

THE IMPACT OF WORK OVERLOAD AND JOB INVOLVEMENT ON WORK-FAMILY CONFLICT AMONG MALAYSIAN DOCTORS

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ABSTRACT

This study examined the relationship between work overload and job involvement with the two dimensions of work-family conflict [work interference with family (WIF) and family interference with work (FIW)]. The sample comprised of 391 local doctors working full-time in nineteen public hospitals in Peninsular Malaysia. Statistical results using regression analysis indicated that work overload was positively related to both work interference with family (WIF) and family interference with work (FIW). On the other hand, job involvement was found to have no significant impact on the two forms of work-family conflict. Implications of the results, limitations, and future research directions are also presented.

Keywords: *Work-to-family interference, family-to-work interference, work overload, job involvement, doctors, Malaysia*

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Introduction

The rising tide of dual-career couples with young children and the changing of the traditional family structural configurations have resulted in substantial home and family responsibilities for both men and women (Allen, Herst, Bruck, & Sutton, 2000). Juggling responsibilities for work, housework, and child-care can become strenuous resulting in work-family conflict. Although the issue of work-family conflict has been extensively investigated, researchers have argued that these studies were mostly conducted among Western societies (Carnicer, Sanchez, Perez, & Jimenez, 2004; Karatepe & Baddar, 2006). These studies involved diverse groups of occupations (for instance, engineers, nurses, entrepreneurs, teachers, accountants, students). Besides the fact that work-family conflict is bound to be a common phenomenon among doctors, few studies have been carried out among individuals in this particular profession (Fletcher & Fletcher, 1993). Although attempts have been made to explore the work-family construct in eastern settings especially in Asian countries, published studies have been limited (Kim & Ling, 2001; Lo, Stone & Ng, 2003). According to Aryee, Fields, and Luk (1999), more empirical research on the issues of work family conflict is needed in non-Western settings since cultural norms which underpin the operation of the work-family interface may affect the findings. Within the Malaysian environment, studies relating to work-family conflict have been relatively scanty (Noor, 2002; 2006; Nasuridin & Hsia, 2008). Eby, Casper, Lockwood, Bordeaux, and Brinley (2005) in their content analysis of the literature from 1980 to 2002 have classified the antecedents of work-family conflict into three categories: work domain variables, non-work domain variables, and individual and demographic variables. Of these, work demands are expected to be relatively salient in influencing work-family conflict particularly the work interference with family dimension because they are accompanied by processes that hinder the performance of family roles or deplete resources needed for participation in family activities (Voydanoff, 2004). Besides, long working hours, working under time pressure, large amounts of administration and paperwork, and taking work home have been shown to characterize doctors' daily job (Cooper, Rout, & Faragher, 1989). Expansion of the Malaysian medical and health services, shortage of doctors in the public sector (NST, June 13, 2009), and the increasing number of patients seeking treatment at government clinics and hospitals, have resulted in greater work burden for doctors especially the junior ones. Sidi and Maniam (1997) provided evidence that junior doctors in Malaysia experienced emotional distress. Against this backdrop, this study sought to examine the effects of work overload and job involvement on work-family conflict among Malaysian doctors.

Literature Review

Work-Family Conflict

Howard (2008) in summarizing the definitions put forth by prior scholars (Greenhaus & Beutell, 1985; Boyar, Maertz, Pearson, & Keough, 2003) conceptualized work-family conflict as a type of inter-role conflict where both work and family issues exert pressures on an individual, creating a conflict where compliance with some set of pressures (family matters) increases the difficulty of complying with the other set of pressures (work matters). Work-family conflict has been shown to be related to negative work outcomes such as job dissatisfaction, job burnout, and turnover (Greenhaus, Parasuraman & Collins 2001, Howard, Donofrio & Boles 2004), as well as to outcomes related to psychological distress, and life and marital dissatisfaction (Kinnunen & Mauno 1998,

Aryee et al., 1999).

Recent definitions of work-family conflict have portrayed this construct a bi-directional: work interference with family (WIF) and family interference with work (FIW). Each type of work-family conflict has its own unique domain-specific antecedents. The specific antecedents of the work interference with family conflict (WIF) lie in the work domain whereas the domain specific antecedents of the family interference with work conflict (FIW) lie within the family domain (Fu & Shaffer, 2001). However, based on Cinnamon's (2006) argument that work usually has a more deleterious impact on family life than vice-versa, the present research will focus on the effects of work demands rather than family demands on work-family conflict. According to Yang, Chen, Choi, and Zou (2000), work demands can originate from the objective as well as subjective psychological environment. One work demand arising from the objective environment relates to long paid work hours (*i.e.* work overload) as suggested by Yang *et al.* (2000). On the other hand, following Aryee, Srinivas, and Tan (2005), we conceptualize job involvement as representing a form of work demand associated with the individual's subjective environment. Therefore, our primary goal was to examine these two variables (work overload and job involvement) as predictors of the two dimensions of work-family conflict.

Work Overload

Work overload is one of the major work domain predictors of work-family conflict (Eby *et al.*, 2000). Work overload describes a perception that one has too much to do (Leiter & Schaufeli 1996). Individuals who perceive their workload to be more than they can handle are likely to experience exhaustion and fatigue, which may negatively influence one's motivation to respond to the demands of the other domains (Aryee *et al.*, 2005). Work overload has been reported to be positively related to work interference with family and family interference with work (Frone, Yardley, & Markel, 1997; Parasuraman, Purohit, Godshalk, & Beutell, 1996). Since medical work entails heavy workload in the form of working long hours, constantly working under time pressures, having to handle increased demands from patients, and having to work unsociable hours (Rout, 1999), it is expected that work overload would be positively and strongly related to work-family conflict particularly the work interference with family component. From this discussion, it is hypothesized that:

Hypothesis 1: Work overload will be positively and strongly related to Work Interference with Family than Family Interference with Work.

Job Involvement

Job involvement is defined as the degree to which a person identifies psychologically with the job, and the importance of the job to the person's self-image and self-concept (Higgins, Duxbury, & Irving, 1992). It has been shown that the salience attached to one's life role will intensify work-family conflict (Frone, Russell, & Cooper, 1992; Greenhaus & Beutell, 1985). High involvement in a role may increase inter-role conflict through two ways (Greenhaus & Beutell, 1985). First, high levels of involvement in one role may be associated with an increase in the amount of time devoted to that role, making it more

difficult to comply with the expectations associated with the second role. Second, high involvement in one role may cause one to be mentally preoccupied with that role even when one is physically attempting to fulfill the demand of the other role. Greenhaus, Parasuraman, Granrose, Rabinowitz, and Beutell (1989) suggested that the “absorptiveness” of jobs and one’s emotional involvement in one’s job represent a potential source of intrusion of work into the family domain. According to Greenhaus et al. (1989), employees with high levels of job involvement tend to be preoccupied with their jobs and are more concerned about achieving success in their career, stimulating them to devote increased effort and energy to their work role at the expense of their family role. Therefore, these employees are more likely to experience increased work-related stress and work-family conflict (Frone et al., 1992; Greenhaus & Beutell, 1985; Greenhaus et al., 1989). Findings from past studies provided evidence for the positive relationship between job involvement and work-family conflict particularly the work interference with family (Adams, King & King, 1996; Carlson & Frone, 2003). Since the medical profession is “people-intensive” and emotionally demanding (Swanson & Power, 1998), it is expected that doctors would be highly involved in their jobs. High job involvement, in turn, would be positively and strongly related to work-family conflict particularly the work interference with family component. Therefore, our second hypothesis is:

Hypothesis 2: Job involvement will be positively and strongly related to Work Interference with Family than Family Interference with Work.

Methodology

Sample and Procedure

Respondents for this study were doctors working full time in 19 public hospitals in Peninsular Malaysia. The doctors selected were married, have at least one child, having a working spouse, and work under the supervision of a head of department. This research replicates the procedure done by previous studies (Bedeian, Burke, & Moffett, 1988; Frone *et al.*, 1992). A total of 2200 questionnaires were distributed with the assistance of the officers in the administration department of the respective hospitals. Specifically, 100 questionnaires were allocated to 18 hospitals with the remaining 400 questionnaires being assigned to one hospital located in Kuala Lumpur, which happens to be the largest of the lot. The distribution and collection of the survey instruments took about three months. Finally, only 391 questionnaires were found acceptable and analyzed, yielding a response rate of 17.77 %.

Measurements

The research instrument measuring work interference with family and family interference with work comprised of five items each adapted from the work of Netemeyer, Boles, and McMurrian (1996). All items were measured on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Work overload was assessed using nine items adapted from Aziz (2004). All items were measured on a 5-point Likert scale ranging from (1) Little to (5) Extreme. Job involvement was assessed using four items adapted from Frone and Rice’s (1987) job involvement scale. All items were measured on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. Demographic information such as age, gender, education, number of

children, ethnicity, educational level, job position, job tenure, and organizational tenure were also requested.

Method of Analysis

A principal component factor analysis with varimax rotation was conducted to validate the dimensionality of the study constructs. Following Snell and Dean (1992), a loading of 0.30 or greater on one factor is considered. Likewise, items will be deleted when the difference between the loadings is less than 0.10 across factors. Results of the factor analysis on work-family conflict revealed a two-factor solution. Similarly, a single factor solution was discovered for work overload and job involvement respectively.

Hierarchical regression analysis was undertaken to test the two hypotheses of this study. Gender, age, and educational level were included as control variables in the regression equations because of their potential relationships with the dependent variable (work-family conflict) following Aryee (1992). However, since these three variables were categorical in nature, they were initially dummy-coded as follows: Gender (male=0 and female=1); age (younger than 30 years=0 and 30 years and above=1); and education variable (bachelor's degree which includes MBBS / MD / MBBCHB / Others = 0 and Masters, Ph. D or equivalent=1). The coding used for age was consistent with that of Bagger, Li, & Gutek (2008) study. Meanwhile, the coding used for education was similar with the study conducted by Dixon and Sagas (2007).

Results

Profile of Respondents

Of the 391 respondents, 163 (41.7%) were men and 228 (58.3%) were women. Majority of the respondents were in their early to mid thirties. Ethnic representation of the sample is as follows: Malays (72.1%), Chinese (14.1%), Indians (11.8%), and other races (1.0%). Four respondents (1.0%) did not indicate their ethnicity. Education-wise, 224 respondents (57.3%) had degree in MBBS / MD / MBBCHB / Others, 161 respondents (41.2%) had masters degree, with the remaining 6 respondents (1.5%) having PhD or equivalent qualification. In terms of position, 22 respondents (5.6%) were in the Houseman category, 201 respondents (51.4%) were Specialists, 147 respondents (37.6%) were Clinicians and the rest, and 21 respondents (5.4%) were Administrators. As for job tenure, the mean value for the sample was 9.87 years (SD= 6.58). Meanwhile, the mean value for organizational tenure for the sample was 4.58 years (SD= 3.91). As for the number of children, the sample reported having children ranging from 1 to a maximum of eight. A majority (63.1%), however, have between 1 to 2 children.

Means, Standard Deviations, Reliabilities and Correlations of the Study Variables

Descriptive statistics such as mean scores, standard deviations, reliabilities, and inter-correlations of the study variables are provided in Table 1.

Table 1: Descriptive Statistics, Correlations, and Reliabilities of the Study Variables

Variables	Mean	Standard Deviation	WIF	FIW	WOL	JI
WIF	3.53	0.84	(0.91)			
FIW	2.49	0.80	0.31**	(0.87)		
WOL	3.27	0.70	0.55**	0.20**	(0.89)	
JI	3.51	0.62	0.08	0.00	0.16**	(0.68)

Note: ** p<0.01, * p<0.05; WIF denotes Work Interference with Family, FIW denotes Family interference with Work, WOL denotes work overload, JI denotes Job Involvement. Figures in parentheses denote the reliability coefficients for the study variables.

As shown in Table I, on the average, the level of work interference with family (M = 3.53, SD = 0.84), job involvement (M = 3.51, SD = 0.62), and work overload (M = 3.27, SD = 0.80), was judged to be relatively high by the respondents. On the other hand, the mean value for family interference with work (M = 2.49, SD 0.80) was found to be moderate. The reliability coefficients for the study variables were in the range of 0.68 to 0.91, which meets the minimum acceptable standard of 0.6 for exploratory research as suggested by Hair et al. (2006). Similarly, four out of six correlations between the study variables were found to be significant (p<0.01). Job involvement had no significant correlations with the two dimensions of work-family conflict.

Regression Results

Results of regressing the dependent variables (the two dimensions of work-family conflict) against the two independent variables (comprising of work overload and job involvement) are shown in Table 2.

Table 2: Regression Results Involving Job Involvement, Work Overload, and Work-Family Conflict Dimensions (Work Interference with Family and Family Interference With Work)

Dependent Variables	Work Interference With Family (WIF)		Family Interference With Work (FIW)	
	Model 1 Std. β	Model 2 Std. β	Model 1 Std. β	Model 2 Std. β
Step 1: Control Variables				
Gender (male = 0, female = 1)	0.08	0.10*	-0.05	-.05
Age (younger than 30 = 0, otherwise = 1)	-0.01	-0.05	-0.02	-.03
Education (bachelor's degree=0, postgraduate = 1)	-0.17*	-0.12*	-0.06	-.04
Step 2: Predictor Variables				
Work Overload		0.54**		0.20**
Job Involvement		0.05		-0.02
F- value	5.22	39.45	0.92	3.73
R ²	0.04	0.34	0.01	0.05
Adjusted R ²	0.03	0.33	-0.01	0.03
R ² Change	0.04	0.30	0.01	0.04
F-Change	5.22*	87.30**	0.92	7.92**

Note: * p<0.05, ** p<0.01; Gender (male = 0, female = 1); Age (0 = younger than 30, otherwise = 1) ;and Education (bachelor's degree = 0, postgraduate = 1).

As illustrated in Table 2, based on model 1, the control variables accounted for 4% of the variance in work interference with family ($r^2 = 0.04$, f -change = 5.22, $p < .05$). Of the three control variables, only education was significantly and negatively related to work interference with family ($\beta = -0.17$, $p < .05$). This indicates that the lower the education level attained by these doctors, the greater the work interference with family experienced by them. In model 2, by adding the two predictor variables, the r^2 increased to 0.34. This result indicates that the two variables were able to explain an additional 30% of the variance associated with work interference with family (r^2 change = 0.30, f -change = 87.295, $p < 0.01$). Of the two variables, work overload was found to have a positive and significant relationship with work interference with family ($\beta = 0.54$, $p < 0.01$). Job involvement was found to have no significant effect on work interference with family. In contrast, none of the control variables had any effect on family interference with work. Again, work overload was found to be significantly and positively related to family interference with work ($\beta = 0.20$, $p < 0.01$). Job involvement too was found to be unrelated to family interference with work. Since the β value for work overload for family interference with work was smaller than what was discovered for work interference with family, we concluded that our first hypothesis was supported. The non-existence of a relationship between job involvement and the two dimensions of work-family conflict lead to the rejection of our second hypothesis.

Discussion, Implications, and Limitations

The main goal of this investigation was to examine the effects of work overload and job involvement on the two dimensions of work-family conflict (work interference with family and family interference with work). Our findings revealed that work overload was a significant predictor of the two dimensions of work-family conflict. This finding is consistent with those of previous researchers (Frone et al., 1997; Parasuraman et al., 1996). When doctors perceive their workload to be more than they can handle, they are likely to experience exhaustion and fatigue, which may negatively influence their motivation to respond to the demands of the other domains such as family as argued by Aryee et al. (2005). In contrast, job involvement was found to be unrelated to work interference with family and family interference with work. This finding is inconsistent with those discovered by past researchers (Adams et al, 1996; Carlson & Frone, 2003). One plausible explanation may relate to the nature of the medical profession itself. Doctors are expected to be dedicated employees who are highly involved in their work and committed to their profession. This is reflected in the relatively high level of job involvement experience by the participating doctors (mean = 3.51). Such expectations associated with doctors are likely to enhance their own motivation level and more likely to increase spousal understanding. As such, being highly involved in their jobs would not be a potential source of work-family conflict for doctors. Since the doctors sampled have been in their jobs for about 10 years (mean = 9.87 years) , they would have developed coping mechanisms that would have enabled them to resolve work-family conflict that may arise.

In terms of implications, since work overload increases both dimensions of work-family conflict, it would be worthwhile for hospital administrators and the Ministry of Health to think of solutions to reduce the workload among doctors. The acute shortage of doctors in Malaysia coupled with the influx in patients seeking treatment in public hospitals due to the economic slowdown (NST, December 12, 2008; NST, June 13, 2009) may have indirectly contributed to the increase in workload by existing doctors working in

Malaysian public hospitals. One short-term measure would be perhaps to recruit retired doctors and even foreign doctors to work in Malaysia. By doing so, the heavy workload handled by existing doctors would be lessened, which in turn, will help reduce their level of work-family conflict.

As for the limitations, only two predictor variables (work overload and job involvement) derived from the work domain alone were examined. Other variables emanating from both work and family domains such as supervisor support, spouse support, family involvement, parental demand, and others may play a role in influencing work-family conflict. Future researchers may want to expand the scope of this study by focusing on these variables. Besides, this study is limited to doctors working in public hospitals in Peninsular Malaysia. The same research could be replicated among doctors in public hospitals in Sabah and Sarawak, as well as among doctors from private hospitals. The use of a larger sample within the same industry would improve the generalization of the findings.

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