WORK-FAMILY CONFLICT AND WORK-RELATED ATTITUDE: THE MEDIATING EFFECTS OF STRESS REACTIONS

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-Abstract -

This study aims to investigate the relationship between work-family conflict (i.e. work-to-family and family-to-work) and work-related attitudes (i.e. job satisfaction, affective commitment and turnover intentions) among academician in Malaysia. Mediation effects of stress reactions which are behavioral stress, somatic stress and cognitive stress were also tested. A survey method using questionnaire was utilized to obtain the data. A total of 267 respondents were participated, giving the return rate of 20% from the entire of population. Research data were analyzed using PASW18 and AMOS SPSS18. Result indicated that only work-to-family conflict was significantly related to stress reactions. While, behavioral stress mediates the effects of work-to-family conflict on job satisfaction, affective commitment and turnover intentions. Cognitive stress only mediates the effects of work-to-family conflict on affective commitment. This paper also discusses the implication of this study to the organization and future research.

Key Words: Work-family conflict, Stress Reactions, Job satisfaction, Turnover intention, Affective commitment

JEL Classification: 123 Higher Education and Research Institutions

1. INTRODUCTION

Greenhaus and Beutell (1985) defined work-family conflict as "a types of inter-role conflict which occur when two domains that are family and work becoming unbalance". The issues of work-family conflict had widely discussed in the area of organizational-related research (Olson-Buchanan, 2006; Voydanoff, 1988). Work-family conflict was found to trigger stress (Voydanoff, 1988) and burnout, reduce job performance and productivity and stress sources among academician (Blix,2006: Bragger, Rodriguez-Srednicki, Kutcher, Indovino, & Rosner, 2005).

Academician involvement in various activities such as teaching and researching contributed to greater job demands which may arise work-family conflict (Bragger, Rodriguez-Srednicki, Kutcher, Indovino, & Rosner, 2005). Unmanaged work-family conflict (i.e. work-to-family conflict (WFC), family-to-work conflict (FWC)) was found associated arisen of academician stresses which in turn reduce job satisfaction and increase turnover intention (Hammer, Bauer, & Grandey, 2003; Noryati, Aminah, & Maznah, 2009; Rode & Near, 2005).

Researchers reported that work-family conflict was highly associated with mental health issues (e.g. stress, strain) (Burke, 1988; Joseph et al., 2007; Poelmans, 2001). The unbalance interaction of work and family may develop stress (Rode & Near, 2005). Role transition theory posits that arisen of family and work will cause the collision between two movements of roles (Burr, 1972). Role movement such as disengagement and engagement process between the roles (i.e. works, family) was part of the interaction in role transition theory. When a high demand perceived from both work and family, individual is required to adjust their self-concept, values, skill and lifestyle as a coping style. However, if the coping is fail, collision will occur. The collision of work and family will break the boundaries which later creating stress and affect the work attitude of employees.

Work pressure, spouse disagreement and perception of family burden were examples of work-family conflict which caused negative spillover. According to Carlson, Kacmar, & Williams (2000) there are three major dimensions of work-family conflict which are time-based conflict, strain-based conflict and behavioral-based conflict. Lack of time spends with family or works (time-based conflict), high works demands (strain-based conflict) and difficulties in communicating with supervisor (behavioral-based conflict) are examples of situations that contribute to work-family conflict.

Previous study stated that work-family conflict affects physical and psychological health (Greenhaus, Allen, & Spector, 2006). One most common health problem is stress. Stress defines as a reaction to the threat of lacking resources or actual loss in

resources (Grandey & Cropanzano, 1999). Joseph *et al.* (2007) found that high level of work-family conflict reduced workers health and produced depression and anxiety. In addition, Vinokur, Pierce and Buck (1999) found work-family conflict were associated with family distress. This lead to the first hypothesis that is:

 H_{1a} : There is a positive relationship between work-to-family conflict and stress reactions

 H_{1b} : There is a positive relationship between family-to-work conflict and stress reactions

Many scholars found that stress were associated with work-attitude such as job satisfaction, commitment and turnover intention (Ahsan, Abdullah, Gun Fie, & Shah Alam, 2009; Kittel & Leynen, 2003; Michael, Court, & Petal, 2009). Previous research indicated that high levels of stress can decrease job satisfaction (Ahsan, et al., 2009). In addition, Shahzad, Rehman, Shad, Gul, & Khan (2011) found high stress were determinants for turnover intention. While, high level of stress was associated with low affective commitment (Khatibi, Asadi, & Hamidi, 2009; Ziauddin, Khan, Ahmed Jam, & Hijazi, 2010). Thus, based on the previous empirical evidence, researcher had developed three hypotheses:

*H*₂: *There is a negative relationship between stress reactions and job satisfaction.*

*H*₃: There is a negative relationship stress reactions and affective commitment.

 H_4 : There is a positive relationship between stress reactions and turnover intention.

Previous research also suggested that high level of work-family conflict were related to high level of stress reactions, which in turn influence work attitude such as job satisfaction (Grandey & Cropanzano, 1999). High level of work-family conflict perceived will leads to high level of stress reactions. Previously, symptoms of stresses such as negative emotion (e.g. sad) were reported to occur as consequence from work-family conflict (J. H. Greenhaus, Allen, & Spector, 2006). High level of stress will influence workers' feeling such as unhappy and lack of job satisfaction. Additionally, work-family conflict was reported to increase turnover intention and decrease affective commitment (Haar, 2004). Thus, the researchers proposed that:

 H_5 : Stress reactions will mediate the relationship between work-family conflict and work attitudes such as job satisfaction, affective commitment and turnover intention

2. METHODOLOGY

2.1 Sample and data collection

The population of this study was academic staffs from three top research universities in Malaysia: University Teknologi Malaysia (UTM), Universiti Sains Malaysia (USM), and Universiti Kebangsaan Malaysia (UKM). A survey method using selfreport questionnaire was employed in this study to obtain the data. Only 344 academic staffs were participated in this study. However, 77 incomplete questionnaires were excluded from the study. Thus, only 265 completed questionnaires were remained, providing response rate of 20 percent which considered acceptable.

In terms of demographic profile, the results indicated that 51 percent of the respondents were female and 49 percent were male. Majority of the respondents were Malay (79%), followed by Chinese (10%) and Indian (3%). Most of the respondent were married (86% married, 10% single, 4% divorced). Respondent positions were tutor (11%), lecturer (19%), senior lecturer (36%), associate lecturer (19%) and professor (14%). Most of respondent were PhD holder (70%), followed by master (27%) and degree (3%).

2.2 Measures

Work-Family conflict. Work-family conflict were measured by using five items for 'work-to-family conflict' and five items for 'family-to-work conflict' by Netemeyer, McMurrian and Boles (1996). 7-point likert scale response were provided start from1=strongly disagree to 7=strongly agree. The confirmatory factor analysis (CFA) of this two-factor solution indicated that the items were acceptable fit with χ^2 (32, N=267) =58.29 *p*>.05, RMSEA=.06, CFI= .99, RMR=.043 and GFI=.99. Plus, it is assumed that both factor had high reliability which α = .96 for work-to-family scale and α = .95 for family-to-work conflict.

Stress reaction. Three types of stress reaction, namely behavioral stress, somatic stress and cognitive stress were measured in this study. The instrument was adapted from Copenhangen Psychosocial Questionnaire version 2003 (Kristensen, Hannerz, Høgh, & Borg, 2005). Eight items represented behavioral stress, seven items represented somatic stress and four items represented cognitive stress. For behavioral and cognitive stress, 5 response scale was utilized [1=correct, 2=almost correct, 3=somewhat correct, 4=only slightly correct, 5=incorrect]. While, somatic stress employed 5-point likert scale items [1=correct, 2=almost correct, 3=somewhat correct, 4=only slightly correct]. The confirmatory factor analysis of these measures revealed that a three-factor solution was a good fit to the data with value χ^2 (144, N=267) =240.37 p < .05, $\chi^2/df=$ 1.67, RMSEA=.05, CFI= .97,

RMR=.04 and GFI=.91. For reliability analysis, behavioral stress ($\alpha = .90$), somatic stress ($\alpha = .90$) and cognitive stress ($\alpha = .92$) had a high reliability.

Job satisfaction. Job satisfaction was measured using Copenhangen Psychosocial Questionnaire version 2003 (Kirsten, Anne, & Finn, 2011). The questionnaire consists of seven positive item with 5-point likert scale response (1=Not relevant, 2=highly satisfied, 3=unsatisfied, 4=satisfied, 5=very satisfied). Confirmatory factor analysis of single-factor solution of the instrument showed an acceptable fit with χ^2 (15, N=267) =37.83, p<.05, χ^2 /df= 2.52, RMSEA=.08, CFI= .98, RMR=.02 and GFI=.96. The alpha coefficient of the instrument was 0.89.

Affective commitment. Seven items from affective commitment scale by Allen and Meyer (1990) were used to measure affective commitment. A 6-point likert scale from 1=strongly disagree to 6= strongly agree were used as a response scale. Confirmatory factor analysis for single-factor solution indicated that all items was acceptable fit with the factor loading with χ^2 (6, N=267) =8.042 *p*>0.05, χ^2 /df= 1.34, RMSEA=0.04, CFI= 0.99, RMR=0.03 and GFI=0.99. The reliability test indicated that the instrument had a high reliability with alpha cronbach value of .90.

Turnover intention. Burke (1988) defines turnover intentions as the situation where the workers had a thought to change the current occupation to the new occupation. The 3-item from Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979) was used to measure turnover intention. 7-point likert scale response were provided start from 1=strongly disagree to 7=strongly agree. The instrument had acceptable fit based on high alpha cronbach value which is .92.

3. **RESULTS**

3.1 Correlation result

Table 1 shows the results of correlation among the study variables. The correlation results indicated that both work-to-family conflict and family-to-work conflict significantly correlated with stress reactions. In specific, work-to-family conflict found to be strongly positive correlated with behavioral stress (r= 0.51, p<0.01), somatic stress (r= 0.40, p<0.01) and cognitive stress (r= 0.52, p<0.01). Meanwhile, family-to-work conflict showed a weak positive relationship with behavioral stress (r= 0.24, p<0.01), somatic stress (r= 0.19, p<0.01), and cognitive stress (r= 0.30, p<0.01). Furthermore, all the stress reactions were significantly correlated with work attitudes. Specifically, behavioral stress (r= -0.37, p<0.01) and cognitive stress (r= -0.34, p<0.01) and somatic stress (r= -0.28, p<0.01) showed a negative relationship with job satisfaction. The result also indicated that all the stress reactions were significantly correlated with affective commitment. Behavioral stress (r= -0.39,

p < 0.01), somatic stress (r = -0.31, p < 0.01) and cognitive stress (r = 0.38, p < 0.01) were found to have a moderate relationship with affective commitment.

For turnover intention, the results showed that all the types of stress reactions were significantly correlated with turnover intention. Behavioral stress was found to be strong positive correlated with turnover intention (r=0.40, p<0.01). While both somatic stress (r=0.32, p<0.01) and cognitive stress (r=0.33, p<0.01) were moderately positive correlated with turnover intention.

	1	2	3	4	5	6	7	8
1	(.96)							
2	.53**	(.96)						
3	.51**	.24**	(.90)					
4	.40**	.20**	.57**	(.90)				
5	.52**	.30**	.66**	(.90) .61 ^{**} 28 ^{**}	(.92)			
6	30**	25**	37**	28***	34**	(.90)		
7	(.96) .53** .51** .40** .52** 30** .30**	(.96) .24** .20** .30** 25** 13*	38**	31**	34 38** .33**	.41**	(.89)	
8	.30**	.24**	.66** 37** 38** .40**	.32**	.33**	34**	(.89) 49 ^{**}	(.92)

Table 1: Descriptive and correlation result

Note: 1- Work Family Conflict, 2- Family-To-Work Conflict, 3- Behavioral Stress, 4- Somatic Stress, 5- Cognitive Stress, 6- Job Satisfaction, 7- Affective Commitment, 8- Turnover Intention, $p < 0.05^*$, $p < 0.01^*$, $p < 0.001^{**}$. [Crobanch's alpha value appears in diagonal]

3.2 Testing of the hypotheses

Path analysis using structural equation modeling (SEM) were conducted to assess the mediating effects of the stress reaction (i.e. behavioral stress, cognitive stress, somatic stress) in relationship between work-family conflict and work related attitude (i.e. affective commitment, job satisfaction, turnover intention). The fit indices show that the model yielded a good fit which χ^2 (6, N=267) = 2.38 *p*>0.05, RMSEA=.071, CFI= .99, RMR=.04 and GFI=.99. [Final model of the research presented in Figure 2].

Figure 2: Final model

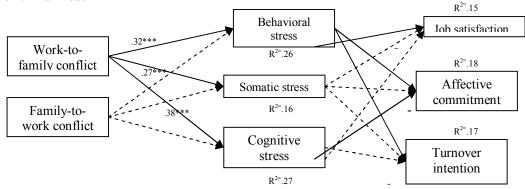


Figure 2 presents the final model of this study. The result indicated that only workfamily conflict was significantly affecting all dimensions of stress reaction (behavioral stress, β =.32, p<.001; somatic stress β =.27, p<.001; cognitive stress, β =0.38, p<0.001). However, none of the dimensions of stress reactions was significantly affected by family-work conflict. In specific, work family conflict altogether explain behavioral stress with 26 percent (R²=.26, p<.001), somatic stress with 16 percent (R²=0.26, p<.001) and cognitive stress with 27 percent (R²=0.27, p<.001). Thus, this research had accepted the hypotheses 1_a while rejected the hypotheses 1_b.

In terms of the effect of stress reactions on the work attitude variables, behavioral stress was significantly predicted job satisfaction (β = -.18, p<.01), affective commitment (β = -.27, p<.01) and turnover intention (β = -.19, p<.05). Behavioral stress explain 15% of the variance in job satisfaction (R²=.15, p<.001), 18% of the variance in affective commitment (R²=.18, p<.001) and 17% of the variance in turnover intention (R²=.17, p<.001). Cognitive stress was found to significantly predicted affective commitment (, β = -.19, p<0.05), but not job satisfaction and turnover intention. The result indicated that cognitive stress explained 18% of the variance in affective commitment (R²=.18, p<.001). However, somatic stress did not predict the entire work attitudes variable. Hence, H₂ was accepted, some of H₃ was accepted while H₄ was rejected.

In terms of the mediating effects analysis, the result indicated that only behavioral stress and cognitive stress mediates the effects of work-family conflict on the work attitude variables. More specifically, behavioral stress mediates the effects of work-to-family conflict on job satisfaction, affective commitment, turnover intention. While, cognitive stress only mediates the effects of work-to-family conflict on affective commitment, but not on job satisfaction and turnover intentions. Based on the result, some of H_5 were accepted.

4. DISCUSSION AND CONCLUSION

In this paper, the researchers had examined the mediation effects of stress reactions in the relationship between work-related stress and work attitude variables. Workfamily conflict was found significantly predict stress reactions (i.e. behavioural, somatic and cognitive stress) and work attitude variables (i.e. job satisfaction, affective commitment and turnover intention). However, family to work conflict did not predict the level of stress reactions. For the mediating role, this study found that only behavioral stress and cognitive stress were acts as the mediating variables.

The findings suggest that work-to-family conflict was a significant predictor of stress reactions. The result was in line with previous research which indicated that work-to-family conflict was likely to occur compared to family-to-work conflict

(Pleck, Stains, & Lang, 1980; Poelmans, 2001). High job demand is common issues in academic fields. Unbearable work demands function as inhibitor that triggers work-family conflict. In addition, interaction with students, additional works such as monitoring students, meeting, and marking papers and assignment was examples of demands that trigger work-family conflict. This result was supported by the border theory, where excessive /conflict with one domain will affect the other domains. Works found to have higher propensity to cross the borderline compared to the family. Therefore, possibly that 'weak' border may form between the interactions of work-to-family compared to family-to-work as consequence from spillover.

Blix (1994) indicated that most lecturers feels burden when they failed to met the expectation of the work assigned to them. The insufficient time caused them to bring their works to the home which later disturb the balance between works and family (Clark, 2000). Specifically, behavioral stress was found significantly mediating the relationship in between work-family conflict and work attitudes (i.e. job satisfaction, affective commitment and turnover intention). People's behavior plays more important role in behavioral stress. The experience of behavioral stress will reduce the academician interest in their works, become sensitive, arising communication problem and caused unhappy feeling which in turn causing negative work outcome. Conflicts with co-worker and upper management (behavioral-based conflict) will lead to the feeling of unhappy which in turn to reduce job dissatisfaction (Muhammad Sabra & Qiasar, 2009). Behavioral stress also affects the level of turnover intention among workers and decrease employees' commitment (Duxbury & Higgins, 2001; Karin & Birgit, 2007).

In addition, cognitive stress was found to mediate the relationship between workfamily conflict and affective commitment. High exposure to work-family conflict will make academician to be cognitively exhausted. Cognitive stress will caused them unable to think clearly, difficult to make decision and reduce concentration. The cognitive exhaustion will reduce emotional attachment between the academician and their organization. This is supported by previous research that found low level of emotional attachment will reduce the level of affective commitment (Lazarus & Folkman, 1984). The result was also in line with work/family border theory which postulated that failure to develop proper thinking will affect the emotional element (Clark, 2000).

4.1 Study limitation and future recommendation

One limitation of this study is the nature of the study that only based on crosssectional data. To strengthen the result, the researchers suggest future researcher to apply longitudinal study which had the ability to track changes over time. From the instrument perspectives, the researchers suggest future researchers to expand the work-family conflict scale into three sub-dimensions that are time-based, strain-384 based and behavioral based. By adopting this sub-dimension, specific effects of work-family conflict on work attitudes can be gained in the future.

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