42.93 ($SD = 6.89$) hours per week.

Measures

Proactive personality. Seibert et al.'s (1999) 10-item Proactive Personality Scale was used to measure proactive personality ($\alpha = .92$). Sample items include "I am constantly on the lookout for new ways to improve my life," and "I am always looking for better ways to do things." Participants used a 7-point scale with anchors ranging from "strongly disagree" to "strongly agree" to respond to the items.

Work-family conflict. Work-family conflict was measured with the 5-item, 7-point scale ($\alpha = .96$) developed by Netemeyer et al. (1996). Response options ranged from "strongly disagree" to "strongly agree." Sample items include "The demands of my work interfere with my home and family life," and "My job produces strain that makes it difficult to fulfill family duties."

Family-work conflict. Family-work conflict was measured with the 5-item, 7-point scale ($\alpha = .81$) developed by Netemeyer et al. (1996). Sample items include "The demands of my family or spouse/partner interfere with my work-related activities," and "Family-related strain interferes with my ability to perform job-related duties."

Burnout. The original Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981, 1986) has 22 items. Using structural equation modeling techniques, Boles et al. (2000) revised the MBI and reduced it to 19 items, dropping items 2, 12, and 16. The 19-item revised MBI (Boles et al., 2000) was used to measure burnout. It measures emotional exhaustion ($\alpha = .91$), depersonalization ($\alpha = .74$) and reduced personal accomplishment ($\alpha = .78$) and has been used in

previous research (e.g., Jawahar et al., 2007). A sample item used to measure emotional exhaustion is “I feel emotionally drained from my work,” A sample item used to measure depersonalization is “I feel I treat others (employees) as if they were impersonal objects.” A sample item used to measure reduced personal accomplishment is “I feel that I am positively influencing other peoples’ lives through my work (reverse scored).” Participants responded using a 7-point scale with anchors ranging from “almost never” to “almost always.”

Control variables. We followed Becker’s (2005) recommendations in selecting control variables for inclusion in this study. Participants were asked to indicate their *sex*; this variable was coded as male = 0 and female = 1. Sex was treated as a control variable as previous research has suggested that women tend to emphasize their family roles more than men (Guttek, Searle, & Klepa, 1991) and are more likely to have primary responsibility of finding a way to balance family obligations with their work obligations (Parasuraman & Greenhaus, 1993). Consequently, men and women may experience different levels of burnout for reasons other than variables examined in this study.

Participants were asked to indicate the approximate number of hours they worked per week. *Number of hours worked per week* was used as a control because it is probable that the likelihood of experiencing work-family conflict and family-work conflict increases with the number of hours one works. *Flexible work schedule* was measured with two items ($\alpha = .86$) which were “Does your organization offer flexible work schedule?” and “Is your work schedule flexible?” Items were rated on a 7-point scale with anchors ranging from “not at all” to “a great extent.” We treated flexible work schedule as a control variable because such a schedule has the potential to reduce work-family and family-work conflict and also enhance one’s ability to cope with such inter-role conflict (Brotheridge & Lee, 2005).

Results

Means, standard deviations and correlations between study variables are reported in Table 1. The pattern of correlations is consistent with hypothesized relationships. To test our hypotheses, we conducted moderated hierarchical regression analyses (Cohen & Cohen, 1983). We used $\alpha = .05$ as our standard to determine significance.

 Insert Table 1 about here

Sex, hours worked per week, and flexible work schedule were entered as control variables. In the second step of the moderated hierarchical regression, the main effects, work-family conflict, family-work conflict and proactive personality were entered. The centering technique was used to properly test for the interaction terms. Centering a variable involves replacing it with its deviation from the mean. The variables, work-family conflict, family-work conflict and proactive personality were centered; the cross-products of these centered variables were used to test for 2-way and 3-way interactions (Cohen & Cohen, 1983, p. 238). The three, 2-way interaction terms were entered in Step 3 and the 3-way interaction term was entered in Step 4 of each hierarchical regression equation.

In the first hierarchical regression (see Table 2), the control variables entered in Step 1 explained 19% of the variance in emotional exhaustion (adjusted $R^2 = .19$, $F_{3,148} = 12.43$, $p < .001$). Sex ($\beta = .16$, $t = 2.08$, $p < .05$; $sR^2 = .02$), hours worked ($\beta = .24$, $t = 3.08$, $p < .01$; $sR^2 = .05$) and flexible work schedule ($\beta = -.33$, $t = -4.43$, $p < .001$; $sR^2 = .11$) all explained unique variance. The squared semi-partial correlation, sR^2 , was used to ascertain the unique contribution of each variable to the criterion. sR^2 indicates the incremental change in R^2 for a given variable beyond all other variables.

 Insert Table 2 about here

The main effects entered in Step 2 explained an additional 32% of the variance in emotional exhaustion ($\Delta R^2 = .32$, $F_{3,145} = 32.67$, $p < .001$), but only work-family conflict was significant and explained unique variance ($\beta = .66$, $t = 9.52$, $p < .001$; $sR^2 = .30$), supporting Hypothesis 1a. Hypothesis 2 was not supported as family-work conflict was not significantly related to emotional exhaustion. Proactive personality was not significantly related to emotional exhaustion, thus Hypothesis 3a was not supported. Step 3, which included the three two-way interactions failed to reach statistical significance at the $p < .05$ level. The three-way interaction entered in Step 4 explained an additional 1% of the variance in emotional exhaustion ($F_{3,141} = 4.39$, $p < .05$; $\beta = -.15$, $t = -2.09$, $p < .05$) in support of Hypothesis 4a. Because the interaction was significant, we performed follow-up split-group analyses by taking a median-split on proactive personality and then regressing the cross-product term of work-family conflict and family-work conflict on emotional exhaustion at low and high levels of proactive personality (Aiken & West, 1991; Dawson & Richter, 2006). The procedures discussed by Dawson and Richter (2006) were used to graph the three-way interaction displayed in Figure 1. As shown in Figure 1, work-family conflict and family-work conflict interacted to influence emotional exhaustion at low levels of proactive personality ($R^2 = .06$, $F_{1,85} = 5.49$, $p < .05$; $\beta = -.25$, $t = -2.34$, $p < .05$) but not at high levels of proactive personality ($R^2 = 0$, $F_{1,72} = 0.86$, $p = .86$).

 Insert Figure 1 about here

In the second hierarchical regression (see Table 2), the control variables entered in Step 1 failed to explain any variance in depersonalization (adjusted $R^2 = .02$, $F_{3,148} = 2.01$, $p = .12$). The main effects entered in Step 2 explained an additional 10% of the variance in depersonalization ($\Delta R^2 = .10$, $F_{3,145} = 5.52$, $p < .001$), but only work-family conflict was significant and explained unique variance ($\beta = .35$, $t = 3.79$, $p < .001$; $sR^2 = .09$), supporting

Hypothesis 1b. We found no support for Hypothesis 2b as family-work conflict was unrelated to depersonalization. Hypothesis 3b was also not supported. The three, two-way interactions entered in Step 3 were not significant ($F_{3,142} = 1.12, p = .34$). The three-way interaction entered in Step 4 explained an additional 4% of the variance in depersonalization ($F_{3,141} = 7.19, p < .01; \beta = .26, t = 2.68, p < .01$). Because the interaction was significant, we performed follow-up split-group analyses. The cross-product term of work-family conflict and family-work conflict was significantly related to depersonalization at higher levels of proactive personality ($R^2 = .03, F_{1,85} = 3.98, p < .05; \beta = .21, t = 2.13, p = .05$) but not at lower levels of proactive personality ($R^2 = .01, F_{1,74} = 0.90, p = .35$) in support of Hypothesis 4b. When faced with work-family conflict and family-work conflict simultaneously, proactive individuals reported more depersonalization than less proactive individuals, suggesting that proactive personality interacted with the two types of inter-role conflict to augment rather than mitigate feelings of depersonalization (see Figure 2).

 Insert Figure 2 about here

In the third hierarchical regression, the control variables entered in Step 1 explained 7% of the variance in reduced personal accomplishment (adjusted $R^2 = .07, F_{3,148} = 4.70, p < .01$), but only flexible work schedule ($\beta = -.18, t = -2.29, p < .05; sR^2 = .03$) explained unique variance. The main effects entered in Step 2 explained an additional 13% of the variance in reduced personal accomplishment ($\Delta R^2 = .13, F_{3,145} = 32.67, p < .001$), however, only proactive personality was significant and explained unique variance ($\beta = -.35, t = -4.75, p < .001; sR^2 = .12$), supporting Hypothesis 3c. Step 3 which included the three two-way interactions was significant and explained an additional 5% of the variance ($F_{3,142} = 3.16, p < .05$) with the cross-product term of work-family conflict and proactive personality reaching statistical significance

($\beta = .19, t = 2.62, p < .05; sR^2 = .04$). The three-way interaction entered in Step 4 explained an additional 2% of the variance in reduced personal accomplishment ($F_{3,141} = 3.31, p < .05; \beta = .16, t = 2.78, p < .05$). Follow-up split-group analysis indicated that the cross-product term of work-family and family-work conflict was significantly related to reduced personal accomplishment at higher levels of proactive personality ($R^2 = .05, F_{1,73} = 53.76, p < .05; \beta = -.22, t = -2.34, p < .05$) but not at lower levels of proactive personality ($R^2 = .02, F_{1,83} = 1.46, p = .23$), thus supporting Hypothesis 4c. Proactive personality interacted with the two types of inter-role conflict to augment feelings of reduced personal accomplishment (see Figure 3).

 Insert Figure 3 about here

Discussion

Work-family conflict and family-work conflict usurp energy and resources. Because actual and perceived loss of resources lead to strain (e.g., Hobfoll, 1989), we proposed that work-family conflict and family-work conflict would be positively related to burnout. Proactive personality is a personal resource and resourceful individuals are likely to experience less conflict and have the wherewithal to cope with conflict. Consequently, we expected proactive personality would be associated with lower perceptions of burnout and also interact with the two types of inter-role conflict to predict burnout.

Results indicate that individuals experiencing work-family conflict report higher levels of emotional exhaustion and depersonalization. Work-family conflict explained 30% of unique variance in emotional exhaustion and 9% of the unique variance in depersonalization. Family-work conflict was not associated with burnout. This pattern of results is consistent with previous research reporting work-family conflict to be more detrimental than family-work conflict (Brotheridge & Lee, 2005; Peeters et al., 2005). Proactive personality was unrelated to emotional

exhaustion and to depersonalization. Proactive personality explained 12% of the variance in personal accomplishment, and it interacted with family-work conflict to enhance prediction of emotional exhaustion and with work-family conflict to enhance prediction of personal accomplishment. As expected, results of three-way interactions indicated that when faced with both work-family conflict and family-work conflict, proactive individuals reported lower levels of emotional exhaustion, higher levels of depersonalization and lower levels of personal accomplishment than less proactive individuals.

Theoretical Implications

Our data indicate that, in terms of main effects, work-family conflict is associated with emotional exhaustion and depersonalization but not with personal accomplishment whereas proactive personality is associated with higher levels of personal accomplishment. This pattern of results offers two insights. First, it suggests that different variables influence different forms of burnout. It is likely that stressors impact emotional exhaustion and depersonalization whereas resources impact feelings of personal accomplishment. Future research should assess whether this insight generalizes to other stressors and resources. Second, the different pattern of relationships exhibited by the different dimensions of burnout in our data reinforces the methodological argument against collapsing burnout dimensions (e.g., Boles et al., 2000) as has been done in some previous investigations (e.g., Cropanzano, Howes, Grandey & Toth, 1997, Study 2).

By far, results of the three-way interaction offer the most insights. When faced with both work-family conflict and family-work conflict, proactive individuals reported lower levels of emotional exhaustion than less proactive individuals (see Figure 1). The graph shows that individuals with high and low scores on proactive personality report about the same level of

emotional exhaustion when they experience low levels of both forms of conflict or a high level of one but a low level of the other. When both forms of conflict are high, the less proactive individuals report significantly higher level of emotion exhaustion relative to proactive individuals. Thus, it appears that a certain level of proactive personality may be necessary to buffer feelings of emotional exhaustion when faced with work-family conflict and family-work conflict, simultaneously.

We predicted and found a different pattern of results for the other two forms of burnout, depersonalization and personal accomplishment. As expected, when faced with both high work-family conflict and family-work conflict, highly proactive individuals reported higher levels of depersonalization and lower levels of personal accomplishment relative to less proactive individuals. Results for depersonalization, we believe, are a function of proactive individuals' tendency to use problem-based rather than emotion-based means of coping. When faced with high levels of work-family conflict and family-work conflict, rather than being overwhelmed by emotions, proactive individuals may disengage emotionally and interact in a detached manner (see Figure 2). Proactive individuals might feel overwhelmed by the simultaneous experience of work-family conflict and family-work conflict and frustration of their natural tendency and efforts to control their environment may lead to feelings of reduced personal accomplishment (see Figure 3). While the pattern of results for depersonalization and personal accomplishment appear counterintuitive, they are consistent with findings of lower levels of satisfaction among highly proactive working college students (McNall & Michel, in press). Replications of the current study should account for coping strategies and controllability of stressors to fully understand the role of proactive personality in the stress-strain relationship.

Potential Limitations and Directions for Future Research

The cross-sectional nature of these data cautions against drawing inferences of causality. It is quite possible, however, that the employees experiencing burnout attributed it to work-family conflict and to family-work conflict. On the other hand, it seems less likely that feelings of burnout would lead to lower scores on the proactive personality measure. In addition, previous research has established that common method variance does not aid in finding interaction effects (Harris & Kacmar, 2005; see also Harris et al., 2009) and support for interaction effects is the primary contribution of the study.

Results of our study suggest several avenues for research. First, these results should be replicated using a longitudinal design. While a longitudinal study would allow for more confidence in inferences of causality, difficult issues, such as the appropriate time interval between measurement of independent variables and burnout would need to be resolved (Mitchell & James, 2001). Second, one insight offered earlier that merits further examination is that stressors affect only emotional exhaustion and depersonalization whereas resources affect feelings of personal accomplishment. Third, our results indicate that when faced with both work-family conflict and family-work conflict, high levels of proactive personality can be adaptive, facilitating avoidance of feelings of emotional exhaustion, and maladaptive, resulting in feelings of depersonalization and lowered personal accomplishment. Investigation of the coping strategies used by individuals who vary in terms of their proactive personality is another potentially fruitful avenue for future research. In addition, research should also investigate if inter-role conflict and inter-role enrichment (i.e., when one role enhances a person's experiences in another role) (c.f., Greenhaus & Powell, 2006; McNall, Nicklin & Masuda, 2010) have different antecedents and consequences.

Finally, more research is needed on the consequences of burnout. Examining how the different dimensions of burnout influence outcomes, such as job satisfaction, job involvement, task performance, contextual performance as well as dysfunctional behaviors such as workplace aggression, is likely to result in theoretical advancement of the burnout construct. One could expect, for example, emotional exhaustion to lead to reduced job involvement and organizational commitment whereas depersonalization is likely to lead to incivility and potentially escalate into bullying and physical aggression in the workplace.

Practical Implications

In today's fast-paced economy, employers continually expect more and more from employees. In addition, given the highly competitive nature of most work environments, employees put in longer and longer hours to distinguish and position themselves for larger pay increases and advancement opportunities. In fact, in the current economy, people are working harder just to keep their jobs, never mind getting ahead. Our data show that individuals perceive more work-family conflict the more hours they work per week. Reducing work-family conflict is one way to reduce feelings of emotional exhaustion and prevent depersonalization. Offering employees a flexible work schedule increases employee control and thus may lessen the burden of longer work hours and result in lower levels of emotional exhaustion. Indeed, in our data, the availability of flexible work hours was negatively related to emotional exhaustion and positively related to personal accomplishment.

Conclusion

Both the increased prevalence and impact of job stress on employees and organizations reinforces the importance of continued search for ways to reduce the negative effects of job stress. Utilizing theoretical frameworks of the stress-strain relationship, we hypothesized and

found work-family conflict to be positively related to emotional exhaustion and depersonalization. Proactive personality interacted with work-family and family-work conflict, such that proactive individuals reported lower levels of emotional exhaustion and personal accomplishment and higher levels of depersonalization relative to less proactive individuals.

References

- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction. *Journal of Applied Psychology, 81*, 411-420.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bakker, A. D., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*, 309-328.
- Bakker, A. D., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*, 103-118.
- Becker, T.E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods, 8*, 274-289.
- Beutell, N. J., & Wittig-Berman, U. (1999). Predictors of work-family conflict and satisfaction with family, job, career and life. *Psychological Reports, 85*, 893-903.
- Boles, J. S., Dean, D. H., Ricks, J. M., Short, J. C., & Wang, G. (2000). The dimensionality of the Maslach Burnout Inventory across small business owners and educators. *Journal of Vocational Behavior, 56*, 12-34.
- Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology, 90*, 740-748.

- Bond, J. T., Galinsky, E., & Swanberg, J. E. (1997). *The 1997 national study of the changing workforce*. New York: Families and Work Institute.
- Boyar, S. L., Maertz, Jr., Pearson, A. W., & Keough, S. (2003). Work-family conflict: A model of linkages between work and family domain variables and turnover intentions. *Journal of Managerial Issues, 25*, 175-190.
- Brotheridge, C. M. (2001). A comparison of alternative models of coping: Identifying relationships among coworkers support, workload and emotional exhaustion in the workplace. *International Journal of Stress Management, 8*, 1-14.
- Brotheridge, C. M., & Lee, R. T. (2005). Impact of work-family interference on general well-being: A replication and extension. *International Journal of Stress Management, 12*, 203-221.
- Burke, R. J. (1989). Career stages, satisfaction and well-being among police officers. *Psychological Reports, 65*, 3-12.
- Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychology & Health, 16*, 583-594.
- Carlson, D. S., & Kacmar, K. M. (2000). Work-family conflict in the organization: Do life role values make a difference? *Journal of Management, 26*, 1031-1054.
- Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology, 91*, 475-481.
- Cinamon, R. G., Rich, Y., & Westman, M. (2007). Teachers' occupation-specific work-family conflict. *Career Development Quarterly, 55*, 249-261.

- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crant, J. M. (1995). The Proactive Personality Scale and objective job performance among real estate agents. *Journal of Applied Psychology, 80*, 532-537.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*, 435-462.
- Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior, 21*, 63-75.
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes and stress. *Journal of Organizational Behavior, 18*, 159-180.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance and organizational citizenship behaviors. *Journal of Applied Psychology, 88*, 160-169.
- Cunningham, C. J. L., & De La Rosa, G. M. (2008). The interactive effects of proactive personality and work-family interference on well-being. *Journal of Occupational Health Psychology, 13*, 271-282.
- Dawson, J. F. & Richter, A.W. (2006). Probing three-way interactions in moderated multiple regression: Development and application of a slope difference test. *Journal of Applied Psychology, 91*, 917-926.
- Froggatt, K. L., & Cotton, J. L. (1987). The impact of Type A behavior pattern on role overload-induced stress and performance attributions. *Journal of Management, 13*, 87-98.
- Frone, M. R., Russell, M., & Barnes, G. M. (1996). Work-family conflict, gender, and health-related outcomes. *Journal of Occupational Health Psychology, 1*, 57-69.

- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77, 65-78.
- Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology*, 7, 235-241.
- Goff, S. J., Mount, M. K., & Jamison, R. L. (1990). Employer supported child care, work/family conflict, and absenteeism: A field study. *Personnel Psychology*, 43, 793-809.
- Goode, W. J. (1960). A theory of role strain. *American Sociological Review*, 25 (4), 483-496.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76-88.
- Greenhaus, J.H., & Powell, G.N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92.
- Gutek, B. A., Searle, S., & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76, 560-568.
- Halpern, D. F. (2005). Psychology at the intersection of work and family: Recommendations for employers, working families, and policymakers. *American Psychologist*, 60, 397-409.
- Harris, K.J., Harvey, P., & Kacmar, K. M. (2009). Do social stressors impact everyone equally? An examination of the moderating impact of core self-evaluations. *Journal of Business and Psychology*, 24, 153-164.
- Harris, K.J., & Kacmar, K. M. (2005). Easing the strain: The buffer role of supervisors in the perceptions of politics-strain relationship. *Journal of Occupational and Organizational Psychology*, 18, 337-354.

- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513-524.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6*, 307-324.
- Jawahar, I. M., Stone, T. H., & Kisamore, J. L. (2007). Role conflict and burnout: The direct and moderating effects of political skill and perceived organizational support on burnout dimensions. *International Journal of Stress Management, 14*, 142-159.
- Jex, S.M., & Bliese, P.D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multilevel study. *Journal of Applied Psychology, 84*, 349-361.
- Kahn, R. L., & Byosiere, P. (1992). Stress in organizations. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Kahn, J., & Langlieb, A. M. (2003). *Mental health and productivity in the workplace: A handbook for organizations and clinicians*. Hoboken, NJ: Jossey-Bass.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford, England: Wiley.
- Karasek, R. A. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285-308.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotions. *American Psychologist, 46*, 819-834.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. London: Free Association Books.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer Publishing Company.

- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*, 123-133.
- Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior, 9*, 297-308.
- Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies, 44*, 243-260.
- MacEwen, K. E., & Barling, J. (1994). Daily consequences of work interference with family and family interference with work. *Work & Stress, 8*, 244-254.
- Maslach, C. (1982). *Burnout: The cost of caring*. New York: Prentice-Hall.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior, 2*, 99-113.
- Maslach, C. & Jackson, S. E. (1986). *Maslach Burnout Inventory manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- McNall, L. A. & Michel, J. S. (in press). A dispositional approach to work–school conflict and enrichment. *Journal of Business and Psychology*
[<http://www.springerlink.com/content/pr22475649328w24/>]
- McNall, L.A., Nicklin, J.M., & Masuda, A.D. (2010). A meta-analytic review of the consequences associated with work-family enrichment. *Journal of Business and Psychology, 25*, 381-396.
- Mitchell, T. R., & James, L. R. (2001). Building better theory: Time and the specification of when things happen. *Academy of Management Review, 26*, 530-547.

- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of Work-Family Conflict and Family-Work Conflict Scales. *Journal of Applied Psychology, 81*, 400-410.
- Parasuraman, S., & Greenhaus, J. H. (1993). Personal portrait: The lifestyle of the woman manager. In E. A. Fagenson (Ed.), *Women in management: Trends, issues, and challenges in managerial diversity* (vol. 4, pp. 186-211). Newbury Park: CA: Sage.
- Parker, S. K., & Sprigg, C. A. (1999). Minimizing strain and maximizing learning: The role of job demands, job control and proactive personality. *Journal of Applied Psychology, 84*, 925-939.
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management, 12*, 43-61.
- Perrewé, P. L., Zellars, K. L., Rossi, A. M., Ferris, G.R., Kacmar, C. J., Liu, Y., Zinko, R., & Hochwarter, W. A. (2005). Political skill: An antidote in the role overload-strain relationship. *Journal of Occupational Health Psychology, 10*, 239-250.
- Rahim, M. A., & Psenicka, C. (1996). A structural equations model of stress, locus of control, social support, psychiatric symptoms, and propensity to leave a job. *Journal of Social Psychology, 136*, 69-84.
- Schaubroeck, J., Jones, J. R., & Xie, J. L. (2001). Individual differences in utilizing control to cope with job demands: Effects on susceptibility to infectious disease. *Journal of Applied Psychology, 86*, 265-278.
- Schaubroeck, J., & Merritt, D.E. (1997). Divergent effects of job control on coping with work stressors: The key role of self-efficacy. *Academy of Management Journal, 40*, 738-754.

- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology, 84*, 416-427.
- Spector, P. E., Chen, P. Y., & O'Connell, B. J. (2000). A longitudinal study of relations between job stressors and job strains while controlling for prior negative affectivity and strains. *Journal of Applied Psychology, 85*, 211-218.
- Stamper, C. L., & Johlke, M. C. (2003). The impact of perceived organizational support on the relationship between boundary spanner role stress and work outcomes. *Journal of Management, 29*, 569-588.
- Thomas, J. P., Whitman, D. S., & Viswesvaran, C. (2010). Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs. *Journal of Occupational and Organizational Psychology, 83*, 275-300.
- Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology, 90*, 1011-1017.
- Tubre, T. C., & Collins, J. M. (2000). Jackson and Schuler (1985) revisited: A meta-analysis of the relationships between role ambiguity, role conflict and job performance. *Journal of Management, 26*, 155-169.
- van Emmerik, H., & Jawahar, I. M. (2006). The independent relationships of objective and subjective workload with couples' mood. *Human Relations, 59*, 1371-1392.
- Williams, K. J., & Alliger, G. M. (1994). Role stressors, mood spillover, and perceptions of work-family conflict in employed parents. *Academy of Management Journal, 37*, 837-868.

- Williams, K. J., Suls, J., Alliger, G. M., Learner, S. M., & Wan, P. (1991). Multiple role juggling and daily mood states in working mothers: An experience sampling study. *Journal of Applied Psychology, 76*, 664-674.
- Worley, J. A., Vasser, M., Wheeler, D. L., & Barnes, L. L. B. (2008). Factor structure of scores from the Maslach Burnout Inventory: A review and meta-analysis of 45 exploratory and confirmatory factor-analytic studies. *Educational and Psychological Measurement, 68*, 797-823.
- Xie, J. L., & Schaubroeck, J. (2001). Bridging approaches and findings across diverse disciplines to improve job stress research. In P.L. Perrewé & D.C. Ganster (Eds.), *Research in occupational stress and well being* (vol. 1, pp. 1-53). Oxford, England: Elsevier Science.

Table 1

Means, Standard Deviations and Correlations between Study Variables

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Sex	0.84	0.36	----									
2. Age	34.06	11.02	-.11	----								
3. Work hours	42.93	6.88	-.24 **	.30**	----							
4. Flexible work schedule	3.80	2.13	-.10	.06	-.09	(.86)						
5. Work-family conflict	3.33	1.73	-.02	.11	.36**	.00	(.96)					
6. Family-work conflict	1.98	0.94	-.10	-.10	-.05	-.05	.33**	(.81)				
7. Proactive personality	4.86	1.10	-.06	-.23*	.12	.00	.11	.01	(.92)			
8. Emotional exhaustion	3.19	1.48	.15*	-.04	.22**	-.01	.66*	.08	.10	(.91)		
9. Depersonalization	2.03	1.23	.05	.06	.06	-.04	.34**	.09	.01	.47**	(.74)	
10. Reduced personal accomplishment	3.14	0.97	.20*	-.04	-.17*	-.05	.02	.05	-.37**	.15*	.21**	(.78)

Note. Male coded 0 and female coded 1. Cronbach's alpha internal consistency reliability coefficients are noted on the diagonal.

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

Table 2

Results of Hierarchical Regression for Burnout Dimensions

Variables	Emotional Exhaustion				Depersonalization				Reduced Personal Accomplishment			
	R ²	ΔR ²	β	sR ²	R ²	ΔR ²	β	sR ²	R ²	ΔR ²	β	sR ²
Step 1 (control variables)	.19***				.02				.07**			
Sex			.16*	.02			.38				.13	
Hours worked per week			.24**	.05			.05				-.15	
Flexible Work Schedule			-.33***	.11			-.18*	.03			-.18*	.03
Step 2 (independent variables)	.50***	.32***			.10***	.09***			.18***	.13***		
WFC			.66***	.30			.35***	.09			.04	
FWC			-.11				-.02				.07	
PAP			.03				-.02				-.35***	.12
Step 3 (2-way interaction)	.52	.02			.10	.02			.22*	.05*		
WFC * PAP			-.10				-.04				.20**	.04
WFC * FWC			-.05				.03				-.11	
FWC * PAP			.13*	.01			.15				-.12	
Step 4 (3-way interaction)	.53*	.01*			.14**	.04**			.23*	.02*		
WFC*FWC * PAP			-.15*	.01			.26**	.04			.17*	.02

Note: WFC – work-family conflict, FWC – family-work conflict, PAP – proactive personality.

R² - adjusted R², * $p < .05$, ** $p < .01$, *** $p < .001$

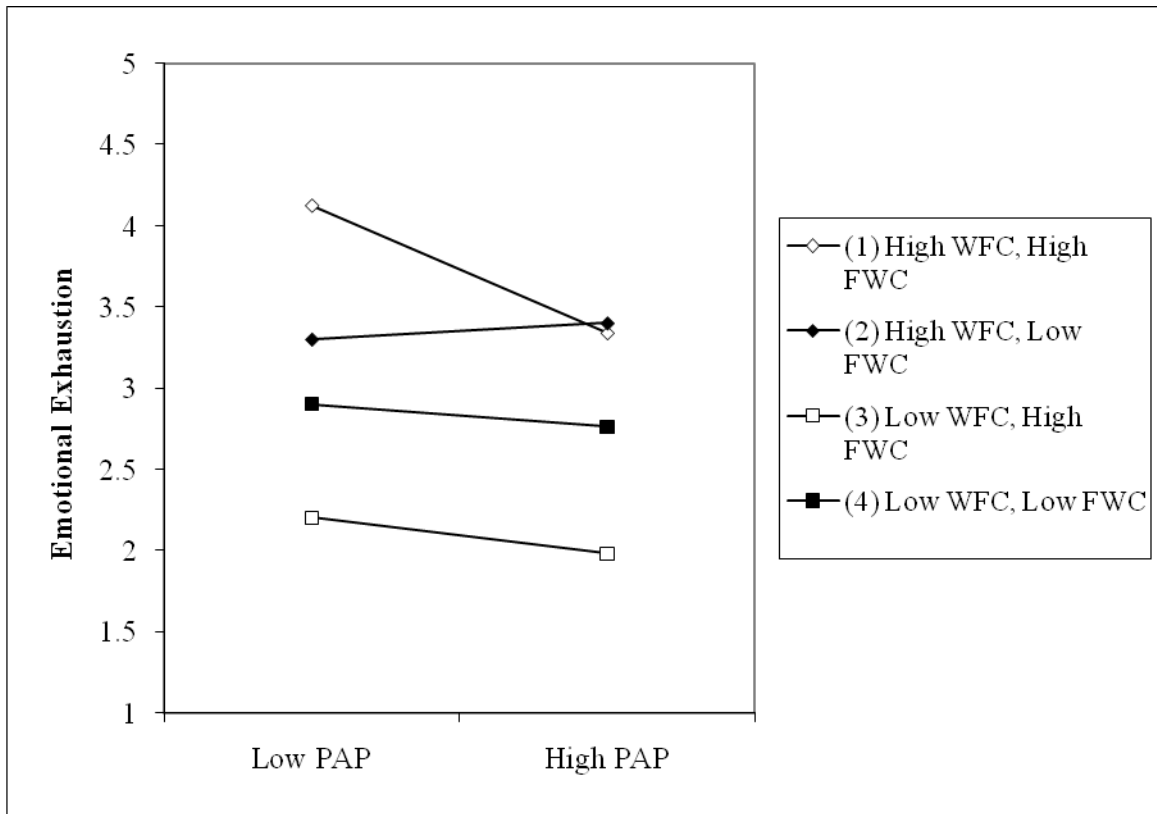


Figure 1. Proactive personality as a moderator of the relationship between two types of inter-role conflict and emotional exhaustion.

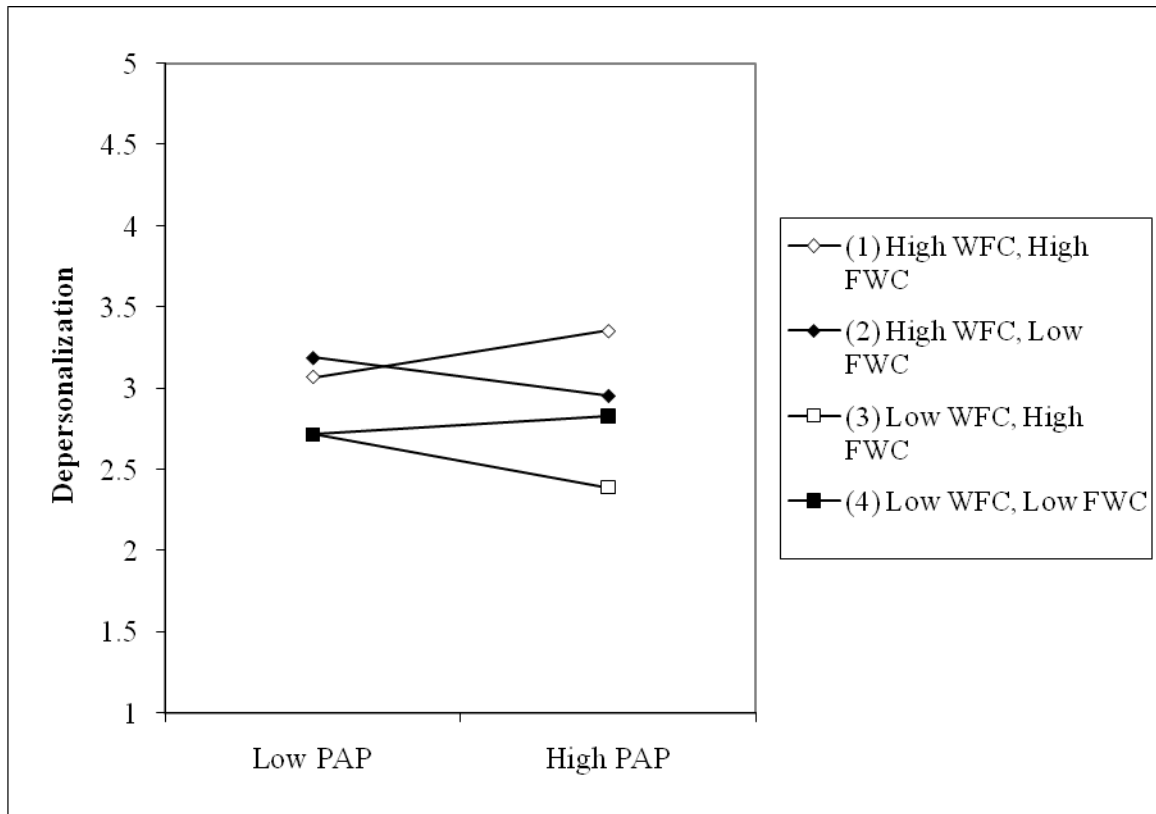


Figure 2. Proactive personality as a moderator of the relationship between two types of inter-role conflict and depersonalization.

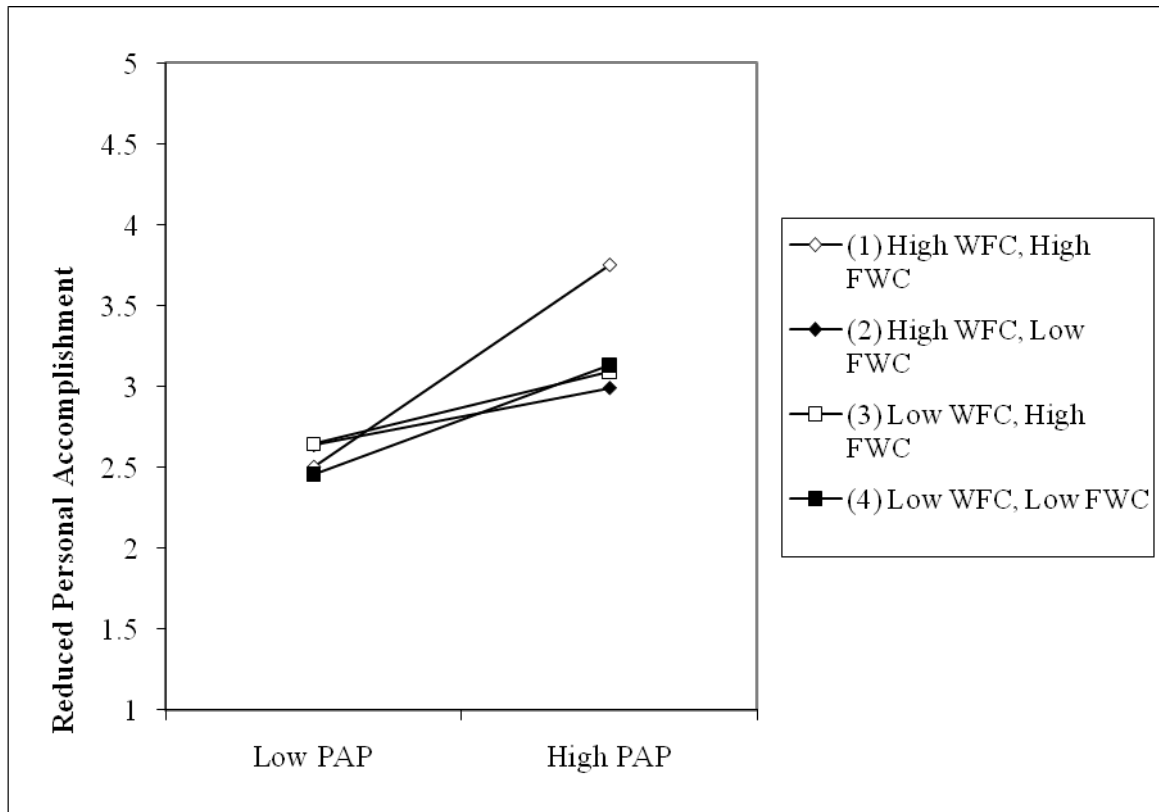


Figure 3. Proactive personality as a moderator of the relationship between two types of inter-role conflict and reduced personal accomplishment.