WORK-FAMILY BALANCE:
THE 3-WAY INTERACTION EFFECT OF ROLE DEMANDS, COLLECTIVISM VALUE AND ETHNICITY

Azelin Aziz,PhD[1]
School of Business Management
Universiti Utara Malaysia
azelin@uum.edu.my

Artemis Chang,PhD
School of Management
Queensland University of Technology
a2.chang@qut.edu.au

ABSTRACT

Work and family are experienced somewhat differently across culture. This paper examines whether the relationship between role-demands and work-family balance (WFB) experience across ethnicity is influenced by the groups' collectivism value. A total of 324 female teachers were sampled. Using a hierarchical regression analysis, some support was found that the collectivism value do moderate the role demands-WFB relationship. Moreover, evidence was found that, to some extent, the collectivism moderating influence does vary among the different ethnic groups.

Field of Research: Work-family interface, cultural value, ethnicity

----

1.   Background of the study

Work-family experience has received remarkable interest from researchers primarily due to the changes in workforce composition. Specifically, there is a global trend of women's increased participation in the workforce. This is coupled with the prevalence of dual-career earners and single-parent families (Aryee, Srinivas & Hwee, 2005; Hansen, 1991), which means more employees are now combining work and family roles.

Given that Western countries had formerly experienced changes in the workforce composition, it is not surprising that many of the work-family studies were established in the West (Cohen & Kirchmeyer, 2005; Poelmans et al., 2003) – be it from the conflict, balance or enrichment perspective of work-family experience. Nevertheless, these changes in the workforce composition are also apparent in non-Western nations, such as Malaysia, where the statistics for 2010 showed that women comprise more than 4 million of the Malaysian workforce. Given this scenario, it is also important to understand how these people of non-Western nations experience their work and family lives. The findings from the West may not be simply generalised to other settings as one's experience with work and family is very much influenced by the larger social, cultural, and political context of the given country (Lewis & Ayudhya, 2006; Westman, 2005). Consequently, cross-cultural work-family studies started to emerge, i.e. studies that examine the differences and similarities

[1] The corresponding author

between two or more countries or ethnic groups, and those that represent a non-Western perspective within one country (Aycan & Kanungo, 2001).

While progress has been made in this perspective, some limitations are apparent. First, although researchers have drawn on the differences in cultural value as an underlying rationale for the importance and relevance of work-family research outside the western context, the majority of these studies merely theorised this cultural influence without explicitly measuring it in their design (Aycan, 2008). As such, one cannot be certain that the cultural attribute plays a role.

Another limitation is that past studies mainly focused on cross-country comparisons, which has resulted in cultural differences being equated to national differences. It is believed that the approach of equating culture with countries is inappropriate for those countries comprised of diverse ethnic groups (Cohen & Kirchmeyer, 2005), particularly if each ethnic group represents a significant percentage of the total population. This is because cultural variations exist across ethnicity (Franklin, 1984), thus equating culture with country leads to all being combined in one group. Consequently, it might result in a faulty representation of the culture of a given country. For this reason, it is necessary to extend the existing literature beyond the country boundary by connecting culture with ethnicity. After all, past research has found evidence that people of different ethnicity experience work and family somewhat differently. However, since these studies only measured membership of a particular cultural group (i.e. ethnicity) rather than measuring the cultural variables, there is not enough evidence to say that these differences are due to the differing cultural values of the groups.

The present study aims to fill these gaps in the work-family cross-cultural literature, i.e. to determine if the variation in the impact of work and family demands (together termed 'role demands') on work-family experience (work-family balance in this case) in ethnicity is influenced by the cultural differences of the groups. Since the differences in the individualism-collectivism value have most often been ascribed to the variations in work-family experience across culture, the present study focuses on this cultural attribute, specifically, on the aspect of the collectivism value. To examine this issue, the Malay and Chinese ethnic groups of Malaysia are used as a proxy for comparison. The Chinese, who are technically a "minority" group, represent more than a quarter of the Malaysian population (Department of Statistics Malaysia, 2008). While acculturation between the Malays and Chinese is minimal, living under the same economic and social system means that these ethnic groups also have similarities with each other. Therefore, comparing the Malays and Chinese of Malaysia provides an insight into the extent of similarities and differences between the two culturally distinct groups residing under the same national system.

In summary, the objective of this study can be described as follows:

1. To determine if the role demand-WFB relationship is influenced (moderated) by the collectivism value. If so, does this effect vary between groups of different ethnicity?
2. To determine whether the collectivism value of the Malay and Chinese Malaysians is significantly different.

2. The Malaysian Setting

Malaysia is well known for its multiracial ethnicity. There are three main groups: Malays constitute about 53 per cent of the population; Chinese, 26 per cent; and Indians, 8 per cent. The remainder of the population consists of numerous ethnic minorities, and indigenous and tribal people (Department of Statistics Malaysia, 2008). With the growth of the economy, new employment

opportunities are created. The overall trend of women's participation in the labour force in Malaysia is increasing (Department of Statistics Malaysia, 2010). For these women, being employed poses a new challenge in their lives. Traditionally, they were responsible for performing household duties, such as meal preparation, laundry work and the upbringing of children. When women take on paid employment, they take on the role of an employee while maintaining their traditional roles of housewife and mother (Greenglass et al., 1989). This is because, in many non-Western countries, such as Malaysia, gender role ideologies remain more traditional (Westman, 2005). Men are assumed to be the primary breadwinner, while women are expected to bear the primary role of homemaker and child-carer in the household.

For these employed women, combining the work and family roles becomes even more challenging, as there are limited work arrangements available to them. In Malaysia, labour laws are under the jurisdiction of the Malaysian federal government. Jobs in the formal sector are mostly fixed hours during workdays of nine-to-five. Thus, like their male counterparts, the majority of women employees also work long hours.

In a situation where work arrangements are limited and traditional gender roles are prevalent in the society (Noor, 1999), combining work and family roles is particularly challenging for employed women in Malaysia. These women are likely to experience overload and conflict in trying to balance their responsibilities in the work and family domains. As such, WFB has become an issue of relevance to be investigated in this society.

3. Work-Family Balance

There are many work-family constructs in the literature. Although related, they are distinct constructs tapping different aspects of work and family interactions, and, thus, should not be used interchangeably. In this paper, the term work-family experience will be used to represent a wide range of work-family inter-relationships (which includes conflict, balance, enrichment, etc.). Otherwise, specific terms will be used, for example the work-family balance.

By far the most common explanation for the nature of the work-family interrelationship is derived from the perspective of role theory (Greenhaus & Beutell, 1985; Kahn et al., 1964). Role theory is generally discussed from the two perspectives of scarcity and the enrichment. The scarcity perspective assumes that individuals have a fixed amount of psychological and physiological resources to expend on their role performance. Thus, involvement in multiple roles can impair one's functioning due to conflicting demands on these resources, or incompatible behaviours among roles (Gutek, Searles & Klepa, 1991). Studies from the scarcity perspective are often known as "work-family conflict" (WFC) research. Recognising a preoccupation with the conflict perspective, researchers called for a more balanced approach that recognises the positive effects of combining the work and family roles (Barnett, 1998; Frone, 2003; Greenhaus et al., 2003), which is where research on the enrichment perspective comes into play. Likewise, research from the balance perspective, termed "work-family balance (WFB)", has also occurred.

The most widely held interpretation of WFB is a lack of conflict or interference between the work and family roles. However, the mere absence of conflict may not adequately capture the positive aspects of the work-family interface that are likely to contribute to a balanced work-family arrangement (Frone, 2003). As such, scholars have suggested a more comprehensive definition of WFB consisting of several dimensions, for example, Clark (2001) defined WFB as a "satisfaction and good functioning at work and at home with a minimum of role conflict", while Greenhaus et al.

(2003) defined it as "the extent to which an individual is equally engaged in – and equally satisfied with – his or her work role and family role". Several other scholars described balance as "when there are low levels of inter-role conflict and high levels of inter-role facilitation" (Frone, 2003), "the degree to which an individual is able to simultaneously balance the temporal, emotional, and behavioural demands of both paid work and family responsibilities" (Hill et al., 2001), "achieving satisfying experiences in all life domains, and doing so requires personal resources such as energy, time and commitment to be well distributed across domains" (Kirchmeyer, 2000), and "the tendency to become fully engaged in the performance of every role in one's total role system, to approach every typical role and role partner with an attitude of attentiveness and care" (Marks & MacDermid, 1996). Although these definitions are not entirely consistent with one another (Greenhaus et al., 2003; Grzywacz, Butler & Almeida, 2008), they depict a similar connotation of balance that is the successful management and juggling of multiple roles – in this case, the work and family roles.

In the present study, the WFB conceptualization was initially based on the definition proposed by Clark (2001) that is the "satisfaction and good functioning at work and at home with a minimum of role conflict" (p.349), forming five dimensions or indicators of WFB: work satisfaction, family satisfaction, work functioning, family functioning and role conflict. After some preliminary interviews, slight modification was made to suit the study context – taking into account inputs found from the interviews. Specifically, work functioning and family functioning in the Clark's model was replaced with the work obligation and family obligation dimensions respectively, as the majority of the interviewees view WFB from this perspective, i.e. being able to fulfil work and family obligations. Given that in the literature WFB was commonly conceptualised as the lack of conflict, in this paper, WFB is measured from the role obligation and conflict/interference dimensions.

4. Role Demands and Work-Family Balance

Determinants of various work-family experiences reside in both the work and family roles. Increased demands from work or family (role demands) are potentially detrimental to individual psychological health as well as job attitudes (Lu, Gilmour, Kao & Huang, 2006; Spector et al., 2004; Yang et al., 2000). It is a well-documented source of pressure experienced by employees when balancing work and family (Lewis & Cooper, 1987). Role demands are those aspects of roles that require the individual's resources of time, energy, and attention.

Past studies have measured role demands in terms of various facets. In the work domain, demand has mostly been attributed to the number of hours worked, workload, days worked per week, overtime and work schedule. In the family domain, demand has been associated with the number and age of dependents in the household, hours spent on household chores, childcare hours and spouse employment (Lu et al., 2006; Poelmans et al., 2003; Voydanoff, 2004). The general findings of past studies show that role demands relate negatively and positively with the positive and negative outcome measures, respectively. For example, work hours and workload are found to increase the perception of work-interfering-family (WIF), while the age of dependents in the household and hours of household chores increase the perception of family-interfering-work (FIW). In contrast, stressors in work, such as work involvement, work hours and WIF reduce job satisfaction, while family time demand, family involvement and FIW reduce family satisfaction (Carlson & Kacmar, 2000; Foley, Yue & Lui, 2005; Lu et al., 2006).

Past studies observed the relationship between role demands and outcome variables from within-domain and cross-domain perspectives. However, it has been observed that role demands have stronger effects on outcome variables associated with the respective domain (Biggs & Brough,

2005; Carlson & Kacmar, 2000). That is, studies have revealed that demands arising from the work domain are consistently related to the work domain outcome, while stressors from the family domain are consistently related to the family domain outcome. As such the present study focuses on within domain effects.

In line with past research, it is inferred that higher role demands limit the ability of individuals to fulfil all role expectations or obligations. Accordingly, an individual's perception that the role would hinder his or her role performance in other domains is increased. In particular, the following hypotheses are proposed:

H1a-b: Work demand is negatively associated with (a) work obligation, and is positively associated with (b) work-interfering-family (WIF)

H2a-b: Family demand is negatively associated with (a) family obligation, and is positively associated with (b) family-interfering-work (FIW)

5. The Cultural Influence: Individualism-Collectivism

In the majority of research, cultural value differences are examined through cultural dimensions as opposed to observing a specific cultural attribute, such as honesty, self-direction or benevolence. This is because the dimensions show validity; they are at the right level between generality and detail; they establish a link among individual, group, and societal level phenomena; and they are easy to communicate (Aycan, 2008). Comparatively, Hofstede's cultural dimensions receive most reference in cross-cultural research. Of all Hofstede's dimensions, the individualism-collectivism (I-C) construct has most often been examined in work-family research, as it is deemed to contribute to how people view the interrelationship between these two roles.

In general, an individualistic culture may be defined as a loosely-knit social framework in which people are expected to look out for themselves and those of their immediate family. Individuals are expected to stand on their own feet, and not expect protection from any group (e.g. family, work group, communities). Individuals only take responsibility for their own actions and are disinclined to share the problems of others (Triandis, 1989). The self is seen as autonomous and separate from the group. Individualists also strive to achieve personal goals, and, in this culture, competition is acceptable. According to Schein (1984), in this culture, an individual's career connotes personal ambition and achievement.

In contrast, collectivism describes a society in which people are integrated into strong, cohesive groups, which throughout people's lifetimes continue to protect them in exchange for unquestioning loyalty (Hofstede, 2001). In a collectivist culture, the self is defined as part of the group, in which people rely on the membership of groups for identity and status. It entails an obligation on the part of individuals to pursue the common interests of the group, and to subordinate individual goals to the goals of the group (Hui & Triandis, 1986). Relationships are of the greatest importance for collectivist cultures. They also value cooperation and group harmony and dislike interpersonal competition within the group (Kim et al., 1994). In this culture, an individual's career is seen as being for the welfare of their group (Yang et al., 2000).

Differences in I-C orientation have implications for how people perceive the interrelationship between work and family domains. Given that individualists value independence and the self is perceived to be autonomous and separate from the group, individualists are more likely to see

group and personal domains as unrelated (Triandis, 1989). They may prefer a clear separation between different life domains, presumably because they believe individuals can function successfully in one without any influence from the other (Schein, 1984). In contrast, where the group is the basic unit of existence for the collectivist, integration between the work and family unit is more likely (Schein, 1984; Yang et al., 2000). These differing views on work and family interrelationship will influence an individual's perceptions as to whether different life domains (i.e. work and family) interfere or support each other, and, consequently, affect how the competing demands from different life roles are perceived.

6. The Moderation Effects of Individualism-Collectivism

Given that collectivists perceive work and family as interdependent, involvement in the work domain is likely to be viewed as contributing to the family rather than competing with it (Yang et al., 2000). Thus, spending excessive resources (e.g. time, energy, attention) in the work domain is less likely to be perceived as detrimental to the family. For example, working extra hours would potentially be seen as contributing more income to the family. In contrast, individualists who view work and family as independent domains would perceive spending extra hours at work as harmful and taking away time from the family.

For that reason, there is a tendency for individualists to perceive the high demand made by the work domain as preventing them from tending to the family, while seeing the high demand made from the family domain as hindering their advancement at work. As a result, when work or family demand is high, individualists will experience more conflict than the collectivists. Conversely, since collectivists view work and family as interrelated, they are more immune to the experience of conflict when there are demands made by both (Ishii-Kuntz, 1994). Social support from the family is believed to be more available in this group, hence, when role demands are high, collectivists will experience less conflict and lower perception of an inability to fulfil role obligations than the individualists. The study of Lu et al. (2006) somewhat supported this assumption. In particular, Lu et al. compared British and Taiwanese samples and found that there was a stronger positive relationship between workload and WFC, as well as a stronger positive relationship between sharing household chores and FWC in the British sample (assumed to have an individualistic value) than for the Taiwanese sample (assumed to have a collectivistic value).

In line with this view, high work and family demands are expected to be perceived more negatively by those with a more individualistic value than those with a collectivistic value, consequently, resulting in unfavourable effects on work-family experience in the former individuals. Taking into account that Malaysia is generally a collectivist nation, the following 2-way moderation hypotheses are proposed based on the collectivism dimension:

> *H3a-b: The relationship between work demand and WFB dimensions of (a) work obligation, and (b) WIF, is weaker when collectivism increases*

> *H4a-b: The relationship between family demand and WFB dimensions of (a) family obligation, and (b) FIW, is weaker when collectivism increases*

The main expectation in this study is that the moderation effects of the collectivism value would differ according to the ethnic group. The following section presents the justification.

7. Collectivism value and Ethnicity

As with other eastern nations, the ethnic groups in Malaysian are generally of the collectivist type. They are strongly attached not only to their immediate family, but also to their extended family. Historically, the Malays lived in rural areas. Their culture has a history of communal living, where villagers traditionally cooperated in agricultural tasks or in the building of communal facilities (Kennedy, 2002). The close-knit social unit of the village has produced a strong community spirit (Sendut, Madsen & Thong, 1990), which, in turn, provides the foundation for Malays to develop a sense of responsibility to help friends, relatives and neighbours (Lim, 1998). Malays are often described as hospitable, peace-loving, and charitable. They are concerned about the effect of their actions on the feelings of others and take care not to upset others (Goddard, 1997). Cooperation is still important to Malays, and, furthermore, the teachings of Islam, which emphasise solidarity and a sense of belonging, are consistent with this value. In organisations, the Malays respond better to productivity increases if they see benefits accruing not only to the organisation but also to their family, community and nation. The concern for collective well-being is further reinforced by the low importance placed on assertiveness. The culture discourages individual displays of assertive or confrontational behaviour, and values self-respect or "face", politeness, sensitivity to feelings, and relationships (Abdullah, 1992).

Compared to the Malays, the Chinese Malaysians are believed to hold fewer collectivist values. This is because the Chinese are more exposed to values from the West, which are more individualistic in nature. The findings from Buda and Elsayed-Elkhouly (1998) support this assumption. Part of their study was to identify the level of collectivism among the Arab population by examining Arab samples from Egypt and the Gulf States. For the most part, Arabs from Egypt and the Gulf States reside in a collectivistic culture. The findings revealed that differences do exist in the collectivism orientation within these Arab samples. The Arabs from Egypt were found to be less collectivist than the Arabs from the Gulf. It was argued that because the Egyptians are more modern, and had greater exposure to Western culture, their cultural values have changed towards being less collectivist. In Malaysia, economic and business activities are dominated by the Chinese (Rashid, Anantharaman & Raveendran, 1997). Increasing foreign investment and joint ventures, together with the country's drive towards a higher level of industrialisation and economic prosperity, have been associated with a "Westernisation" of many management practices, work values, life values and the like. Given that in Malaysia the Chinese dominate these activities, it is reasonable to expect that their collectivistic value might be weaker than it is for the Malays. Thus, the following hypothesis is proposed:

> *H5: Generally, the degree of collectivism in the Malays and the Chinese differs, such that the collectivism value is stronger among the Malays than the Chinese*

In line with hypothesis 5, that the Malays are believed to have a stronger collectivism value than the Chinese, the stronger collectivism buffering effects on the role demands-WFB relationship would be observed more in the Malay group than in the Chinese group, as represented by the 3-way moderation hypotheses below:

> *H6a-b: The moderating effect of collectivism on the relationship between work demand and WFB dimensions of (a) work obligation, and (b) WIF, will be stronger for the Malays than the Chinese*

H7a-b: The moderating effect of collectivism on the relationship between family demand and WFB dimensions of (a) family obligation, and (b) FIW, will be stronger for the Malays than the Chinese

Figure 1 below presents the research framework for this study.
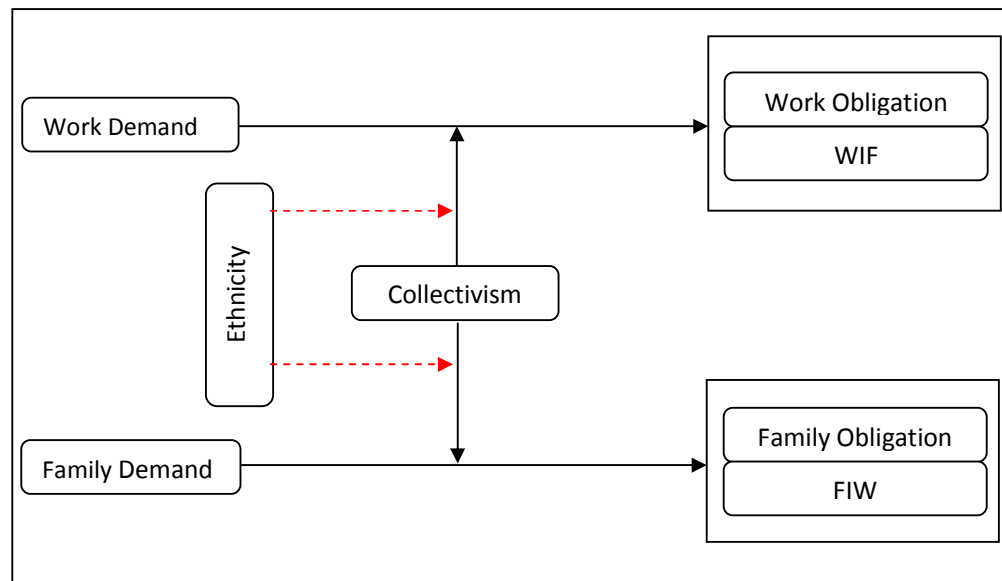
Note: WIF= work-interfering-family, FIW= family-interfering-work

8. Methodology

8.1 Participants and procedure

The participants were female teachers of Malay and Chinese ethnicity from 25 schools in the northern region of Peninsular Malaysia. These schools were selected upon their agreement to participate in this study. Women in the teaching profession were sampled due to the widely-held assumption in Malaysia that women enter this profession to maintain a good balance between work

and family life. In this regard, these women can be considered to have developed their own views of what a balanced work-family life is like, and are thus considered to be an ideal group to sample.

Written applications were sent to the school administrators requesting permission to distribute the questionnaires in their schools. All the schools chosen are categorised as "Grade A" schools, which means they have high student enrolment. Hence, it is assumed that they also have a large number of teachers in the school. The number of questionnaires placed or distributed at each school was determined by the school representative and also subject to the number of available participants in the school at that time. Some school representatives requested a minimum number of questionnaires to be placed at their schools. An alternative data collection technique, referred to as the personal networking technique, was also employed to increase the number of participants. The networking technique involved distributing questionnaires to friends and colleagues (Casper, 2000) who met the study criteria.

Overall, the participants in this survey numbered 324 female teachers – about 54% Malay and 45% Chinese. On average, the Malay participants were somewhat younger than the Chinese. For the Malays, the majority were in the 30-34 year age group (26.9%) and had an average job tenure length of 11 years, while the majority of the Chinese participants were in the 45-49 year age group (27.9%) with an average job tenure length of about 16 years. The majority of the Malays (57.7%) had preschool-aged children in their household as opposed to the Chinese (27.5%). Although the majority of Malay and Chinese participants reported not having a third party person living in their household, more Chinese than Malay participants (38.9%) indicated having a third party person in the household (27.6%). The Chinese participants also had a much higher average monthly household income of RM7,260 compared to RM5,443 for the Malays.

8.2 Instrumentation

Work demand (WDD) and family demand (FDD)
The work and family demand constructs were measured perceptually – primarily adapted from Boyar et al. (2007). One of the perceived work demand items was dropped from the original scale to reduce redundancy with another item. In the present study, both scales consisted of four items each. A sample item for the perceived work demand is: "I feel like I have a lot to do at work". A sample item for perceived family demand is: "I have a lot of responsibility in my family". In the present study, the Cronbach's alpha values for the WDD and FDD constructs were 0.90 and 0.89, respectively.

Collectivism
The scale developed by Singelis, Triandis, Bhawuk and Gelfand (1995) was adapted for this study. Only three items measuring family collectivism facets were used. In the present study, this construct had an alpha of 0.68. This value was slightly below the cut-off of 0.70, and was deemed close enough to be retained in the model.

Work-family balance
The present study measured the WFB construct across two dimensions – role interference (conflict) and role obligation. In total, there were four subscales measuring different dimensions of WFB.

Work-interfering-family (WIF) and family-interfering-work (FIW) dimensions

WIF and FIW were assessed by two scales developed by Netemeyer, Boles and McMurrian (1996). The only adaptation is that "spouse/partner" in one of the items was substituted for "family" in order to capture a wider scope of responsibilities in the family domain. Although Clark's (2001) study did measure "work-family interference", the measure used was a global measure that did not differentiate the direction of influence between work and family domains. Therefore, it was not adopted in this study. A total of five items measured WIF and another five items measured FIW. A sample item from the WIF is: "The demands of my work interfere with my home and family life". A sample item from the FIW scale is: "The demands of my family interfere with work-related activities". In the present study, the internal reliability coefficient for the WIF scale was 0.93, and 0.87 for the FIW scale.

Work obligation and family obligation dimensions

Measurements for the work obligation and family obligation dimensions were developed for this study, corresponding to the WFB conceptualisation derived from the interviews conducted in the early stage of this research. The work obligation (WRO) and family obligation (FRO) scales each consisted of four items. A sample item from the WRO dimension is: "I think I have given enough attention to my work", while the sample item from the FRO dimension is: "I am always able to fulfil my duties at home satisfactorily". The WRO construct had an alpha of 0.73 while the FRO scales produced an alpha of 0.77.

8.3 Analysis

The hypotheses were tested using SPSS. For testing the moderation effect, the hierarchical regression analysis was employed. The procedures suggested by Baron and Kenny (1986) were followed. According to Baron and Kenny, three relationships are tested in the moderation analysis phase. These relationships are between: first, the independent variable and the dependent variable; second, the moderator and the dependent variable; and third, the interaction of the independent and moderator variables with the dependent variable. The moderation hypothesis is supported if the third relationship is significant, that is, when the effects of the independent and the moderator variable on the dependent variable are controlled. To reduce the level of collinearity between variables without affecting the regression results, the independent variables, including the moderator variables, were first centred. That is, the mean was subtracted from each item resulting in a new mean of zero (Keith, 2006).

9. Findings

Hypothesis 1 proposed that work demand is negatively related to fulfilling work obligation (1a) and positively to WIF (1b). The results presented in Table 1 only showed support for hypothesis 1b, that is work demand relates positively to WIF (β =0.48, p< 0.01).

Hypothesis 2 predicted a negative relationship between family demand and fulfilling family obligation (2a) and positive relationship between family demand and FIW (2b). Only hypothesis 2b was significant (β =0.28, p< 0.01).

Table 1: Regression results of the direct effects of role demands on WFB dimensions

	WRO		WIF		FRO		FIW	
	β value		β value		β value		β value	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Step 1: Control variables								
Age	0.27*	0.27*	-0.28*	-0.26*	0.17	0.16	-0.22+	-0.14
Education	0.13*	0.13*	-0.02	0.05	0.15*	0.14*	-0.02	0.00
Tenure	0.04	0.04	.22+	0.13	-0.04	-0.02	0.13	0.04
Domestic helper	-0.03	-0.03	-0.01	0.05	-0.07	-0.07	0.01	0.01
Income	0.01	0.01	0.06	-0.02	0.07	0.08	0.00	-0.01
Spouse job	-0.03	-0.03	0.03	0.06	0.01	0.01	0.00	0.01
Ethnicity	-0.06	-0.06	0.28**	0.31**	-0.13*	-0.14*	0.06	0.10
Step 2: Predictors								
Work demand		0.01		0.48**				
Family demand						-0.04		0.28**
Overall F	5.74**	5.01**	4.72**	15.64**	2.89**	2.58*	0.78	3.02**
R^2	0.12	0.12	0.10	0.30	0.07	0.07	0.02	0.08
ΔR^2		0.00		0.20**		0.00		0.06**

Note. Standardized beta-weights are presented . *p < .05 **p < .01 +p < .1
WRO = Work obligation, FRO = Family obligation
WIF = Work-interfering-family, FIW = Family-interfering-work

Table 2: Difference in collectivism between the Malay and Chinese participants

		N	Mean	SD	t value
Collectivism	Malay	175	4.41	0.76	3.44**
	Chinese	149	4.11	0.79	

*p < .05   **p < .01

Hypothesis 5 postulated that, on average, the collectivism value is stronger among the Malays than the Chinese. The t-test analysis supported this hypothesis (t = 3.44, p < 0.01), as shown in Table 2 above.

With regard to the moderation hypotheses, given that the significant 3-way moderation effect superseded the 2-way moderation effect, the 3-way interaction result was evaluated first in the analyses. If the interaction term is significant, then a graph should be plotted to allow for proper interpretation, where the interaction term is grouped one standard deviation above the mean for high and one standard deviation below the mean for low values (Aiken & West, 1991). Where the 3-way interaction was not significant, significant 2-way interactions were interpreted, in that order. Hypothesis 6 presumed that the moderating effect of collectivism on the relationship between work

demand and work obligation (6a), and WIF (6b), will be stronger for the Malay than the Chinese, respectively. Only hypothesis 6a was supported, as shown in Table 3, where the interaction term of work demand, collectivism, and ethnic was significant (β = -0.22, p<0.01). Hypothesis 6b on the WIF dimension was insignificant. Similarly, its 2-way moderation hypothesis was not supported (hypothesis 3b).

Table 3: Moderator regression results for Work

Step 1: Control variables	Work Obligation (WRO)					
	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Age	0.27	0.24	0.24	0.24	0.22	0.22[+]
Education	0.13	0.14	0.14	0.14	0.13	0.15[*]
Tenure	0.02	0.03	0.03	0.04	0.04	0.04
Domestic helper	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03
Income	-0.01	0.00	0.00	0.01	0.02	0.01
Spouse job	-0.02	-0.02	-0.02	-0.03	-0.04	-0.04
Step 2: Main effects						
WDD		0.00	0.00	0.00	-0.09	-0.12
Collectivism		0.10	0.11	0.10	0.13	0.12
Step 3: Two-way interaction						
WDD * Collectivism			-0.03	-0.03	0.00	0.14[+]
Step 4: Main effect						
Ethnic				-0.04	-0.04	-0.01
Step 5: Two-way interactions						
WDD * Ethnic					0.14	0.14[+]
Collectivism * Ethnic					-0.05	0.00
Step 6: Three-way interactions						
WDD * Collectivism * Ethnic						-0.22[**]
Overall F	6.51**	5.30**	4.74**	4.30**	3.95**	4.36**
R^2	0.12	0.13	0.13	0.13	0.14	0.17
ΔR^2		0.01	0.00	0.00	0.01	0.03
Note. Standardized beta-weights are presented . *p < .05, **p < .01, [+]p < .1						
WDD = Work demand						

Obligation

The graph was plotted for interpreting the significant findings of hypothesis 6a. As indicated in Figure 2, increased work demand predicts lower work obligation for Malays but higher work obligation for the Chinese, when collectivism is low. However, consistent with the expectation, when collectivism is high, increased work demand has no impact on the perception of the Malays for fulfilling work obligation, but the Chinese participants reported a lower perception for being able to fulfil their work obligation when work demand increases.
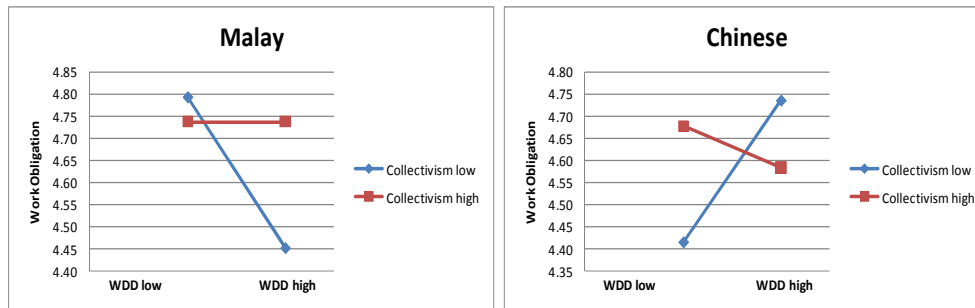
Figure 2: Interaction between perceived work demand (WDD) and collectivism value on work obligation for the Malay and Chinese participants

Hypothesis 7 predicts that the moderation effect of collectivism on the relationship between family demand and family obligation (6a), and between family demand and FIW (6b), will be stronger for the Malay than the Chinese, respectively. None of these hypotheses were significant. As for its respective 2-way moderation effects (i.e. hypotheses 4a and 4b), only hypothesis 4a was supported (β = 0.23, p<0.05), which indicated that collectivism moderated the relationship between family demand and family obligation (Table not presented).

10. Discussion

The t-test result confirmed that the Malay and Chinese participants in this study do vary in the degree of collectivism value. Specifically, the Malays reported a stronger collectivism value than the Chinese, which is consistent with expectations (Abdullah, 1992; Kennedy, 2002). This finding indicates that although residing within the same country, and living under the same economic and social systems, the Malay and Chinese ethnic groups in Malaysia do somewhat vary, and, ostensibly, retain their own cultural identity. This somewhat implies that the leading influence is the ethnic values rather than the situational factors (e.g. economic and social systems) in shaping the identities of these ethnic groups. These results demonstrate that acculturation is minimal when the two groups are dominant and compose a significant percentage of the population.

The main objective of this study is to determine if the variations in the role demands – WFB experience across different ethnic groups – is influenced by differences in the collectivism value of the groups. Although limited, this proposition received some support in this study. Specifically, only one of the hypotheses was significant. This result does not seem to completely support the widely held assumption in the literature, with regard to the collectivism moderating influence. It is possible that collectivism does not have as much influence on the role demand-WFB relationship as assumed by past research. Perhaps the observed group differences in past studies were due to the sample diversity. For example the study of Lu et al. (2006) sampled employees from diverse organisations in Taiwan and Britain. Similarly, Yang et al. (2000) had variations in their Chinese and US samples, which included managers and students in a business training programme. The role demand variations across samples might have influenced those results rather than the influence of the I-C value.

Alternatively, the samples employed in the present study may have caused the insignificant results. Participants in this study are from ethnic groups that would be generally described as collectivist, which may limit the variability of the collectivism construct, causing the limited observation of significant results. Clearly, more research is needed to ascertain the moderating influence of the collectivism value (as well as its counterpart, the individualism value), given that it has frequently been argued to be the cause of variation in the work-family experience across cultural groups.

Concerning the WFB dimension, it was observed that the supported moderation hypotheses (both the 3-way and 2-way) mainly showed the effects on the role obligation dimension. This shows that societal norms (i.e. cultural elements) influence an individual's judgement about meeting role expectations. This is reasonable, given the situation of these women in which the work role is additional to their traditional role in the family. The ability to perform in these combined roles and whether the roles are perceived as intruding upon each other are very much dependent on whether the group's culture facilitates or restrains women as they juggle their roles.

This study contributes to confirmation of the proposition that there is a cultural influence in the relationship between role demands and work-family experience. Past studies found variations in the impact of role demands on work-family experience in people of different ethnicity and attributed it to the influence of the groups' cultural differences. However, this assumption has never been confirmed given that past studies merely theorised this cultural influence but did not include cultural measures in their design (Aycan, 2008). On the side of the practitioner, this finding informs human resource managers that they should expect that any strategy or policy designed to help employees cope with role stressors may not be applicable or helpful to all employees of diverse ethnicity. Therefore, discretion from management is important in developing and applying work-family-related strategies or policies so that no one group is disadvantaged.

11. Conclusion

In summary, the overall findings of the moderation hypotheses show that, to some extent, the relationship between role demands and WFB is influenced by the collectivism value. These findings provide support for the assumption in the literature about the possible influence of collectivism in work and family experience. However, given that not many of the hypotheses were supported, future research should consider looking into other cultural attributes, other than the collectivism value. There is also a likelihood that these moderation effects are situation-specific, and dependent on the characteristics of the job situation. As jobs vary in terms of their characteristics, e.g. the level of demand , these findings pertaining to the moderation effect are not believed to generalise across occupations.

References

Abdullah, A. (1992). The influence of ethnic values on managerial practices in Malaysia. *Malaysian Management Review, 27*(1), 19-30.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: testing and interpreting interactions*. Newbury Park: Sage.

Aryee, S., Srinivas, E. S., & Hwee, H. T. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology, 90*(1), 132-146.

Aycan, Z. (2008). Cross-cultural approaches to work-family conflict. In K. Korabik, D. S. Lero & D. L. Whitehead (Eds.), *Handbook of work-family integration* (pp. 353-370). Burlington: Elsevier.

Aycan, Z., & Kanungo, R. N. (2001). Cross-cultural industrial and organizational psychology: A critical appraisal of the field and future directions. In N. Anderson, D. S. Ones, H. K. Sinangil & C.Viswesvarn (Eds.), *Handbook of industrial, work and organizational psychology* (Vol. 1, pp. 385-408). London: Sage.

Barnett, R. C. (1998). Toward a review and reconceptualization of the work/family literature. *Genetic, Social & General Psychology Monographs, 124*(2), 125-182.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Biggs, A., & Brough, P. (2005). Investigating the moderating influences of gender upon role salience and work-family conflict. *Equal Opportunities International, 24*(2), 30-41.

Boyar, S. L., Carr, J. C., Mosley, D. C., & Carson, C. M. (2007). The development and validation of scores on perceived work and family demand scales. *Educational and Psychological Measurement, 67*, 100-115.

Buda, R., & Elsayed-Elkhouly, A. M. (1998). Cultural differences between Arabs and Americans: Individualism-collectivism revisited. *Journal of Cross-Cultural Psychology, 29*(3), 487-492.

Carlson, D. S., & Kacmar, K. M. (2000). Work–family conflict in the organization: Do life role values make a difference? *Journal of Management, 26*(5), 1031-1054.

Casper, W. J. (2000). *The Effects of Work-Life Benefits and Perceived Organizational Support on Organizational Attractiveness and Employment Desirability.* George Mason University, Fairfax, VA.

Clark, S. C. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior, 58*(3), 348-365.

Cohen, A., & Kirchmeyer, C. (2005). A cross-cultural study of the work/nonwork interface among Israeli nurses. *Applied Psychology: An International Review, 54*(4), 537-567.

Department of Statistic, Malaysia. (2008). *Yearbook of statistics Malaysia 2007*. Kuala Lumpur: Department of Statistics, Malaysia.

Department of Statistics, Malaysia. (2010). Key indicator of the labour market Malaysia, http://www.statistics.gov.my/portal/download_Labour/files/BPTMS/ringkasan_perangkaan_2010.pdf

Foley, S., Yue, N. H., & Lui, S. (2005). The effects of work stressors, perceived organizational support, and gender on work-family conflict in Hong Kong. *Asian Pacific Journal of Management, 22*(3), 237-256.

Franklin, K. J. (1984). On the origin and formation of creoles. *Notes on Linguistic, 31*, 36-40.

Frone, M. F. (2003). Work-family balance. In J.C.Quick & L.E.Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143-162). Washington: APA.

Goddard, C. (1997). Cultural values and 'cultural scripts' of Malay (Bahasa Melayu). *Journal of Pragmatics, 27*, 183-201.

Greenglass, E. R., Pantony, K. L., & Burk, R. J. (1989). A gender-role perspective on role conflict, work stress and social support. In E. B. Goldsmith (Ed.), *Work and family: Theory, research and applications*.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management. The Academy of Management Review (pre-1986), 10*(000001), 76-88.

Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior, 63*(3), 510-531.

Grzywacz, J. G., Butler, A. B., & Almeida, D. M. (2008). Work, family , and health: Work-family balance as a protective factor against stresses of daily life. In A. Marcus-Newhall, D. F. Halpern & S. J. Tan (Eds.), *The Changing Realities of Work and Family* (pp. 194-215). Malden, MA: Blackwell Publishing Ltd.

Gutek, B. A., Searles, S., & Klepa, L. (1991). Rational versus gender role expectations for work-family conflict. *Journal of Applied Psychology, 76*, 566-568.

Hansen, G. L. (1991). Balancing work and family: A literature and resource review. *Family Relations, 40*(3), 348-353.

Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. *Family Relations, 50*(1), 49-58.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Thousand Oaks, CA: Sage.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage Publications.

Hui, C. H., & Triandis, H. C. (1986). Individualism and collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology, 17*, 225-248.

Ishii-Kuntz, M. (1994). Work and family life: Findings from international research and suggestions for future study. *Journal of Family Issues, 15*, 490-560.

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: Wiley.

Keith, T. Z. (2006). Multiple regression and beyond. Boston, MA: Pearson Education.

Kennedy, J. C. (2002). Leadership in Malaysia: Traditional values, international outlook. *Academy of Management Executives, 16*(3), 15-26

Kennedy, J., & Mansor, N. (2000). Malaysian culture and the leadership of organizations: A GLOBE study. *Malaysian Management Review, 35*(2), 44-53.

Kim, U., Triandis, H. C., Kagiticibasi, C., & Yoon, G. (1994). *Individualism and collectivism: Theoretical and methodological issues*. Newbury Park, CA: Sage.

Kirchmeyer, C. (2000). Work-life initiatives: Greed or benevolence regarding workers' time. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in Organizational Behavior* (Vol. 7, pp. 79-93). West Sussex, UK: Wiley.

Lewis, S. N. C., & Cooper, C. L. (1987). Stress in two-earner couples and stage in the life-cycle. *Journal of Occupational Psychology, 60*, 289-303.

Lewis, S., & Ayudhya, U. C. N. (2006). Work and family through an international lens.   Retrieved 29 December, 2008, from http://wfnetwork.bc.edu/The_Network_News/26/newsletter.shtml

Lim, L. (1998). Cultural attributes of Malays and Malaysian Chinese: Implications for research and practice. *Malaysian Management Review, 32*(2), 81-88.

Lu, L., Gilmour, R., Kao, S. F., & Huang, M. T. (2006). A cross-cultural study of work/family demands, work/family conflict and wellbeing: The Taiwanese vs British. *Career Development International, 11*(1), 9-27.

Marks, S. R., & MacDermid, S. M. (1996). Multiple roles and the self: A theory of role balance. *Journal of Marriage and the Family, 58*(2), 417.

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*(4), 400-410.

Noor, N. M. (1999). Roles and women's well-being: some preliminary findings from Malaysia. *Academic Research Library, 41*(3/4), 123-145.

Poelmans, S. (2003). The multi-level 'fit' model of work and family. *International Journal of Cross-Cultural Management, 3*(3), 267-274.

Rashid, M. Z. A., Anantharaman, R. N., & Raveendran, J. (1997). Corporate cultures and work values in dominant ethnic organizations in Malaysia. *Journal of Transnational Management Development, 2*(4), 51-65.

Schein, E. H. (1984). Culture as an environmental context for careers. *Journal of Organizational Behavior, 5*, 71-81.

Sendut, H., Madsen, J., & Thong, G. (1990). *Managing in a Plural Society*. Singapore: Longman.

Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research, 29*, 240-275.

Spector, P. E., Cooper, C. L., Poelmans, S., Allen, T. D., O'driscoll, M., Sanchez, J. I., et al. (2004). A cross-national comparative study of work-family stressors, working hours, and well-being: China and Latin America versus the Anglo world. *Personnel Psychology, 57*(1), 119-142.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506-520.

Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. *Journal of Marriage and Family, 66*, 398–412.

Westman, M. (2005). Cross-cultural differences in crossover research. In S. A. Y. Poelmans (Ed.), *Work and Family: An International Research Perspective* (pp. 241-260). New Jersey: Lawrence Erlbaum Associates.

Yang, N., Chen, C. C., Choi, J., & Zou, Y. (2000). Sources of work-family conflict: A Sino-U.S. comparison of the effects of work and family demands. *Academy of Management Journal, 43*(1), 113-123.