



# Relationship between work-family conflict and quality of life

## An investigation into the role of social support

Samsinar Md-Sidin and Murali Sambasivan

*Graduate School of Management, Universiti Putra Malaysia, Serdang,  
Malaysia, and*

Izhairi Ismail

*Kulliyah of Economics and Management Sciences, Kuala Lumpur, Malaysia*

### Abstract

**Purpose** – The main purpose of this study is to link work-family conflict, quality of work and non-work lives, quality of life and social support (supervisor and spouse supports). Specifically, it seeks to address three different roles of social support that have theoretical and empirical support and the mediating roles of quality of work life and quality of non-work life.

**Design/methodology/approach** – The SEM-based approach has been used to study supervisor and spouse supports as moderators between work-family conflict and quality of life; independent variables of work-family conflict; independent variables of quality of life. The study has been carried out in Malaysia.

**Findings** – The main findings are: work-family conflict has relationship with quality of life; quality of work life and non-work life are “partial” mediators between work-family conflict and quality of life; and, among the various roles of social support, its role as an independent variable of quality of life gives the best results.

**Research limitations/implications** – The research is based on a cross-sectional study conducted in Malaysia and addresses only the spouse and supervisor supports as components of social support.

**Originality/value** – The research has developed a comprehensive model linking work-family conflict, quality of work and non-work lives, and quality of life and has studied the role of social support.

**Keywords** Quality of life, Social roles, Malaysia

**Paper type** Research paper

### Introduction

Work and family (non-work) epitomize the most important domains of adult life for most individuals and these realms are often regarded as the backbone of human existence. The ability of individuals to deal constructively with the demands of work and of family depends on many factors, such as the kind of job they have; the organizations that employ them; and the economic, social, and cultural context in which they live (Bailyn, 1992). Millions of people all over the world juggle these two domains:

- (1) to balance their lives;
- (2) to minimize the potential conflicts that arise from the “balancing act”; and
- (3) to improve the quality of living.



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Today, there are more dual-career families than ever before and there are a large number of single-parent households (Morf, 1989). This makes managing the work-family responsibilities more difficult and challenging than in the households with a more traditional “husband works, wife stays at home” family units (Boles *et al.*, 2001; Powell and Greenhaus, 2006). The challenges in meeting the (often) incompatible demands of work and family can create work-family conflict (Eby *et al.*, 2005; Greenhaus and Beutell, 1985; Kopelman *et al.*, 1983; Thoits, 1983 (cited in Aryee *et al.*, 1999); Verbrugge, 1983; Voydanoff, 1987). In this research, we address the work-family conflict that arises from work and non-work (family) domains. The work-family conflict and some aspects of quality of life have been discussed and argued extensively for the past 30 years (Bacharach *et al.*, 1991; Behson, 2002; Boles *et al.*, 2001; Cooke and Rousseau, 1984; Frone *et al.* 1994; Greenhaus *et al.*, 1997; Judge *et al.*, 1994; Lui *et al.*, 2001; Noor, 2002; Parasuraman *et al.*, 1996; Senecal *et al.*, 2001; Thomas and Ganster, 1995). The absence of a strong theoretical framework has hampered the empirical efforts to investigate work and family (Senecal *et al.*, 2001). In this study, we have attempted to present a comprehensive model that can help understand:

- the relationship between work-family conflict and quality of work and non-work lives and quality of life as a whole;
- the mediating roles of quality of work life and quality of non-work life; and
- the role of social support on the relationship between work-family conflict and quality of life.

Several studies have used overall life satisfaction, well-being and quality of life to explain the same construct (Adams *et al.*, 1996; Judge *et al.*, 1994; Aryee *et al.*, 1999) and we use these terms interchangeably. In this research, the terms quality of life, quality of work life and quality of non-work life reflect individuals’ perception.

Many models that deal with the stress management have identified social support as an essential resource or a coping mechanism that is able to reduce the negative effects of stressors and work-family conflict (Carlson and Perrew, 1999; Etzion, 1984; Ganster *et al.*, 1986; Thomas and Ganster, 1995). The most common source of support at work originates from supervisors, co-workers and organizational policies. Researchers examining the role of supervisor support have claimed that it is more significant than other supports in reducing the stress at work (Ganster *et al.*, 1986; Kirmeyer and Lin, 1987). In a non-work domain, support comes from various sources, such as spouse, other family members and friends. However, spouse support has been consistently viewed in a positive way when evaluating various job and life outcomes (Kim and Ling, 2001; Parasuraman *et al.*, 1996). Therefore, in this study, only supervisor support and spouse support constitute social support. Many researchers have investigated social support as an antecedent or an independent variable of work-family conflict (Aryee, 1992; Carlson and Perrew, 1999; Granrose *et al.*, 1992; Greenhaus and Beutell, 1985; Parasuraman *et al.*, 1996). A few studies have examined the role of social support as a moderator between stress and well being (Blau, 1981; Cohen and Wills, 1985; Ganster *et al.*, 1986); work-family conflict and well-being (Carlson and Perrew, 1999; Greenhaus and Parasuraman, 1994; Parasuraman *et al.*, 1992); and work-family conflict and job and family satisfaction (Suhlatmini, 2000). These studies have hypothesized a particular relationship (independent variable or moderator) and have tested it. A different slant has been taken in this research. We

have used SEM-based (Structural Equation Modeling) approach to study supervisor and spouse supports as:

- moderators between work-family conflict and quality of life;
- independent variables of work-family conflict; and
- independent variables of quality of life.

The results from these three models have been compared to assess the most “appropriate” roles for supervisor and spouse supports.

This research also addresses the role of gender and ethnicity on the perceptions of work-family conflict and quality of life. Earlier studies by Parasuraman *et al.* (1996) and Senecal *et al.* (2001) have addressed the role of gender on work-family conflict and quality of life. According to Lobel (1992), the perception of work-family conflict is related to individual’s value system. Since this study has been conducted in Malaysia (Malaysia has three major races: Malays, Chinese and Indians), it is interesting to study the role of ethnicity on the perception of work-family conflict and quality of life.

The contributions of this study are manifold:

- a comprehensive model linking work-family conflict, quality of work and non-work lives, and quality of life;
- testing the mediating roles of quality of work life and non-work life;
- determination of appropriate role of social support; and
- a study in an eastern setting.

Most of the earlier studies have been carried out in western countries. This study has been conducted in Malaysia, a fast developing country in South-East Asia.

### **Theoretical framework and hypothesis development**

Many theories have been postulated to study the impact of work-family conflict on individuals:

- The Role Stress theory (Judge *et al.*, 1994; Katz and Kahn, 1978);
- The Role Enhancement theory (Crouter, 1984; Kinnunen *et al.*, 2006);
- The Spillover theory (Staines, 1980);
- The Compensatory theory (Staines, 1980);
- The Gender-Role Expectation theory (Galinsky *et al.*, 1991; Higgins and Duxbury, 1994); and
- The Self-Identity theory (Schlenker, 1987).

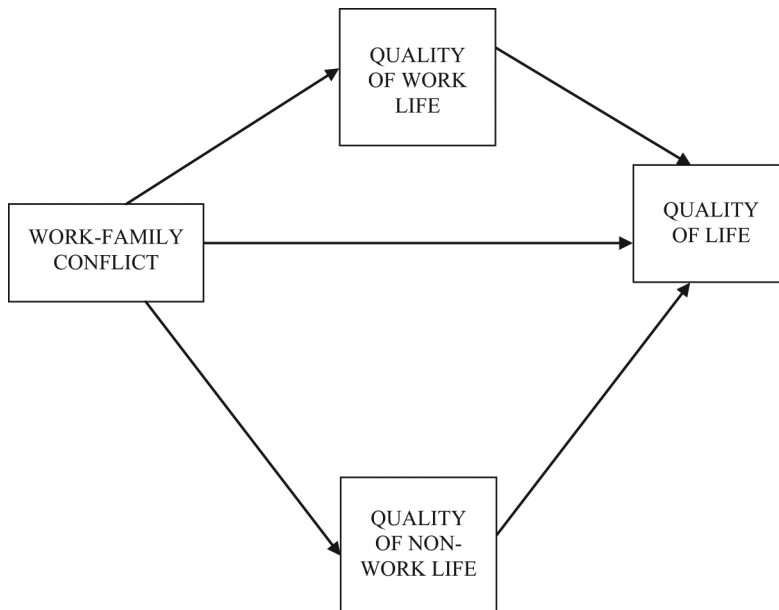
The major theory that governs the foundation of the theoretical framework in this study is the Spillover Theory (Champoux, 1978; Duxbury and Higgins, 1991; Piotrkowski, 1978; Staines, 1980). The Spillover theory suggests that there is a similarity between what occurs in the work environment and what occurs in the family environment (Staines, 1980). This theory emphasizes on the tendency of the workers to carry their emotions, attitudes, skills, and behaviors that they establish at work into their family life and vice versa (Crouter, 1984; Piotrkowski, 1978). The spillover process can be either positive or negative. The negative spillover induces stress in individuals

and the positive spillover can lead to high levels of satisfaction. According to Kinnunen *et al.* (2006, p. 159), “individuals experience, to some extent, both spillovers simultaneously”. Most of the researchers analyzing work and non-work nexus with work-family conflict and quality of life have anchored their research foundations in this theory because of its broad applicability and widespread acceptance in the literature (Parasuraman *et al.*, 1996; Sirgy *et al.*, 2001; Staines, 1980; Zedeck, 1992; Zedeck and Mosier, 1990).

Many researchers have attempted to construct a single model for work-family conflict in connection with quality of life. Four major models developed by Greenhaus and Beutell (1985), Higgins *et al.* (1992), Kopelman *et al.*(1983), and Parasuraman *et al.*(1996), linking work-family with quality of work and non-work lives and overall satisfaction, form the basis for the theoretical framework developed in this study. The theoretical framework is given in Figure 1 and it represents the base model (without social support). Since the role of the social support is to be analyzed from different perspectives, it is not included in the base model.

*Work-family conflict and quality of work life*

Shamir and Solomon (1985) have defined quality of work life (QWL) as a comprehensive construct that includes an individual’s job related well being and the extent to which work experiences are rewarding, fulfilling, and devoid of stress and other negative personal consequences. The relationship between work-family conflict and aspects of quality of work life has been shown in many studies. For instance, negative association has been established between work-family conflict and job satisfaction/quality of work life (Adams *et al.*, 1996; Bacharach *et al.*, 1991; Boles *et al.*, 2001; Brett *et al.*, 1992; Frone *et al.*, 1992, Frone *et al.*, 1994; Lui *et al.*, 2001;



**Figure 1.**  
The theoretical framework  
(base model without social  
support)

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Martins *et al.*, 2002; Noor, 2002; Thomas and Ganster, 1995; Parasuraman *et al.*, 1996). Therefore, we posit that:

- H1. Individual perception of work-family conflict will be negatively related to the individual perception of quality of work life.

*Work-family conflict and quality of non-work (family) life*

Quality of non-work life (QNL) (family life) is referred to as a construct that assesses an individual's non-work-related well-being and the extent to which his or her roles as a parent and a spouse or other roles in non-work activities are rewarding, fulfilling and devoid of stress and other negative personal consequences (Shamir and Solomon, 1985). According to Higgins *et al.* (1992), the most commonly measured quality of family life components are marital and family satisfaction. There are numerous evidences pointing to the direct and negative associations between work-family conflict and quality of non-work life. For instance, between work interference with family and marital satisfaction (Leiter and Durup, 1996); work-family conflict and job and family satisfaction (Carlson and Perrew, 1999); work-family conflict and quality of family life (Wiegel and Wiegel, 1995); and work-family conflict and marital adjustment (Burley, 1995). Therefore, we hypothesize that:

- H2. Individual perception of work-family conflict will be negatively related to the individual perception of quality of non-work life.

*Work-family conflict and quality of life*

Rice *et al.* (1985) have defined the perceived quality of life (QOL) as a set of affective beliefs directed toward the totality of one's life (overall perceived quality of life) or toward specific domains of life (e.g., perceived quality of work life or perceived quality of family life). The important part of quality of life is the "affect" consequence, which has been described by Naylor *et al.* (1980, cited in Rice *et al.*, 1985) as a psychological state, or feelings – and therefore, cognizant of pleasure, happiness, well-being or satisfaction. As such, measures of satisfaction and happiness are typically used to operationalize the perceived quality of life (Andrews and Whitey, 1976 (cited in Rice *et al.*, 1992); Diener, 1984; Diener *et al.*, 1999; Rice *et al.*, 1992). There are numerous studies on the relationship between work-family conflict and some aspects of quality of life. For instance, between work-family conflict and life satisfaction (Aryee *et al.*, 1999; Judge *et al.*, 1994; O'Driscoll *et al.*, 1992); work-family conflict and aspects of quality of life, such as job-, family- and marital-satisfaction (Aryee, 1992; Kim and Ling, 2001; Kopelman *et al.*, 1983; Rice *et al.*, 1992); work-family conflict and well-being, such as physical symptomatology and emotional affect (Noor, 2004; Paden and Buehler, 1995); work-family conflict and emotional distress and emotional exhaustion (Gerstel and Gallagher, 1993; Guelzow *et al.*, 1991; Noor, 2002; Senecal *et al.*, 2001); and family intrusions into work and the mood states of individuals (Williams and Alliger, 1994). Based on the above arguments, we posit that:

- H3. Individual perception of work-family conflict will be negatively related to the individual perception of quality of life.

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*Mediating roles of quality of work life and quality of non-work (family) life between work-family conflict and quality of life*

A theoretical foundation to elucidate the connections between quality of work life and quality of life is drawn from the Spillover Theory (Champoux, 1978; Payton-Miyazaki *et al.*, 1976 (cited in Zedeck, 1992); Staines, 1980) with a particular emphasis on the “additive view” (Payton-Miyazaki *et al.*, 1976). Many studies have established a strong positive relationship between quality of work life and quality of life (Adams *et al.*, 1996; Higgins *et al.*, 1992; Higgins and Duxbury, 1992; Judge and Watanabe, 1993; Judge *et al.*, 1994; Judge and Hulin, 1993; Kopelman *et al.*, 1983; Orpen, 1978 (cited in Judge and Watanabe, 1993); Sirgy *et al.*, 2001).

Vertical spillover theory proposed by Sirgy *et al.* (2001) can be used to explain the association between quality of non-work life and quality of life. The empirical studies connecting quality of non-work life and quality of life are limited compared to those connecting quality of work life and quality of life. A few studies have reported a positive association between the two constructs (Aminah, 1996; Kopelman *et al.*, 1983; Higgins and Duxbury, 1992; Higgins *et al.*, 1992; Sirgy *et al.*, 2001). Based on the above arguments and the arguments for *H1* and *H2*, we posit that:

- H4.* Individual perceptions of quality of work life and quality of non-work life will mediate the relationship between individual perceptions of work-family conflict and quality of life.

*Role of social support*

According to Etzion (1984), social support can be defined as an informal social network that provides individuals with expressions of emotional concern or empathy, practical assistance, informational support or appraisal. According to Brough and Pears (2005, p. 472), “workplace social support focuses on collaborative problem solving and sharing information, reappraising situations and obtaining advice from a variety of personnel such as colleagues, supervisors and managers”. Spouses provide the necessary emotional and physical support to individuals to alleviate the effects of stress due to work-family conflict (Kinnunen *et al.*, 2006). Therefore, social support can reduce the negative effects of stressors and work-family conflict (Carlson and Perrewe, 1999; Etzion, 1984; Ganster *et al.*, 1986; Thomas and Ganster, 1995). The exact role of social support varies across studies depending on the theory of social support that drives a particular investigation. From the perspective of stress-buffering model, social support is seen “to enhance a person’s ability to cope with stress or to alleviate the impact of the stressful event on the person” (Choenarom *et al.*, 2005, p. 20). Therefore, social support can be seen as a moderator. From the perspective of social-cognitive model, social support is seen to promote wellbeing regardless of the presence of stress or the stress level (Choenarom *et al.*, 2005). Therefore, social support can be seen to have a direct effect. Many researchers have looked at social support as an antecedent (Aryee, 1992; Carlson and Perrewe, 1999; Granrose *et al.*, 1992; Greenhaus and Beutell, 1985; and Parasuraman *et al.*, 1996) or as a moderator (Blau, 1981; Carlson and Perrewe, 1999; Cohen and Wills, 1985; Kaufmann and Beehr, 1986; Paden and Buehler, 1995; Parasuraman *et al.*, 1992). In this research, we have analyzed three different roles of social support (Supervisor support – SUPSS and spouse support – SPOSS) to find the most appropriate role. In all these models we have included the different roles of social support to the base model. These three models are described in the following sections.



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*Model I – spouse and supervisor supports as moderators between work-family conflict and quality of life*

No empirical study has considered social support as a moderator between work-family conflict and quality of life. However, there are studies that have considered social support as a moderator between stress and employee well being (Blau, 1981; Carlson and Perrewe, 1999; Cohen and Wills, 1985; Kaufmann and Beehr, 1986; Paden and Buehler, 1995; Parasuraman *et al.*, 1992). Even though stress and work-family conflict represent two different constructs, the perceived stress is measured as the negative feelings that originate from stressful events in life, such as work-family conflict; inequity of pay; ongoing strains including poverty, marital conflict, parental problems, work overload and chronic illness (Cohen and Wills, 1985 and Pearlin and Lieberman, 1979 (cited in Cohen and Wills, 1985)). Work-family conflict has also been associated with the stress level (Frone *et al.*, 1992; Frone *et al.*, 1997; Greenhaus *et al.*, 1997; Parasuraman *et al.*, 1992). This model suggests that higher the degree of social support an individual has higher is the quality of life even when there is work-family conflict. On the contrary, low degree of social support results in low quality of life (Adebayo, 2006). Therefore, the social support (supervisor and spouse supports) can be posited as moderators between work-family conflict and quality of life. Model I posits that:

- H5. Individual perceptions of supervisor and spouse supports will moderate the relationship between individual perceptions of work-family conflict and quality of life

*Model II – supervisor and spouse supports as independent variables of work-family conflict*

Many studies have considered social support as antecedents to work-family conflict (Aryee, 1992; Carlson and Perrewe, 1999; Granrose *et al.*, 1992; Greenhaus and Beutell, 1985; Parasuraman *et al.*, 1996). For example, Parasuraman *et al.* (1996) have shown that spouse support has a direct effect on family-to-work conflict and an indirect effect on work-to-family conflict; Carlson and Perrewe (1999, p. 513) have argued “social support reduces the likelihood that situation will be perceived as stressful, thus, indirectly affecting work-family conflict through perceived stressors”. They have looked at the role of social support as a moderator, as an intervening variable, as an antecedent, and as an independent variable to work-family conflict. Results from the study of Carlson and Perrewe (1999) suggest that social support may be best viewed as an antecedent. Model II suggests that regardless of the level of work-family conflict the social support has a direct effect on the work-family conflict (Adebayo, 2006; Hammer *et al.*, 1998). Model II posits that:

- H6. Individual perceptions of supervisor and spouse supports will be independent variables of individual perception of work-family conflict.

*Model III – supervisor and spouse supports as independent variables of quality of life*

Some researchers have studied the main effect of social support on quality of life regardless of the level of work-family conflict experienced by the individual (Adams *et al.*, 1996; Carlson and Perrewe, 1999; Parasuraman *et al.*, 1989; Westman and Etzion, 1995). Adams *et al.* (1996) have asserted that family (spouse) social support is essential to have a higher level of life satisfaction (quality of life). According to Roehling *et al.*

(1999), supportive supervisors contribute to life quality, loyalty, and the coordination of work and family role obligations. Therefore, through this model, we posit social support as an independent variable of quality of life. Model III posits that:

- H7.* Individual perceptions of supervisor and spouse supports will be independent variables of individual perception of quality of life.

## Method

### *Sample and location of study*

The data for the study have been collected through a questionnaire and the sampling unit is an individual. The following criteria have been used in selecting the sample:

- the respondent must be employed and should have an immediate supervisor or boss. This criterion is essential since one of the social supports is supervisor support;
- the respondent must be married and must have at least one child residing in the same home. It makes a logical sense to select married employed individuals because the study incorporates spouse support as an important variable and according to Herman and Gyllstrom (1977, cited in Greenhaus and Beutell, 1985) married persons (with children) experience more work-family conflict than unmarried persons; and
- the respondent can work in a private or a public company and can be either at a managerial or at a non-managerial level.

The respondents residing around Kuala Lumpur, capital city of Malaysia, were chosen for this study.

### *Sampling procedure*

Judgmental sampling, a non-probability sampling technique, was used to select the respondents. The respondents who fitted the above criteria were approached based on the personal contacts. A total 400 self-administered questionnaires were distributed and 335 usable questionnaires were returned (a response rate of 83.8 percent).

### *Questionnaire design and measures*

The questionnaire was divided into two sections. The first section contained questions concerning the six constructs: work-family conflict, quality of work life, quality of non-work life, quality of life, and social support (supervisor and spouse supports). The second section contained demographic information like age, gender, education level, salary level, employment details, and family details. The language of the questionnaire was English and it is one of main languages in use in Malaysia. The items in the questionnaire were adapted from earlier studies. We used the guidelines given by ITC (International Test Commission) in designing and administering the questionnaire. The questionnaire items were vetted by professors in the area of cross-cultural management and marketing and they agreed that there were no items that were culturally insensitive. Besides, a pilot study was also conducted to assess whether:

- the items were easy to understand;
- the questionnaire design was appropriate;



- there were “sensitive” items; and
- the questionnaire could be completed within a “reasonable” time.

The pilot study did not indicate any problem with the questionnaire.

*Work-family conflict.* Work-family conflict is a form of conflict in which the role pressures from the work and family domain are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role (Greenhaus and Beutell, 1985). This construct has been adapted from Bohlen and Viveros-Long (1981). This measure consists of 16 items and uses a six-point scale ranging from 1 (never) to 6 (always). This measure captures both the time-based and the strain-based work-family conflicts. Some sample questions under this construct are:

- I wish I had more time to do things for my family; and
- I feel physically drained when I get home from work.

A high score indicates a high level of work-family conflict. Earlier studies using this construct have indicated a high reliability (Bohlen and Viveros-Long (1981) – 0.80; Higgins and Duxbury (1992) – 0.88).

*Quality of work and non-work lives.* These scales have been adapted from the Michigan Organizational Assessment Questionnaire (Cammann *et al.*, 1979) produced by the Survey Research Center at the Institute for Social Research at the University of Michigan. The Quality of work life and non-work life measures consist of eight items each and use a six-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). High scores on these constructs indicate high quality of lives. Some sample questions under these constructs are:

- (1) Describe how you see yourself at work: successful, in control, happy?
- (2) Describe how you see yourself at home: successful, in control, happy?

An earlier study using these constructs by Higgins and Duxbury (1992) has indicated a high reliability of 0.90 for both the constructs.

*Quality of life.* This measurement has been adapted from the overall life satisfaction scale developed by Quinn and Staines (1979). This construct measures the quality of life through eight specific moods or effects (e.g. “Indicate how you feel about your present life in general: Interesting”) and uses a six-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). A high score on this construct indicates a high quality of life. An earlier study using this construct by Higgins and Duxbury (1992) has indicated a high reliability of 0.95.

*Social support – supervisor support.* This measure has been adapted from the scale developed by Shinn *et al.* (1984). This construct has nine items and use a six-point scale ranging from 1 (never) to 6 (always). Some sample questions under this construct are:

- my supervisor is understanding and sympathetic; and
- my supervisor juggles tasks or duties to accommodate my family responsibilities.

An earlier study by Shin *et al.* (1989) indicates a high reliability score of 0.83.

*Social support – spouse support.* This measure has been adapted from the scale developed by Caplan *et al.* (1975). This construct has six items and uses a six-point scale ranging from 1 (almost none) to 6 (a great deal). Some sample questions under this construct are:

- (1) How much is the degree of emotional support provided by your spouse for your work?
- (2) How much does your spouse go out of his/her way to do things to make your work life easier for you?

An earlier study by Suhatimi (2000) report a reliability score of 0.75.

## Results

### *Construct validity of the constructs*

According to Cronbach and Meehl (1955) and Garver and Mentzer (1999), construct validity examines the degree to which a scale measures what it intends to measure. The sub-dimensions of construct validity include: content validity, substantive validity, unidimensionality, reliability, convergent validity, discriminant validity, and predictive validity. Testing for content and substantive validity is mostly subjective and depends upon the conceptual nature of the construct within a given context (Graver and Mentzer, 1999). The constructs used in this study (work-family conflict, quality of work life, quality of non-work life, quality of life, spouse support and supervisor support) have been adapted from established studies that have tested these constructs. Confirmatory Factor Analysis (CFA) using SEM is used very widely for refining and testing other sub-dimensions of construct validity (Graver and Mentzer, 1999). Table I gives the results of reliability test and CFA and the values are all within the threshold levels prescribed by Hair *et al.* (2006). The correlation values (in Tables II and III) between the various constructs support the hypothesized behavior and the results of the previous studies.

### *Respondent profile and descriptive statistics*

The profile of the respondents is given in Table IV. Some characteristics deserve mention. About 80 percent of the respondents have their spouses working and about 83 percent of the respondents sought the help of maids (it is quite common in Malaysia to employ maids from neighboring countries such as Indonesia and Philippines), babysitters, parents, and nurseries to take care of their children. These can help to

Construct	Number of items	Reliability (alpha)	Validity <sup>a</sup> (GFI)	Validity <sup>a</sup> (RMSEA)
1. INTCON	16	0.89	0.89	0.08
2. QWL	8	0.88	0.98	0.05
3. QNL	8	0.88	0.97	0.06
4. QOL	8	0.90	0.95	0.09
5. SUPSS	9	0.89	0.91	0.08
6. SPOSS	6	0.85	0.97	0.09

**Notes:** <sup>a</sup> Validity tests performed using LISREL 8.52; INTCON – Work-family conflict, QWL – Quality of work life, QNL – Quality of non-work life, QOL – Quality of life, SUPSS – Supervisor support, SPOSS –Spouse support

**Table I.**  
Reliability and validity  
test results of various  
constructs

reduce the family conflict and therefore, work-family conflict. The above trend is not surprising and it is prevalent in many developed and developing countries.

Descriptive statistics (mean and standard deviation) of various constructs are given in Tables II and III. Most of the mean scores indicate a moderate level experience of that particular characteristic. Most of the respondents have indicated a “good” level of family involvement and spouse support. Interestingly, the mean score for the work-family conflict is the lowest indicating that the respondents, on average, experienced a low level of conflict. This is also borne out by a “moderately” high score on quality of life. Another notable feature is that the spouse support ranks better than the supervisor support and the correlation supports this. In general, it is seen that the family plays a major role in improving the quality of life in Malaysia.

*Role of gender and ethnicity on work-family conflict and quality of life*

We have studied the role of gender and ethnicity on the level of work-family conflict and quality of life. The results from the independent t-tests reveal that there are no significant differences between male and female in the levels of work-family conflict experienced and there are significant differences between male and female in terms of perceptions of quality of life. Females perceive a higher quality of life. The results from ANOVA indicate that there are significant differences in the level of work-family conflict experienced by different ethnic groups and a post-hoc test reveals that Chinese experience more work-family conflicts when compared to other ethnic groups and there are no significant differences between the ethnic groups in terms of perceptions of quality of life.

No.	Construct	Minimum	Maximum	Mean	Standard deviation	Variance
1	INTCON	1.00	6.00	3.01	1.32	1.73
2.	QWL	2.00	6.00	3.84	1.15	1.32
3.	QNL	1.00	6.00	3.90	1.20	1.44
4.	QOL	2.00	6.00	4.14	1.09	1.19
5.	SUPSS	1.00	6.00	3.26	1.16	1.35
6.	SPOSS	1.00	6.00	4.12	1.22	1.49

**Table II.**  
Descriptive statistics of various constructs

**Notes:** INTCON – Work-family conflict, QWL – Quality of work life, QNL – Quality of non-work life, QOL – Quality of life, SUPSS – Supervisor support, SPOSS – Spouse support

Construct	1	2	3	4	5	6
1. INTCON	1.00					
2. QWL	<i>- 0.43</i>	1.00				
3. QNL	<i>- 0.27</i>	<i>0.17</i>	1.00			
4. QOL	<i>- 0.43</i>	<i>0.39</i>	<i>0.29</i>	1.00		
5. SUPSS	0.07	-0.01	0.11	0.10	1.00	
6. SPOSS	<i>- 0.27</i>	<i>0.17</i>	0.08	<i>0.32</i>	-0.05	1.00

**Table III.**  
Descriptive statistics of various constructs

**Notes:** Correlation in italics is significant at the 0.05 level (two-tailed); INTCON – Work-family conflict, QWL – Quality of work life, QNL – Quality of non-work life, QOL – Quality of life, SUPSS – Supervisor support, SPOSS – Spouse support

	Respondents	%	Cum %
<i>1. Gender</i>			
Male	154	46.0	46.0
Female	181	54.0	100.0
<i>2. Age</i>			
25 and below	16	4.8	4.8
26-30	74	22.1	26.9
31-35	83	24.8	51.6
36-40	87	26.0	77.6
above 40	75	22.4	100.0
<i>3. Ethnic</i>			
Malay	214	63.9	63.9
Chinese	62	18.5	82.4
Indian	50	14.9	97.3
Others	9	2.7	100.0
<i>4. Religion</i>			
Islam	216	64.5	64.5
Christian	35	10.4	74.9
Buddha	34	10.1	85.1
Hindu	42	12.5	97.6
Others	8	2.4	100.0
<i>5. Education</i>			
High school	58	17.3	17.3
Diploma	91	27.2	44.5
Bachelor	147	43.9	88.4
Postgraduate	39	11.6	100.0
<i>6. Sector</i>			
Public	150	44.8	44.8
Private	185	55.2	100.0
<i>7. Position</i>			
Non-manager	163	48.7	48.7
Manager	172	51.3	100.0
<i>8. Work time (hours)</i>			
<20	10	3.0	3.0
20-50	217	64.8	67.8
>50	108	32.2	100.0
<i>9. Salary (RM)</i>			
<1,000	16	4.8	4.8
1,000-7,000	297	88.6	93.4
>7,000	22	6.6	100.0
<i>10. Working spouse</i>			
Yes	268	80.0	80.0
<i>11. Number of children</i>			
1	84	25.1	25.1
2	88	26.3	51.3
3	77	23.0	74.3
4	55	16.4	90.7
5 or more	31	9.3	100.0

**Table IV.**  
(continued) Profile of the respondents

	Respondents	%	Cum %
<i>12. Number of preschool children</i>			
0	150	44.8	44.8
1	135	40.3	85.1
2	38	11.3	96.4
3	8	2.4	98.8
4	4	1.2	100.0
<i>13. Family time (hours per day)</i>			
<2	7	2.1	2.1
2-15	181	54.1	56.2
>15	147	43.8	100.0
<i>14. Maid at home</i>			
Yes	135	40.3	40.3
No	200	59.7	100.0
<i>15. Childcare</i>			
Spouse	57	17.0	17.0
Maid	105	31.3	48.4
Nursery	46	13.7	62.1
Neighbor/babysitter	37	11.0	73.1
Parents/other relatives	61	18.2	91.3
Others	29	8.7	100.0

Table IV.

*Testing of hypotheses and role of social support*

SEM (using LISREL 8.52) has been used to test the various hypotheses. SEM enables the estimation of a series of separate, but interdependent, multiple regression equations simultaneously by specifying the structural model used by the statistical program (Hair *et al.*, 2006). SEM provides information about the hypothesized impact both, directly from one variable to another and via other variables positioned between the other two. For the purpose of conducting SEM, the covariance matrix has been used as an input to empirically estimate the strength of each relationship (path) (Hair *et al.*, 2006). We ran three different models, each model indicating a specific role of the social support. SEM output provides absolute and incremental fit indices. These indices are used to assess the goodness of model fit. Since we are comparing different models, we have used a combination of absolute and incremental fit indices as suggested by Hair *et al.* (2006).

The effectiveness of the three roles (models) of social support has been compared using the following indices: RMSEA, RMR, GFI, AGFI, NCP, ECVI, PGFI, AIC, and *R*-squared value of the regression equation that links work-family conflict, quality of work and non-work lives, social support to quality of life. Based on the results given in Table V, the base model gives the best results. While testing for the role of social support, social support as an antecedent to quality of life provides very good results and in this model, both supervisor and spouse supports have been found to be significant. Therefore, we consider that the seventh hypothesis (*H7*) has been supported by the study. In all the models that we have tested social support is added to the base model given in Figure 1. We have tested the various hypotheses based on this model. The first hypothesis (*H1*) supports the negative relationship between work-family conflict and quality of work life. The second hypothesis (*H2*) supports the

Fit statistics (threshold values)	Base model	Spouse support as		
		Moderator between INTCON and QOL Model I	Independent variables of INTCON Model II	Independent variables of QOL Model III
Degrees of freedom	19	22	25	25
RMSEA	0.033	0.16	0.057	0.035
GFI	0.98	0.90	0.97	0.98
Chi-sq/Df	1.36	13.26	2.15	1.40
RMR	0.037	0.10	0.045	0.036
AIC	97.64	298.47	157.77	141.15
NFI	0.96	0.69	0.94	0.96
CFI	0.99	0.70	0.96	0.99
AGFI	0.96	0.69	0.92	0.95
PGFI	0.34	0.30	0.31	0.31
NCP	6.64	176.48	26.77	10.15
ECVI	0.30	0.88	0.48	0.43
R-squared (QOL eqn)	0.26	0.27	0.26	0.32
Overall model fit	Best	Poor	Good	Very good

**Notes:** INTCON – Work-family conflict, QWL – Quality of work life, QNL – Quality of non-work life, QOL – Quality of life, SUPSS – Supervisor support, SPOSS – Spouse support; RMSEA – Root mean square error approximation, GFI – Goodness of fit index, RMR – Root mean square residual, AIC – Akaike information criterion, NFI – Normed fit index, CFI – Comparative fit index, AGFI – Adjusted goodness of fit index, PGFI – Parsimony goodness of fit index, NCP – Noncentrality parameter, ECVI – Expected cross-validation index (Hair *et al.*, 2006)

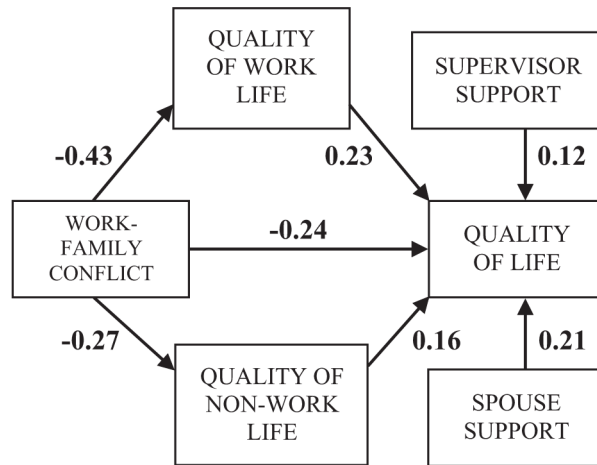
**Table V.**  
Summary of the SEM  
results for all the models

negative relationship between work-family conflict and quality of non-work life. The result indicates a strong negative relationship between these variables. The third hypothesis (*H3*) establishes a strong negative relationship between work-family conflict and quality of life. The fourth hypothesis (*H4*) establishes the mediating roles of quality of work life and non-work life between work-family conflict and quality of life. We performed the Sobel's test (Baron and Kenny, 1986) to verify the mediation effects. We have indicated the shortcomings of Baron and Kenny's approach in the discussion section. Based on the results of the Sobel's test, quality of work life ( $t = 3.99$ ,  $p\text{-value} = 0.000$ ) and quality of non-work life ( $t\text{-value} = 2.79$ ,  $p\text{-value} = 0.005$ ) mediates the relationship between work-family conflict and quality of life. The framework showing the social support and all other constructs and the correlation coefficients is given in Figure 2.

## Discussion

*Work-family conflict with quality of work life, quality of non-work life, and quality of life*  
Work-family conflict has significant negative relationships with quality of work and non-work lives and quality of life. The results indicate that work-family conflict has the strongest relationship with quality of work life. This implies that regardless of the source of work-family conflict, the pressure from the incompatible roles has reduced the well-being in the work domain greater than the well-being in the non-work (family) domain. Since Malaysians give high importance to the family, they tend to block the





**Notes:** Numbers in bold are significant and are standardized path coefficients

**Figure 2.**  
Final framework with all the constructs (supervisor support and spouse support as antecedents of quality of life)

work-family conflict from influencing their quality of non-work (family). Therefore, the impact of work-family conflict is much higher on work domain (Aryee, 1992; Aryee *et al.*, 1999; Kim and Ling, 2001). The tendency to block any spillover from one life domain to another can be explained by the Segmentation Theory (Cohen, 1997; Frone *et al.*, 1994; Kreiner, 2006; Lambert, 1990; Sirgy *et al.*, 2001).

*Mediating roles of quality of work life and non-work life between work-family conflict and quality of life*

Quality of work life and quality of non-work life have significant positive relationships with quality of life. Between the two relationships, quality of work life is stronger. This implies that satisfaction at the work place plays an important role in providing an overall satisfaction with life. It is interesting to note that the respondents consider family domain to be a stronger cause for work-family conflict but when it comes to overall quality of life, respondents view quality of work life to be more influential. A plausible explanation for this phenomenon can be that the respondents have a high degree of commitment to their work (Higgins *et al.* 1992) and view work as an important source of self-fulfillment, satisfaction, and nonmaterial reward (Lee and Kanungo, 1984, cited in Higgins *et al.*, 1992).

Quality of work life and quality of non-work life mediates the relationship between work-family conflict and quality of life. This result has to be interpreted with caution because “inferences about mediation are causal inferences” (Stone-Romero and Rosopa, 2008:328). In this study, we have established the relationships between work-family conflict, quality of work life, quality of non-work life, and quality of life (overall). These relationships are consistent with the assumed causal model shown in Figure 1. Since our study is not based on randomized experimental designs, the relationships may also be consistent with a number of other causal models (Stone-Romero and Rosopa, 2008). The mediating effect implies that work-family conflict has relationship with quality of life (overall) through the quality of work life and non-work life. The work-family conflict has both direct and indirect effects on quality of life. Since the direct effect of

work-family conflict on quality of life is not close to zero, quality of work life and quality of non-work life have partial mediation effects. Of the total impact of work-family conflict on quality of life, based on the results of the path analysis, we can attribute 60 percent to the direct effect and 40 percent to the mediation effects of quality of work life (26 percent) and quality of non-work life (14 percent).

*Spouse and supervisor supports as independent variables of quality of life*

Spouse support and supervisor support have a significant positive relationship with quality of life. Between the two, the impact of spouse support is stronger. Many researchers have argued the role of social support, as a coping mechanism that can mitigate the negative impact of work-family conflict on individuals' perceived quality of life (Frone *et al.*, 1997; Frone *et al.*, 1992; Greenhaus *et al.*, 1997; Parasuraman *et al.*, 1992). However, lack of theoretical justification and the complexity and multidimensionality of social support are the reasons for the failure to observe consistent moderating effects of social support (Ganster *et al.*, 1986; Greenhaus and Parasuraman, 1994; Thoits, 1982; Shumaker and Brownell, 1984). The role of social support in this study is quite revealing. Based on different models we have analyzed, the social support does not reduce the level of work-family conflict and does not reduce the impact of work-family conflict on quality of work and non-work lives and quality of life. But social support does have beneficial effects on increasing the quality of life. Therefore, we submit that social support functions as a "health-sustaining support" instead of "stress-reducing support" (Shumaker and Brownell, 1984). Many researchers have studied the direct effects of social support on stress and strains (Cohen and Wills, 1985 and O'Neil and Greenberger, 1994) and other life outcomes, such as burnout (Westman and Etzion, 1995); marital adjustment (Burley, 1995); job satisfaction (Parasuraman *et al.*, 1992) and job dissatisfaction (Ganster *et al.*, 1986). None of these studies has evaluated the role of social support in impacting the quality of life.

*Implications*

We have anchored the framework and the models used in this study based on Spillover theory, stress-buffering model, and social-cognitive model. The Spillover theory has been used to study the link between work-family conflicts, quality of work life, quality of non-work life, and quality of life. The analysis indicates that the framework is well supported. The stress-buffering and social-cognitive models have been used to study the various roles of social support. The current findings underscore the importance of work-family conflict on quality of work and non-work lives and quality of life, and role of social support in improving the quality of life. The mediating roles of quality of work life and non-work life underscore the importance of work life and family life on the overall quality of life. Employed individuals must learn to structure their work and non-work roles to reduce potential role intrusions by separating them rather than trying to concentrate on both the roles at the same time. Individuals must make deliberate attempt to unwind by taking personal time and engaging in their hobbies and leisure. This effort may help them prioritize their personal and work activities and prevent strain from accumulating. Organizations, on their part can play a role by introducing "family-friendly" work policies that include flexible work schedules, workplace child-care center, personal days, flexible workplace (telecommuting), career paths without transfer, part-time and job-sharing, compressed work week and longer

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paid maternity and paternity leaves. Studies have shown that employees are increasingly turning to organizations that provide greater family-oriented benefits (Bretz *et al.*, 1994; Lau and Husna, 1996) and these family-friendly policies evidently have increased life satisfaction (Thomas and Ganster, 1995); reduced absenteeism, turnover intention and increased organizational commitment (Aryee, 1992; Aryee *et al.*, 1999; Grover and Crooker, 1995). As is prevalent in the eastern culture, family constitutes a strong foundation of the Malaysian society (Rahimah, 2000). Another interesting finding of this study is the role of social support. Spouse support and supervisor support are essential to improve the overall well-being of an individual. Since supervisor support has been established to give beneficial impact on mental and physical welfare of employees (Frone *et al.*, 1997; Ganster *et al.*, 1986; Moen and Yu, 2000), organizations must be encouraged to devise schemes, such as formal mentoring programs. These programs can help improve communication and interaction between the employees and their supervisors. The spouse, on his/her part, must share the burden of household chores and must provide the necessary support (physical and/or mental) required handling any problem in the work and non-work domains.

The current findings enhance our understanding about the role of social support and contribute to the literature on work-family conflict. Earlier researchers (Frone *et al.*, 1997; Frone *et al.*, 1992; Greenhaus *et al.*, 1997; Parasuraman *et al.*, 1992) have hypothesized the role of social support as a coping mechanism to moderate the effects of work-family conflict on quality of life. This research, through the use of SEM, has analyzed three different roles of social support and has shown empirically that “health-sustaining” role as more appropriate in Malaysia.

#### *Limitations and future directions*

The current study has some limitations that deserve mention. This study has entirely relied on cross-sectional data. We suggest longitudinal and experimental designs in future research to confirm causal inferences. The sample elements have been derived from Klang Valley, a small industrialized area in Malaysia. The sample elements included all the three ethnic groups in Malaysia and therefore, the sample elements were not from a homogeneous group. Even though this area attracts people from all over Malaysia, the study can be made comprehensive by including other major cities in Malaysia. The current study has considered only supervisor and spouse supports. Other forms of support through co-workers, friends, and community have not been studied. The future studies can look into these additional supports to mitigate the effects of work-family conflict on quality of life.

#### **Conclusions**

The current research was conducted to:

- assess the impact of work-family conflict on quality of life;
- test the mediating roles of quality of work life and quality of non-work life; and
- assess the role of social support in enhancing the quality of life.

The study was conducted in Malaysia, a fast growing country in South-east Asia. The findings of this study are:

- (1) work-family conflict has a negative relationship on the quality of life;

- (2) quality of work life and quality of non-work life mediates the relationship between work-family conflict and quality of life. Our study has shown that of the total impact of work-family conflict on quality of life, 60 percent can be attributed to the direct effect, and 40 percent to the mediation effects; and
- (3) supervisor support and spouse support play important roles in enhancing the quality of life of an individual.

The study has also shown that women in Malaysia perceive a higher quality of life when compared to males and of the three major ethnic groups in Malaysia (Malays, Chinese, and Indians), Chinese perceive a higher level of work-family conflict. The study has outlined several theoretical and practical implications.

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#### About the authors

Samsinar Md-Sidin is the Dean of the Graduate School of Management, Serdang, Malaysia. Her areas of interest are: Consumer Behavior and General Marketing.

Murali Sambasivan is an Associate Professor at the Graduate School of Management. His areas of interest are: Operations Management, Management Science and Statistics. Murali Sambasivan is the corresponding author and can be contacted at: murali@econ.upm.edu.my

Izhairi Ismail is an Assistant Professor at UIA. Her areas of interest are: Organizational Behavior and General Management.