Work Overload, Parental Demand, Perceived Organizational Support, Family Support, and Work-Family Conflict among New Zealand and Malaysian Academics

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Relationships between work overload and parental demands with work-family conflict were investigated among New Zealand and Malaysian academics. In addition, social support from the work and family domains were explored as moderators in the proposed relationships. Two public universities, one located in New Zealand and the other in Malaysia, participated in the study. Analysis of data gathered from 202 academic staff from New Zealand and 183 from Malaysia demonstrated similar findings concerning the positive relationships between work overload and work-to-family interference across the two samples. Contrary to prediction, parental demand was found to be unrelated to family-to-work interference in both samples. In addition, no evidence emerged for the moderating effects of perceived organizational support and the two forms of family support. Implications of the findings and suggestions for future research are discussed.

Work and family represent two central domains in the lives of many employed men and women. Several factors have contributed to a greater blurring of the boundaries between work and family (O'Driscoll, Brough, & Kalliath, 2004), including increased percentages of women in the workplace, more dual-earner couples and single parents, changed family role expectations, and greater use of technologies which can enable work to be conducted anywhere, anytime. In trying to simultaneously meet the demands and responsibilities associated with work and family, many individuals are likely to experience between-domain conflict. Finding time for multiple work responsibilities and balancing the demands of work and family have been identified as major issues of concern for academic staff at all career stages, especially for female academic staff (Sorcinelli, 2007). Comer and Stites-Doe (2006) highlighted the importance of work-family issues given the rising trend in the number of academic women. Nevertheless, even though work-family conflict has sometimes been considered as primarily a women's issue, changing definitions of fatherhood (Winslow, 2005) have increased expectations for men to share domestic responsibilities, which in turn may increase the likelihood of men (as well as women) experiencing more work-family conflict. More empirical research is needed to examine the predictors of work-family conflict regardless of gender.

Work-family conflict is posited to be bidirectional, such that work can interfere with family and family can interfere with work (Frone, Yardley, & Markel, 1997; Netemeyer, Boles, & McMurrian, 1996). Scholars (Adams, King, & King, 1996; Fu & Shaffer, 2001; Thomas & Ganster, 1995) have claimed that the two directions of work-family conflict have unique antecedents, with those for work-to-family interference emanating from the work domain and those for family-to-work interference from the family domain.

Most research in the area of work-family conflict has employed samples from developed Western nations like Canada (Burke & Greenglass, 2001), the Netherlands (Demerouti, Geurts, & Kompier, 2004), Spain (Carnicer, Sanchez, Perez, & Jimenez, 2004), Finland (Kinnunen & Mauno, 1998), and with the United States being predominant (Anderson, Coffey, & Byerly, 2002; Boyar, Maertz, Mosley, & Carr, 2008; Frone, Russell, & Cooper, 1992; Parasuraman & Simmers, 2001; Wadsworth & Owens, 2007). Several studies of work-family conflict in Asia have also been conducted, such as Hong Kong (Aryee, Fields, & Luk, 1999; Fu & Shaffer, 2001; Luk & Shaffer, 2005), Taiwan (Lu, Kao, Chang, Wu, & Cooper, 2008), Singapore (Aryee, 1992; Kim & Ling, 2001), and Malaysia (Ahmad, 1996; Komarraju, 2006; Nasurdin & Hsia, 2008; Noor, 2002). These investigations have either examined the validity of Western findings on work-family conflict or tested a model of work-family conflict which was specifically tailored to one particular nationality.

Realizing that how individuals in different countries experience work-family conflict may be culturally-bound (Luk & Shaffer, 2005), our aim in this research was to assess a model of the antecedents of work-family conflict in two very different countries: New Zealand and Malaysia. With a few exceptions (e.g., Hill, Yang, Hawkins, & Ferris, 2004; Spector, Allen, Poelmans, Lapierre, Cooper, O'Driscoll, et al., 2007; Yang, Chen, Choi, & Zou, 2000),

little attention has been devoted to comparing the predictors of work-family conflict across countries. Yang et al. (2000) examined the effects of work and family demands on work-family conflict in the United States and in China. Work demands did not differ significantly between the two countries and contrary to prediction, did not have a greater effect than family demands on work-family conflict in China. Similarly, Lu, Gilmour, Kao and Huang (2006) explored relationships between work/family demands, work-to-family conflict and family-to-work conflict, and wellbeing outcomes in the United Kingdom and Taiwan, and found a stronger positive relationship between workload and work-to-family conflict in the British sample. In contrast, sharing household chores was found to reduce family-to-work conflict for the Taiwanese sample, especially when the person reported high family demands than in the United Kingdom.

To our knowledge, this is the first comparison between New Zealand and Malaysia. We believe that these two nations are worth comparing due to their different ethnic, cultural and religious compositions. According to Ward and Masgoret (2008), cultural diversity is a reality in New Zealand and will increase in the future. Although European migration has contributed to its population, along with the indigenous Maori population, widespread labor shortages have resulted in the influx of other ethnic minorities such as Asians (especially Chinese and Indians) and those from Pacific countries. Future projections forecast significant growth in the proportion of ethnic minorities over the next 15 years, ranging from 28 percent (Pasifika) to 120 percent (Asians) (Ward & Masgoret, 2008). Despite this heterogeneity, Christianity is the largest religion in New Zealand (Ahdar, 2006).

Malaysia, a South-East Asian country, is also considered a multiethnic society. There are three main ethnic groups: Malays, Chinese, and Indians. Based on the Census 2000 (Haque, 2003), Malays and other indigenous groups constitute 65.1 percent of the population followed by the Chinese, 26.0 percent, Indians 7.7 percent and others 1.2 percent. In terms of religion,

60.4 percent of the population is Muslim, 19.2 percent Buddhist, 9.1 percent Christian, and 6.3 percent Hindu. Although Hofstede's (2001) clustering of countries indicates that Malaysia is high on collectivism whereas New Zealand has strong individualism, we expected the same patterns of relationships to exist between variables across the two countries since work-family conflict, demands associated with it, and work and family support are considered universal issues. Besides, following the unprecedented growth in the proportion of Asians in New Zealand (Hannis, 2009), we would expect Asian values to become more apparent in New Zealand's society.

Against this backdrop, our aim was to develop and test a model of the determinants of work-family conflict among academics in these two countries. We did not predict cross-country differences in the relationships between variables investigated in our study, but rather our intention was to determine whether the same pattern of relationships would emerge in New Zealand, which is predominantly (though not exclusively) individualistic, and Malaysia, which is predominantly collectivistic. Observing similar patterns of relationships across the two countries would be a step toward confirming the cross-cultural generality of the theoretical model tested here.

Theory and research suggest that stressors encountered in the work and family domains may have differential effects on the two forms of work-family conflict (work-to-family interference and family-to-work interference). A review of the literature suggests that two major contributors are *work demands* and *parental demands*. We therefore sought to examine the relationships between these two stressors (work overload and parental demands) and the two dimensions of work-family conflict among academics from New Zealand and Malaysia. Work overload occurs when work demands exceed an individual's abilities and resources to perform their work roles comfortably. According to Cardenas, Major, and Bernas (2004), overload becomes a stressor when the employee feels that they have too many responsibilities or tasks in a defined period. Work overload has been shown to directly

and positively affect work-to-family interference (Boyar, Maertz, Pearson, & Keough, 2003; Burke & Greenglass, 2001; Fu & Shaffer, 2001). When excessive demands occur in one domain (work), resources have to be borrowed from the other domain (family), leading to higher work-to-family interference. Therefore, we predicted that:

H1: Work overload will be positively related to work-to-family interference in both samples.

Similarly, one stressor that is most representative of pressure from the family domain is parental demand (Parasuraman, Greenhaus, & Granrose, 1992). As suggested by spillover theory (Zedeck & Mosier, 1990), extensive parental responsibilities are likely to make increased claims on the individual's time, resulting in family-to-work interference, hence parental demands are an important determinant of this direction of conflict (Aryee et al., 1999; Fu & Shaffer, 2001; Lu et al., 2008; Luk & Shaffer, 2005; Major, Klein, & Ehrhart, 2002; Parasuraman & Simmers, 2001). In general, parental demands are likely to vary based on the number and ages of children. According to Walls, Capella, and Greene (2001), large families are likely to be more demanding than small families, resulting in higher levels of work-family conflict. Younger children (infant or those of pre-school age) are likely to demand more of their parents' time, leading to greater parental demands compared to older children (Major et al., 2002; Parasuraman & Simmers, 2001). However, a study by Kim and Ling (2001) illustrated that having adolescent children can also induce greater work-family conflict. Although findings on the influence of parental demands seem to be mixed, it would be logical to expect that the more children one has who are directly dependent on the parents, the greater would be the family-to-work interference experienced by parents. Hence, we hypothesized that:

H2: Parental demands will be positively related to family-to-work interference in both samples.

Perceived organizational support and family support as moderators

Interest in social support arises because of its potential role in reducing

stress at the workplace and outside of work. The dominant hypothesis is that social support buffers the impact of stressors on psychological strain (Ganster, Fusilier, & Mayes, 1986). This is because social support serves as a resource or coping mechanism that can mitigate the aversive effects of stressors encountered in different domains (Parasuraman et al., 1992; Thomas & Ganster, 1995). In the work environment, social support can come from various sources such as supervisors and co-workers (Parasuraman et al., 1992), as well as the organization in general (Allen, 2001). Family-supportive policies (Thomas & Ganster, 1995) and a supportive work-family culture (Thompson, Beauvais, & Lyness, 1999) have been found to alleviate work-family conflict. Furthermore, O'Driscoll, Poelmans, Spector, Kalliath, Allen, et al. (2003) observed that perceived support from the organization was linked with reduced work-family conflict in a sample of New Zealand managers. Nevertheless, despite the fairly consistent evidence that supportive work environments may help to reduce work-family conflict, few studies have investigated the potential moderating role of perceived organizational support. Along with Allen (2001), we argue that a supportive work environment enhances a person's feelings of being valued, which will help to buffer the effects of work demands on work-family interference.

H3: The positive relationship between work overload and work-to-family interference will be weaker when perceived organizational support is high.

Similarly, if an individual perceives a high level of parental demand, social support from the family may be able to attenuate the impact of that source of strain. This is because family members have a unique opportunity to provide both socio-emotional support and instrumental (or tangible) support to the employee outside of the work environment (Adams et al., 1996). Emotional support includes empathic understanding and listening, affection, advice, and genuine concern for the welfare of the person (Aycan & Eskin, 2005). Instrumental support includes assistance received in facilitating day-to-day household operations (King, Mattimore, King, & Adams, 1995). The work-family literature has focused mainly on support given by one specific member of the family, especially the spouse (Erdwins, Buffardi, Casper, & O'Brien, 2001; Fu & Shaffer, 2001; Kirrane & Buckley, 2004), which was found to reduce work-family conflict. Besides spouse support, social support may be derived from other family members (such as parents, siblings, and relatives) or one's kin (Voydanoff, 2007).

Although several studies have demonstrated that family support lessens work-family conflict (Adams et al., 1996; Ford, Heinen, & Langkamer, 2007; Karatepe & Bekteshi, 2008), little attempt has been made to examine the moderating role of family support in the relationship between stressors and work-family conflict, and findings on the buffering effects of social support generally have been inconclusive (Dewe, O'Driscoll & Cooper, 2010). Instrumental and emotional support from the family may ease the burden of managing family responsibilities, which helps diminish the effect of parental demand on family-to-work interference. Therefore, we would expect that family support would weaken the positive relationship between parental demand and family-to-work interference. We expected that this would apply in both countries included in this study.

H4: The positive relationship between parental demand and family-to-work interference will be weaker when family support is high.

Methodology

Sample and Procedure

Data were collected from academic staff working in two public universities, one located in New Zealand and the other in Malaysia. A total of 547 online questionnaires were distributed to the academic participants in the university from New Zealand, and 202 responded (36.9% response rate). In the Malaysian university, a total of 921 questionnaires were distributed via the institution's intranet, of which 183 useable responses were received (19.9% response rate). Respondents were given about two weeks to respond to the questionnaires. To encourage participation, follow-up emails were sent one week following the initial invitation to participate.

The New Zealand sample comprised 43.3% males and 56.7% females. The participants consisted of NZ Europeans (66%), other Europeans (16.5%), NZ Maori (5.5%), Asians (2%) and others (10%). In terms of marital status, 80.5% were married or had partners. The percentage of respondents in each job category was: 13% (professors), 16% (associate professors), 39.5% (senior lecturers), 16.5% (lecturers), and 15% others (including senior tutors, teaching fellow, senior teacher, advanced teacher, and senior kaiwhakaako). Participants ranged in age from 26 to 67 years, with an average age of 48.7 years (SD=9.5). Average organizational tenure was 11.9 years (SD=8.4) whereas the average years of work experience was 15.6 years (SD=9.8).

The Malaysian sample included 41.9% males and 58.1% females, which was approximately the same distribution as the New Zealand sample. In terms of ethnicity, the sample consisted of Malays (66.5%), Chinese (23.5%), Indians (8.4%), and others (1.7%). A majority (81.5%) of the respondents were married. The job designations of the participants were: professors (4.4%), associate professors (23.9%), senior lecturers (29.4%), lecturers (34.4%), and others (such as language teacher and tutor) (7.8%). Participants ranged in age from 22 to 62 years, with an average age of 43 years (SD=8.2). Average organizational tenure was 12 years (SD=8.7) whereas the average years of work experience was 13.3 years (SD=9).

Measures

The online questionnaire included pre-existing measures of all the study variables. *Work-to-family interference (WFI)* was measured with four items adopted from Wayne, Musisca, and Fleeson (2004). A sample item is "My job reduces the effort I can give to activities at home". Responses to the items were made on a 5-point scale (1= strongly disagree to 5 = strongly agree). *Family-to-work interference (FWI)* was operationalized using four items again adopted from Wayne et al. (2004). A sample item is "Responsibilities at home reduce the effort I can devote to my job". Responses to the items were made on

a 5-point scale (1= never to 5 = all the time). *Work overload* was gauged via three items developed by Bolino and Turnley (2005). A sample item is "The amount of work I am expected to do is too great". Responses were made on a 5-point scale (1= strongly disagree to 5 = strongly agree). *Organizational support* was assessed with five items with the highest factor loadings adopted from Allen (2001). A sample item is "Offering employees flexibility in completing their work is viewed by this university as a strategic way of doing business". Responses to the items were made on a 5-point scale (1= strongly disagree to 5 = strongly agree). *Parental demand* was gauged by a single item relating to the number of children that that were directly dependent on the respondent. Responses to this single item were given on a 7-point scale (1= no children to 7 = more than 5 children). *Family support* was measured using a scale consisting of eight items adopted from the Family Support Inventory developed by King et al. (1995). The original inventory consisted of 44 items relating to two types of social support: instrumental assistance and emotional sustenance. However, in this study, four items with the highest item-total correlations associated with instrumental assistance and another four items with the highest item-total correlations associated with emotional sustenance were chosen. A sample item for instrumental support is "My family members do their fair share of household chores". Responses to the items were made on a 5-point scale (1= strongly disagree to 5 = strongly agree). A sample item for emotional support is "When I have a problem at work, members of my family express concern". Responses to the items were made on a 5-point scale (1= strongly disagree to 5 = strongly agree).

To assess the appropriateness of computing unidimensional scores for each of the major variables in this study except for parental demand, we conducted principal axis factor analysis, combining the criterion variables (work-to-family and family-to-work interference) together in one analysis, and the predictor variables together in a second analysis. With regard to the criterion variables, factor analysis revealed that the eight items loaded

cleanly on two factors with eigenvalues greater than one, as expected. The four WFI items loaded highly on the first factor whereas the four family-to-work interference items loaded highly on the second factor for both New Zealand and Malaysia. The correlations between the two factors were .32 (New Zealand) and .58 (Malaysia). Hence the WFI and FWI constructs were retained and each treated as unidimensional. The reliability coefficient for WFI was .78 in the New Zealand sample and .87 in the Malaysian sample. Likewise, the reliability coefficients for FWI were .79 (New Zealand) and .87 (Malaysia) respectively.

With regard to the predictor variables, factor analyses revealed the presence of five separate factors in both samples, corresponding to the constructs under investigation. All items loaded substantially onto their corresponding factor and not on other factors, confirming the distinction between the predictor variables. Results were identical across the two samples. The first factor consisted of three workload items. The reliability coefficients computed for this construct were .91 and .83 for New Zealand and Malaysian samples respectively. The second factor included the five items comprising perceived organizational support. The reliability coefficient for this variable was .83 in New Zealand and .86 in Malaysia. The eight family support items loaded on to two clear factors and corresponded with instrumental family support items and emotional family support items. The reliability coefficient for instrumental family support was .90 in the New Zealand sample and .91 in the Malaysian sample. Likewise, the reliability coefficients for emotional family support were .92 (New Zealand) and .95 (Malaysia) respectively. The single-item measure of parental demand (number of dependent children) was distinct from all the other items and constructs.

Hypothesis Testing

Since there were two criterion variables, a four-step hierarchical multiple regression analysis was conducted separately to examine the direct as well as the moderating effect of social support (from the work and family domain) on the proposed

relationships. Gender was controlled in the statistical analysis since it is considered an important background factor in work-family research, as noted by Eby, Casper, Lockwood, Bordeaux, and Brinley (2005).

Results

Descriptive Statistics

Descriptive statistics for academic staff in the two participating universities in New Zealand and Malaysia are presented in Table 1. Independent samples t-tests were conducted to examine significant differences between the two samples on each variable except for parental demands due to its categorical nature whereby cross-tabulation was carried out instead. New Zealand academics reported significantly higher scores than their Malaysian counterparts on only one variable, work overload, although both groups reported moderate levels of overload. Malaysian academics scored higher than New Zealand academics on the following variables: family-to-work conflict, parental demands, perceived organizational support, and instrumental family support. There were no significant differences between the two groups in levels of work-to-family interference (both reported relatively low levels) and emotional family support (both reported moderate support). As expected, reported levels of work-to-family interference were higher than those for family-to-work interference, in both samples.

Correlations among variables in the New Zealand and Malaysian Samples

Table 2 shows the correlation coefficients between the variables for the New Zealand and Malaysian samples. Some similar patterns of inter-correlations were observed among the two groups of respondents in the two countries. For the New Zealand sample, 10 out of 21 correlations were significant. Work-to-family interference was significantly correlated with family-to-work interference, work overload, and organizational support, but not with parental demand, instrumental family support, and emotional family support. Family-to-work interference was significantly correlated with work

Table 1. Means, standard deviations, and t-values for New Zealand and Malaysia

Country	New Zealand		Malaysia		
Variables	**Mean**	**Standard deviation**	**Mean**	**Standard deviation**	***t*-value**
Work Overload	3.76	1.03	3.49	0.92	2.70**
Organizational Support	3.02	0.80	3.26	0.75	-2.94**
Instrumental Family Support	3.65	1.02	3.86	0.86	-6.95**
Emotional Family Support	3.78	0.87	3.84	0.91	-0.60
WFI	2.89	0.89	2.72	0.91	1.86
FWI	2.03	0.73	2.19	0.83	-2.07*
Parental Demands	**Median**		**Median**		**Chi-Square**
					Value
	2		3		23.95**

Note: Asterisks indicate significance of differences in means using independent sample t-test except for parental demands; **p < 0.01; *p<0.05

overload, organizational support, parental demand, instrumental family support, and emotional family support. Besides, work overload was negatively and significantly correlated with organizational support. These results provide initial support for our *H1* and *H2* for the New Zealand sample. For the Malaysian sample, 16 out of 21 correlations were found to be significant. Work-to-family interference was significantly correlated with family-to-work interference, work overload, organizational support, instrumental family support, and emotional family support but not with parental demand. Family-to-work interference was significantly correlated with work overload, organizational support, parental demand, instrumental family support, and emotional family support. These results provide initial support for our *H1* and *H2* for the Malaysian sample. Work overload was significantly correlated with parental demand, instrumental family support, and emotional family support. Organizational support was positively and significantly correlated with both instrumental as well as emotional family support. Across both samples, these correlations lend initial support to our hypotheses. To further assess support for the direct and moderator hypotheses, a four-step hierarchical multiple regression analysis was conducted on each of the criterion variables (work-to-family and family-to-work interference) for the two samples.

Regressions of Work-Family Conflict on Work Demands and Organizational Support

In the first regression analysis, work-to-family interference served as the criterion variable. Step 1 incorporated the inclusion of gender as a control variable. In step 2, the predictor variable (work overload) was added. Step 3 entailed the inclusion of the moderator and finally, in step 4, the interaction term was included. Results from Model 2 in Table 3 report the direct relationship of work overload to work-to-family interference for the New Zealand and Malaysian samples respectively.

As shown in Table 3, gender had no significant effect on work-to-family interference in both samples. In the New Zealand sample, work overload accounted for an additional 27% of the variance in work-to-family interference. Work overload was found to be positively associated with work-to-family interference ($\beta = 0.53$, $p<.01$). Almost identical results were obtained for the Malaysian sample, where the increase in explained variance for work-to-family interference contributed by work overload was 26.0%. Work overload was significantly and positively related to work-to-family interference ($\beta = 0.51$, $p<.01$). Hence, our findings fully supported *H1* for both samples.

To test the moderating effect of organizational support, this variable was initially incorporated as a predictor in the second step of the regression analyses. From Model 3, organizational support was found to be negatively and significantly related to work-to-family interference for the New Zealand ($\beta = -0.18$, $p<.01$) and Malaysian ($\beta = -0.18$, $p<.01$) samples respectively. Further analysis using the interaction term between work overload and organizational support, as shown in Model 4 in Table 3, revealed that the interaction term was insignificant for both samples. Hence, *H3* was unsupported.

Regressions of Work-Family Conflict on Family Antecedents

To test *H2* for both samples, family-to-work interference was regressed onto the predictor variable from the family domain (parental demand). We initially dichotomized the construct into two categories based on the median value as follows: (0) no/low parental demand for those with 0-2 children and (1) high parental demand for those with 3 children and above. Step 1 incorporated gender as a control variable. In step 2, the predictor variable (parental demand) was added. Step 3 entailed the inclusion of the moderator and finally, in step 4, the interaction term was included. Results from Model 2 in Table 4 report the direct relationship of parental demand to family-to-work interference for the New Zealand and Malaysian samples respectively.

As shown in Table 4, gender had no significant effect on family-to-work interference for both samples. In the New Zealand sample, parental demand was not significantly associated with family-to-work interference, and accounted for only 1% of the variance in

Table 2. Correlations among the study variables for New Zealand and Malaysia

	New Zealand							Malaysia						
Variable	WFI	FWI	WO	OS	PD	IFS	EFS	WFI	FWI	WO	OS	PD	IFS	EFS
WFI														
FWI	0.39**							0.51**						
WO	0.53**	0.24**						0.53**	0.42**					
OS	-0.34**	-0.24**	-0.34**					-0.20**	-0.21**	-0.11				
PD	-0.09	0.10*	0.06	0.07				0.13	0.19*	0.16*	0.01			
IFS	0.02	-0.22**	-0.03	0.10	0.01			-0.23**	-0.38**	-0.23**	0.27**	-0.08		
EFS	0.06	-0.17*	0.04	0.09	-0.13	0.63**		-0.28**	-0.36**	-0.21**	0.27**	-0.06	0.64**	

** $p < 0.01$, * $p < 0.05$

WFI = Work-family interference

FWI = Family-work interference

WO = Work overload

OS = Perceived organisational support

PD = Parental demands

IFS = Instrumental family support

EFS = Emotional family support

Table 3. Regression of work-to-family interference on the work-related variables

	New Zealand					Malaysia			
	Work-to-Family Interference (WFI)					**Work-to-Family Interference (WFI)**			
Variables	β (Model 1)	β (Model 2)	β (Model 3)	β (Model 4)	Variables	β (Model 1)	β (Model 2)	β (Model 3)	β (Model 4)
Control variable					**Control variable**				
Gender	0.08	0.04	0.02	0.02	Gender	0.12	0.11	0.07	0.06
Predictor Variable					**Predictor Variable**				
Work Overload (WO)		0.53***	0.47***	0.76***	Work Overload (WO)		0.51***	0.48***	0.64***
Moderating Variable					**Moderating Variable**				
Org. Support (OS)			-0.18***	0.08	Org. Support (OS)			-0.18***	-0.14**
Interaction Term					**Interaction Term**				
WO x OS				-0.03	WO x OS				-0.07
R^2	0.01	0.28	0.31	0.32	R^2	0.01	0.27	0.30	0.32
Adj. R^2	0.00	0.28	0.30	0.30	Adj. R^2	0.01	0.26	0.29	0.31
R^2 Change	0.01	0.27	0.04	0.01	R^2- Change	0.01	0.26	0.03	0.02
F Change	1.38	76.63***	8.10***	1.31	F- Change	2.37	60.63***	7.37***	1.06

Note: Gender was coded: 0 (male);1(female); ***$p < 0.01$, **$p < 0.05$, p* <0.10. β = standardized regression coefficient

family-to-work interference. Likewise, in the Malaysian sample, parental demand did not have any effect on family-to-work interference, and the increase in explained variance for family-to-work interference was 4%. Hence, *H2* was unsupported.

To test the moderating effect of both forms of family support as stated in *H4*, instrumental family support and emotional family support were incorporated into the regression model as predictor variables in the third step of the regression analyses for the two samples. From Model 3 in Table 4, instrumental family support was found to be negatively and significantly related to family-to-work interference for the New Zealand (β = -0.21, *p*<0.05)

and Malaysian (β= -0.25, *p*<0.01) samples respectively. On the other hand, emotional family support was found to be negatively and significantly related to family-to-work interference for the Malaysian (β = -0.20, *p*<0.05) sample but unrelated in New Zealand. The two interaction terms between parental demand and the two forms of family support, as shown in Model 4 in Table 4, were found to be insignificant for both samples. Therefore, *H4* was unsupported.

Discussion

The present research explored the predictors of two dimensions of work-family conflict arising from both work and home domains in a New Zealand

and a Malaysian academic setting. Work overload and work-to-family interference were found to be positively related in both samples. This finding supports previous research using non-academic staff samples (e.g., Boyar et al., 2003; Burke & Greenglass, 2001; Fu & Shaffer, 2001; Frone et al., 1992).

Contrary to our hypothesis, there was no significant relationship between parental demand and family-to-work interference for both samples. This finding is consistent with a research undertaken by Hammer, Neal, Newsom, Brockwood and Colton (2005), who also reported a lack of relationship between parental demands (responsibilities associated with having to care for children at home) and work-family

Table 4. Regression of family-to-work interference on the family-related variables

New Zealand					Malaysia				
Family-to-Work Interference (FWI)					**Family-to-Work Interference (FWI)**				
Variables	β (Model 1)	β (Model 2)	β (Model 3)	β (Model 4)	Variables	β (Model 1)	β (Model 2)	β (Model 3)	β (Model 4)
Control variable					**Control variable**				
Gender	-0.01	-0.01	-0.06	-0.07	Gender	0.10	0.12	0.10	0.11
Predictor Variable					**Predictor Variable**				
Parental Demand (PD)		0.09	0.08	0.18	Parental Demand (PD)		0.11	0.13*	0.12
Moderating Variable					**Moderating Variable**				
Instrumental Family Support (IFS)			-0.21**	-0.11	Instrumental Family Support (IFS)			-0.25***	-0.34**
Emotional Family Support (EFS)			-0.03	-0.11	Emotional Family Support (EFS)			-0.20**	0.11
Interaction Term					**Interaction Term**				
PD x IFS				-0.16	PD x IFS				0.18
PD x EFS				0.11	PD x EFS				-0.16
R²	0.00	0.01	0.07	0.08	*R²*	0.01	0.05	0.20	0.23
Adj. *R²*	-0.01	-0.00	0.05	0.05	Adj. *R²*	0.01	0.04	0.18	0.20
R² Change	0.00	0.01	0.06	0.01	*R²*- Change	0.01	0.04	0.15	0.03
F Change	0.03	1.40	6.17***	0.82	*F*- Change	2.01	0.72	17.02***	0.57

Note: Gender was coded: 0 (male);1(female), parental demand was coded:0(no/low parental demand); 1 (high parental demand) ; ***p < 0.01, **p < 0.05, p* <0.10. β = standardized regression coefficient

conflict in a US sample. One possible explanation for our findings may relate to the relatively small family size for the two samples. An inspection of the demographic attribute of the sample revealed that in the case of New Zealand, among those who are married or have partners, 40 percent of them had no children. An additional 19.4 percent had only one child. For the Malaysian sample, among the married ones, 11.1 percent had no children. An additional 18.8 percent had one child with another 24.3 percent having two children. These findings seem to suggest that the two samples may be experiencing relatively lower parental demands, which may not be sufficient to induce family-to-work interference.

Organizational support did not emerge as a significant moderator of the relationship between work overload and work-to-family interference for both samples. One plausible explanation is that organizational support was perceived to be modest for both samples judging by the mean scores. It appears that workload tend to increase work-to-family interference among academics regardless of support. Perhaps, given the increasing global challenges facing faculty members relating to their professoriate, the student body, and the nature of teaching, learning, and scholarship, highlighted by Sorcinelli (2007), perceptions of their institutional support may not be viewed as salient in reducing the effect of work overload on levels of work-to-family interference.

Although instrumental family support showed a negative relationship with family-to-work interference in both samples, the negative effect of emotional family support on family-to-work interference was only demonstrated in the Malaysian sample. These findings reaffirm past findings about the ameliorating influence of support from family members (Adams et al., 1996; Ford et al., 2007; Karatepe & Bekteshi, 2008). Instrumental and/or emotional support is likely to reduce the negative spillover from family to the work domain. When an individual receives practical help with household chores and family responsibilities, feelings of stress and strain associated with looking after the family will be reduced, which in turn will lead to lower

family-to-work interference.

Contrary to our expectation, both forms of family support did not emerge as significant moderators of the relationship between parental demand and family-to-work interference for both samples. As mentioned earlier, one possible reason for these findings may relate to the relatively low parental demands for the two samples. Despite the fact that the levels of both forms of support were found to be slightly above moderate, these variables failed to buffer the effect of the burden of childcare on family-to-work interference.

One major implication of the present study is that to reduce work-to-family interference, tertiary institutions should focus on addressing work overload. It is essential that employers provide mechanisms for employees to cope with their work demands. In addition, support at the workplace is important in reducing the conflict arising from the work interface. The similarity in findings across both samples highlights the importance of developing a family-supportive work environment within institutions of higher learning. Creating policies and programs that make it feasible for academic staff to blend their careers and personal lives demonstrates commitment and support by the employer. According to Rhoades and Eisenberger (2002), when employees believe that their organization cares about them and is able to fulfil their socio-emotional needs, they may reciprocate via increased affective commitment, performance, and reduced turnover.

Similarly, academics holding administrative positions, such as deans and heads of departments, play a pivotal role in the effective implementation of work-family policies and programs, by enabling academics to utilize work-family policies and programs available and by reinforcing a culture which emphasizes a balance between work and family lives. Furthermore, deans and department heads can display sensitivity to the work-family needs of their staff, taking into account these needs when determining workloads and work schedules, and when assigning administrative roles and responsibilities. Unlike many other organizational contexts, the academic environment has

the advantage of permitting a high level of flexibility and personal control, which have been shown to be closely affiliated with reduced work-family conflict and increased well-being (Anderson et al., 2002; Frone et al., 1997).

To further reduce interference arising from the family into the work domain, family members can also play an active role by providing instrumental and emotional support to academics. Assistance rendered by one's spouse or other close family members (such as parents and siblings) is likely to reduce the strain and demands emerging from household chores and parental demands. Having someone to take care of the children and perform household chores at home is likely to lower one's physical and mental burden, which in turn helps mitigate the negative spillover from family to work. Likewise, affection, empathy, and understanding by members of one's family would help alleviate family-to-work interference.

Limitations of the Study and Suggestions for Future Research

This study has certain limitations. First, participants were academic staff teaching at one particular public university in each country. These institutions may have features which are not shared by other universities in the respective countries, and we cannot be certain that the findings obtained here would generalize to staff at other university campuses in New Zealand and Malaysia. Although we have no reason to suspect substantial differences across universities, surveying academic staff in other universities in these two countries would be necessary to confirm the generality of the present findings.

A second potential limitation relates to our measure of parental demands. We measured parental demands using a single item relating to the number of children who are directly dependent on the respondent. This may have hampered systematic examination of the relationships between the predictor variables and work-family conflict.

Third, a considerable proportion of variance in the two dimensions of work-family conflict remained unexplained in our analyses. Specifically, work overload accounted for about 26-27% of the variance in work-to-family

interference in both countries. Likewise, parental demand accounted for very little (about 1-4%) variance in family-to-work interference in both samples. Although the variance accounted for is similar to that obtained in other studies of work-family conflict, future research is needed to identify other contributors to work-family (or work-life) conflict among academics. These could include the specific roles engaged in by academics, the amount of administrative and managerial responsibility they are expected to take on, work-related travel, and a range of other work-related variables. Based on past studies of workaholism (Russo & Waters, 2006) and work-family climate (Kossek, Colquitt, & Noe, 2001), it would also be informative to explore these variables as possible moderators in the relationships between work-family conflict and its predictors.

Finally, as with many other studies in this field of research, the present investigation was based entirely on self-reports of all variables. To a large extent, reliance on this methodology is necessary, as the variables being explored are subjective in nature. However, future research would benefit from obtaining more objective data on variables such as job performance and absenteeism, which may also be affected by work-family conflict (Hammer, Bauer & Grandey, 2003; Witt & Carlson, 2006), and which can exert an impact on an organization's overall productivity and effectiveness.

Conclusion

Despite its limitations, the present investigation carried out among academic staff working in two public universities, one located in New Zealand and the other in Malaysia, enhances our understanding of the predictors of work-family conflict. Despite the differing economic, cultural and social contexts, there was some similarity in results across respondents in the countries. In brief, work overload was associated with higher work-to-family interference in both samples. Likewise, parental demand was found to be unrelated to family-to work interference in both samples. In terms of moderating effects, organizational support was unable to buffer the effect of work overload on

work-to-family interference in both samples. Similarly, both forms of family support were unable to moderate the influence of parental demands on family-to-work interference in both samples. Since the nature of academic work is boundary less, the potential for conflict at the work-family interface is high. Given the key role of tertiary education in the career advancement of future generations, it is important for institutions of higher learning to understand factors that can trigger conflict between work and family among their faculty members.

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