Influence of Work-Family Conflict and Work-Family Positive Spillover on Healthcare Professionals’ Job Satisfaction
Lee-Peng Ng¹, Lok-Sin Kuar² and Wei-Hin Cheng³

Abstract
The purpose of this paper is to examine the influence of work-family conflict and work-family positive spillover on job satisfaction among healthcare professionals. The sample of this study consists of healthcare professionals (e.g. registered nurses, medical doctors, pharmacists etc.) who work in public and private hospitals in Malaysia. This study involved a cross sectional design quantitative study. Data was collected through self-administered questionnaires. From a total of 642 questionnaires distributed, 503 were returned and 3 were discarded, leaving 500 usable questionnaires. Partial least square analysis revealed that only family-to-work conflict was negatively related to job satisfaction, no significant relationship was found between work-to-family conflict and job satisfaction. Work-to-family and family-to-work positive spillover were found to improve job satisfaction among the healthcare professionals. Work-to-family positive spillover showed stronger influence on job satisfaction as compared to family-to-work positive spillover. Practical implications, limitations and future research were discussed.

Key words: Work-to-family conflict, family-to-work conflict, work-to-family positive spillover, family-to-work positive spillover, job satisfaction, healthcare

INTRODUCTION
Healthcare industry is an important driver for Malaysian economic growth. This sector is described as one of the most dynamic and fast growing industries in worldwide economy (Economic Transformation Programme, 2014). Several trends, such as the rise of aging population, extended longevity as well as lifestyle diseases (e.g. cancer, hypertension and diabetes) are expected to be the driving factors for the increase demands for healthcare services (Economic Transformation Programme, 2014; Malaysian Investment Development Authority, 2015). Moreover, Malaysia government put a lot of efforts in promoting the country as one of the main destinations for medical tourism. The number of medical tourists to Malaysia has increased from 641,000 in year 2011 to 850,000 in 2015 (Malaysia Healthcare Travel Council, 2016). Nevertheless, Malaysia together with other South-East Asian countries are facing shortage of health professionals and this becomes one of the major constraints to the country’s health care system (Kanchanachitra et al., 2011; Bahrom, 2013, February 6). According to the report released by World Health Organisation (2013), the shortage of healthcare workers worldwide will increase from 7.2 million in year 2013 to 12.9 million by 2035.

The above developments indicate the needs to have well trained, skilled and adequate number of healthcare workforce to cope with the increasing demands for healthcare services. Besides, it is essential to ensure quality healthcare services are provided to the patients. Prior studies showed that employee attitudes (e.g. job satisfaction) were closely linked to improved job performance (Wright, Cropanzano, & Bonett, 2007; Ölçer, 2015) and patient’s satisfaction (Weng et al., 2011). It is important to note that job satisfaction was reported to have greater impact on job performance for complex job (e.g. professional) than the less complex job (Judge, Thoresen, Bono, & Patton, 2001). Besides, satisfied employees also have less tendency of intention to leave organization and profession (Buchan & Aiken 2008; Ramoo, Abdullah,

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Many have addressed their concerns of the several challenges encountered by healthcare sector, such as high workload, long working hours, shift work, time pressure, shortage of staff, and lack of flexibility in working hour (Lu, While, & Barriball, 2005; Pal & Saksvik, 2008). Such demanding work environment has often been related to the interference between work and family life or work-family conflict, which eventually lead to undesirable job attitude (e.g. job satisfaction) and behavior (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Adverse impacts of work-family conflict are undeniable and it is quite well documented in the literatures (Amstad et al., 2011). Nevertheless, the potential advantageous consequences due to positive spillover between work and family domain are often been neglected in many studies. Work and family/personal life are integral part of working adults. Work-family studies have expanded from the traditional scarcity hypotheses which focus on the negative consequences of inter-role conflict to enhancement hypothesis that emphasize on the benefits of occupying multiple life roles (Mullen, Kelly, & Kelloway, 2008). Several authors (e.g. Grywarz & Marks, 2000; Hanson, Hammer, & Colton, 2006) have stressed that the understanding of work-family interface is incomplete without integrating the inter role strain and role enhancement hypotheses. Apart from that, others (Frone, 2003; Rantanen, Kinnunen, Mauno, & Tillemann, 2011) have clearly addressed that the bi-directional nature of positive and negative side of work-family interface (work-to-family and family-to-work) are important components of work-family balance. Thus far, the analysis on the positive side of work-family interface among healthcare professionals remains scant as most studies were concentrated primarily on the conflict, especially work-to-family conflict (e.g. Cortese, Colombo, & Ghislieri, 2010; Lembrechts, Dekocker, Zanoni, & Pulignano, 2015; van der Heijden et al., 2009). In view of such limitation, this study aims to examine the influence of work-family conflict and work-family positive spillover on job satisfaction among the health care professionals.

LITERATURE REVIEW

Job Satisfaction
Job satisfaction has received extensive attention in organizational research. Job satisfaction has been defined as “a function of the perceived relationship between what one wants from one’s job and what one perceives it as offering” (Locke, 1969). Spector (1997) described job satisfaction as “the extent to which people like or dislike their job” (p. 2). Continuous research on job satisfaction has been conducted throughout the past few decades. Job satisfaction is one of the key concerns among the health care professionals as well as the management team all around the world in view of its potential detrimental impact on organization overall performance. Job satisfaction has significant implications toward employees’ turnover intention (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Delobelle, Rawlinson, Ntuli, Malatsi, Decock, & Depoorter, 2011) or intention to stay (AbuAlRub, El-Jardali, Jamal, & Abu Al-Rub, 2015) among nurses. Meta-analysis performed by Yin and Yang (2002) showed that job satisfaction is the most important predictor of nurses turnover intention based on a review of 129 studies from 1978 to 1998. In addition, the degree of job satisfaction is viewed as traditional indicator of employee well-being, and low job satisfaction has proven to be important indicator of withdrawal behavior, such as absenteeism (Johns, 2009).

In general, job and organizational related factors are among the most common factors found to be related to job satisfaction. Herzberg’s Two-Factor Theory (1966) is one of the widely cited theories in explaining job satisfaction. This theory explains the presence of hygiene factors, such as salary, work environment, quality of supervision, and company policy may eliminate job dissatisfaction. On the other hand, employees’ job satisfaction can be derived from the job itself, such as recognition, promotion, and personal growth (Herzberg, 1966). Rad and De Moraes (2009) found that salaries, fringe benefits, promotion, and communication exhibit greatest correlation with job satisfaction among employees from 12 public hospitals in Iran. Besides, their findings showed that supervision, co-worker, work condition, and nature of work have less influence on job satisfaction. In a study involving large group of registered nurses, van der Heijden et al. (2009) found that unsupportive work environment, low leadership quality,
and high work-to-home interference were the causes of lower job satisfaction, which, in turn result to nurses’ intention to leave the profession one year afterwards.

Work-Family Conflict

Work-family studies have evolved from its initial focus on single direction to dual directions (i.e. work-to-family and family-to-work). Both work-to-family conflict (WFC) and family-to-work conflict (FWC) are related but distinct form of inter-role conflict (Frone, Russell, & Cooper, 1992; Greenhaus & Beutell, 1985). WFC (FWC) is “a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the job (family) interfere with performing family (work)-related responsibility” (Netemeyer, Boles, & McMurian, 1996, p.401). Antecedents of WFC (FWC) include work (family) role stressors, work (family) social support, job (family) characteristics, and personality (Shropshire & Kadlec, 2012). Time consumed in one domain (e.g. work) limit one’s ability to take part in the activities of another domain (e.g. family). Besides, strain generated from work or family activities is likely to cause negative psychological spillover to another domain that consequently affects individual attitudes and behaviors (Voydanoff, 2008). In contrast, resources that individuals gained either from family or work domain (communication skills, supportive supervisor/family members, job autonomy etc.) are important in enhancing cross-domain role performance and well-being (Voydanoff, 2008).

There are a multitude of studies provided evidences of the negative consequences of WFC and FWC. WFC and FWC may lead to unfavorable change in work attitude (e.g. declining job satisfaction and organizational commitment), career outcomes, performance-related outcomes, and well-being (Dorio, Bryant, & Allen; Mihelič & Tekavčič, 2014). Moreover, work-family interference also leads to increase withdrawal behavior and intentions, such as absenteeism and turnover among the employees (Dorio et al., 2008). Anyway, some mixed results were reported on the relationship and magnitude of influence of WFC and FWC on job satisfaction. For instance, Fisher, Bulger, and Smith (2009) only affirmed negative relationship between WFC and job satisfaction, and null association was found between FWC and job satisfaction in a study involving 530 managers from various organizations in the United States. Aryee, Luk, Leong, and Lo (1999) only found an inverse relationship between FWC and job satisfaction based on a study among employed parents in Hong Kong. Additionally, their studies couldn’t detect any linkage between FWC, WFC and family satisfaction.

Nevertheless, meta-analysis conducted by Amstad et al. (2011) confirmed that the dual directions of work-family conflict or interference were linked to work-related outcomes (work satisfaction, organizational commitment, intention to turnover, burnout, absenteeism, career satisfaction, organization citizenship behavior, work related performance and stress), family-related outcomes (marital satisfaction, family satisfaction, family-related performance and stress), and domain-unspecific outcomes (life satisfaction, health problems, psychological strain, somatic/physical symptoms, depression, substance use/abuse, stress, and anxiety). Furthermore, their findings also revealed that the correlation between WFC and work-related outcomes were stronger than family-related outcomes. On the other hand, FWC has stronger association with family-related outcomes as compared to work-related outcomes (Amstad et al., 2011).

Likewise, meta-analysis performed by Shockley and Singla (2011) also indicated that WFC exhibited stronger relationship with job satisfaction than family satisfaction; and FWC was a stronger predictor of family satisfaction than job satisfaction. Shockley and Singla (2011) concluded that such results support the source attribution (or same domain) perspective instead of Frone et al.’s (1992) domain specific consequences (or cross-domain) view. Source attribution perspective explains that WFC may cause declining performance in the receiving domain; however individual will psychologically attribute the blame to the domain that was the source of the conflict (Shockley & Singla, 2011). On the other hand, domain specificity consequences/cross-domain model contends that when work interfere with family life, one has limited time and energy meeting the demands of family role, thus result to more distress or dissatisfaction in family domain and vice versa. As such, WFC was more related to family outcomes and FWC tend to associated with work outcomes (Frone, Yardley, & Markel, 1997; Frone, 2003).

Further empirical evidences that indicate the negative impact of WFC and FWC on job satisfaction can be found in the work of Rathie and Barath (2013) who performed a study among junior police personnel in
India. In the similar vein, Yildirim and Aycan (2008) reported that that work overload and irregular work schedules significantly predict WFC, which subsequently result to lower job and life satisfaction based on a study among 243 nurses in Turkey. In Taiwanese sample, Lu and Cooper (2008) also found that WFC and job satisfaction were negatively connected. Gözükara and Çolakoğlu's (2015) analysis showed that increase in WFC resulted to decline job satisfaction among 284 participants from service industry and manager support partially mediate this relationship (Gözükara & Çolakoğlu, 2015). On the other hand, Cortese et al. (2010) discovered that emotional charge and job demand increase the level of WFC, which eventually lower job satisfaction among Italian nurses. Taken together, prior studies lend strong support on the relationship between the different directions of work-family conflict and job satisfaction (Beutell, 2010; Carlson, Grzywacz, & Kacmar, 2010; Karatepe & Kilic, 2007; Karatepe & Sokmen, 2006; Netemeyer et al., 1996; Spector et al., 2007; Wayne, Mūsisca, & Fleeson, 2004; Zhao & Namasivayam, 2012). Hence, the following hypothesis is proposed:

H1a: Work-to-family conflict is negatively related to job satisfaction.
H1b: Family-to-work conflict is negatively related to job satisfaction.

**Work-Family Positive Spillover**

Sieber (1974) and Marks (1977) were among the first to argue on the cross-domain conflict or depletion perspective. Sieber’s (1974) role accumulation theory explained that involvement in multiple roles allow one to gain benefits, such as role privileges, access to multiple resources for role enhancement, status security, as well as enrichment of the personality and ego gratification. Meanwhile, Marks (1977) contended that involvement in multiple roles can enhance resources and generate energy. Work and family role accumulation were found to enhance social network and resources. Based on this backdrop, subsequent researchers have developed several distinct but closely related concepts that reflect positive side of work-family interface, such as work-family facilitation (Wayne et al., 2004), work-family enrichment (Greenhaus & Powell, 2006; Carlson, Kacmar, Wayne & Grzywacz 2006), work-family enhancement (Ruderman, Ohlott, Panzer, & King, 2002) and work-family positive spillover (Edwards & Rothbard, 2000; Hanson et al., 2006).

Generally, positive spillover refers to positive cross-domain influence (e.g. values, skills, and behaviors) between the roles that one play in work and family or personal life (Edwards & Rothbard, 2000; Poelmans, Stepanova, & Masuda, 2008). Hanson et al. (2006) extended the work by Edwards and Rothbard (2000) and define work-family spillover as the “transfer of positively valence affect, skills, behaviors, and values from the originating domain to the receiving domain, thus having beneficial effects on the receiving domain” (Hanson et al., 2006, p. 251). Work-family positive spillover and work-family conflict are two distinct constructs; one may experience high conflict and positive spillover at the same time or high (low) in positive spillover, but low (high) in work-family conflict (Hanson et al., 2006).

As a whole, positive work-family interactions have received less empirical attention as compared to work-family conflict. In a study among mid-life employed adults, Grzywacz (2000) found that those with high WFPS reported better mental health and physical health. Meanwhile, FWPS also promote positive well-being and mental health (Grzywacz, 2000). Moreover, the positive side of work-family interface was linked to greater work engagement (Ng & Hassan Ali, 2014), life satisfaction (Fisher et al., 2009), job satisfaction, affective commitment, family satisfaction, mental and physical health (Magee, Stefanic, Caputi, & Iverson, 2012; McNall, Nicklin, & Masuda, 2010).

Several researchers suggested that work-family positive spillover may enhance job satisfaction (Edwards & Rothbard, 2000; Grzywacz, Almeida, & McDonald, 2002). McNall et al. (2010) as well as Shockley and Singla (2011) further proved that work-to-family and family-to-work enrichment were positively linked with job satisfaction in their meta-analysis. Shockley and Singla’s (2011) study was based on various publications from 1995 till 2008, and only 25 independent samples work-family enrichment (positive spillover) were found relevant, in contrast to 153 samples involving work-family conflict. In addition, their analysis revealed that source attribution effect was applied to work-family enrichment as well. Other researchers (Haar & Bardoe1, 2007; Hanson et al., 2006) also support the functions of WFPS and
FWPS in improving employees’ job satisfaction. Based on the above review, the following hypothesis is formulated:

H2a: Work-to-family positive spillover is positively related to job satisfaction.
H2b: Family-to-work positive spillover is positively related to job satisfaction.

METHODOLOGY

Procedure
The participants of the present study consist of healthcare professionals who are serving the public and private hospitals around Klang Valley, Malaysia. As cross sectional design quantitative study is employed, self-administered questionnaire is used as the major data collection instrument. A total of 642 questionnaires were distributed to the target respondents based on convenient sampling approach. After excluding three incomplete questionnaires, there were a total of 500 questionnaires which were usable for data analysis. As such, the total response rate is about 78 percent.

Measures
Work-family conflict was measured with the scale developed by Netemeyer et al. (1996). WFC and FWC consist of five items each, representing the bi-direction nature of work-family conflict. Examples of the item are “My job produces strain that makes it difficult to fulfill family duties,” and “Things I want to do at work don’t get done because of the demands of my family”. Response options ranged from strongly disagree (1) to strongly agree (5). The Cronbach’s alpha value for both WFC and FWC exceeded 0.80 in prior study (Netemeyer et al., 1996). The bi-direction of work-family positive spillover consists of 14 items, adopted from Hanson et al. (2006). WFPS and FWPS were measured with seven items each, capturing the cross-domain behavior-based and value-based instrumental positive spillover. The participants were asked to indicate their agreeableness for each statement based on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). The sample items for WFPS include “Skills developed at work help me in my family life,” and “Values developed at work make me a better family member.” Items for FWPS include “Skills developed in my family life help me in my job,” and “I apply the principles my family values in work situations.” The Cronbach’s alpha values for the 7-item WFPS and FWPS were reported at 0.92 and 0.93 respectively in prior studies, indicating very good reliability (Tsai, 2008). Job satisfaction consists of five items and the measure was adapted from Anderson, Coffer and Byerly (2002). An example of the item is “The work I do on my job is meaningful to me”. Respondents indicated their level of agreement based on a five-point Likert scale, with the response options ranged from strongly disagree (1) to strongly agree (5). This scale showed good reliability in the previous studies, with Cronbach’s alpha value of 0.80 (Anderson et al., 2002) and 0.74 (Amah, 2009).

DATA ANALYSIS AND RESULTS

SmartPLS 3.0 software for Partial Least Square-Structural Equation Modelling (PLS-SEM) was used for hypotheses testing. Meanwhile, IBM SPSS version 23 was used for data entry, data screening and descriptive analysis. No missing data and substantial outliers were observed. The initial data screening described earlier are essential in meeting the conditions for running PLS-SEM (Hair, Hult, Ringle, & Sarstedt, 2014). The current sample size (500) is adequate for the analysis. Figure 1 shows that the maximum number of arrows pointing at a latent variable in the model of the present study is 4, thus the minimum observation required is 40 based on the 10 times rule (Hair et al., 2014). The first stage of data analysis through PLS-SEM involves the evaluation of measurement model of which the purpose is to examine the reliability and the validity of the measures used in the current study. Next stage is the examination of structural model for hypothesis testing (Hair et al., 2014).

The respondents’ profile
Based on the data of 500 respondents, 265 (53%) were female and 235 (47%) were male. Majority of the respondents in the current study were between 21 to 30 years old (60.8%), followed by those whose age
range from 31 to 40 years old (20%), 41 to 50 years old (12%), 23 (4.6%), over 51 years old, and lastly the smallest group were those 20 years old and below (2.6%). The biggest ethnic groups that took part in this survey were Chinese (63.2%), followed by Malay (20.2%), Indian (14.2%), and others (2.4%). Among the respondents, 147 (29.4%) were registered nurses, 132 (26.4%) were medical doctor, 59 (11.8%) were medical assistants, 54 (10.8%) were emergency medical technicians/paramedics, 43 (8.6%) were pharmacists, 25 (5%) were clinical laboratory technologist or technicians and the balance 40 (8%) were in other specialization. Majority of the respondents (63.2%) were still single, 30.2% respondents were married and other categories composed of 6.6% of the total respondents.

Measurement Model Evaluation
Convergent validity
Based on the guideline provided by Hair et al. (2014) for reflective measurement model, composite reliability ($\rho_c$), convergent and discriminant validity were evaluated. Composite reliability values as presented in Table 1 ranged from 0.832 to 0.903, indicating good reliability (Gefen, Straub, & Boudreau, 2000). Indicators with outer loadings below the threshold of 0.5 were deleted and the remaining items were showed in Table 1 (Bagozzi & Yi, 1991). Average variance extracted (AVE) for each model construct range from 0.502 to 0.701 (Table 1), thus fulfil the minimum criteria of 0.5 for convergent validity (Hair et al., 2014).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Indicator</th>
<th>Loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-to-family conflict</td>
<td>WFC1</td>
<td>0.831</td>
<td>0.903</td>
<td>0.701</td>
</tr>
<tr>
<td></td>
<td>WFC2</td>
<td>0.831</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFC3</td>
<td>0.800</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>WFC4</td>
<td>0.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family-to-work conflict</td>
<td>FWC2</td>
<td>0.755</td>
<td>0.892</td>
<td>0.675</td>
</tr>
<tr>
<td></td>
<td>FWC3</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FWC4</td>
<td>0.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FWC5</td>
<td>0.869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>JS1</td>
<td>0.716</td>
<td>0.853</td>
<td>0.538</td>
</tr>
<tr>
<td></td>
<td>JS2</td>
<td>0.759</td>
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<tr>
<td></td>
<td>JS3</td>
<td>0.804</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JS4</td>
<td>0.672</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JS5</td>
<td>0.710</td>
<td></td>
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<tr>
<td>Work-to-family positive</td>
<td>WFPS1</td>
<td>0.789</td>
<td>0.860</td>
<td>0.509</td>
</tr>
<tr>
<td></td>
<td>WFPS2</td>
<td>0.735</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFPS3</td>
<td>0.794</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFPS4</td>
<td>0.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFPS5</td>
<td>0.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFPS7</td>
<td>0.652</td>
<td>0.832</td>
<td>0.502</td>
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<tr>
<td>Family-to-work enrichment</td>
<td>FWPS1</td>
<td>0.620</td>
<td></td>
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<tr>
<td></td>
<td>FWPS2</td>
<td>0.685</td>
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<td></td>
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<tr>
<td></td>
<td>FWPS3</td>
<td>0.838</td>
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<td></td>
<td>FWPS4</td>
<td>0.754</td>
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<tr>
<td></td>
<td>FWPS7</td>
<td>0.621</td>
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</tr>
</tbody>
</table>

Note. CR = composite reliability, AVE = average variance extracted. WFC5, FWCL, WFPS6, FWPS5 and FWPS6 were deleted as outer loading are< 0.5.
Discriminant Validity
The Fornell-Larker (1981) criterion was used to assess the discriminant validity. Evaluation of discriminant validity is essential as to ensure that a construct is truly different from other constructs in the model by empirical standards (Hair et al., 2014). As illustrated in Table 2, the square root of the AVE value for each construct in this study is greater than the correlations between construct. As such, this study meets the requirement as specified in Fornell-Larker criterion for discriminant validity (Hair et al., 2014). In addition, the heterotrait-monotrait ratio of correlations (HTMT) was examined as well and it is a new approach in assessing discriminant validity of variance-based SEM (Henseler, Ringle, & Sarstedt, 2015). As shown in Table 3, the maximum HTMT value is 0.635 and this is nicely below 0.85 (Kline, 2011), which is the most conservative critical HTMT value. Hence, the result further confirms that the discriminant validity has been established.

Table 2: Discriminant validity results based on Fornell-Larker criterion

<table>
<thead>
<tr>
<th></th>
<th>FWPS</th>
<th>FWC</th>
<th>JS</th>
<th>WFC</th>
<th>WFPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWPS</td>
<td>0.708</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FWC</td>
<td>-0.234</td>
<td>0.822</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>0.396</td>
<td>-0.321</td>
<td>0.734</td>
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</tr>
<tr>
<td>WFC</td>
<td>-0.032</td>
<td>0.413</td>
<td>-0.136</td>
<td>0.837</td>
<td></td>
</tr>
<tr>
<td>WFPS</td>
<td>0.459</td>
<td>-0.208</td>
<td>0.522</td>
<td>-0.148</td>
<td>0.713</td>
</tr>
</tbody>
</table>

Note. The square root of AVE values is shown on the diagonal, typed in bold and italic, off-diagonals are correlations among constructs. WFC = work-to-family conflict, FWC = family-to-work conflict, WFPS = Work-to-family positive spillover, FWPS = Family-to-work positive spillover, JS = job satisfaction

Table 3: Discriminant validity results based on heterotrait-monotrait ratio of correlations (HTMT)

<table>
<thead>
<tr>
<th></th>
<th>FWPS</th>
<th>FWC</th>
<th>JS</th>
<th>WFC</th>
<th>WFPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWPS</td>
<td>0.327</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FWC</td>
<td>0.496</td>
<td>0.376</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>0.183</td>
<td>0.422</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFC</td>
<td>0.599</td>
<td>0.269</td>
<td>0.635</td>
<td>0.201</td>
<td></td>
</tr>
</tbody>
</table>

Note. WFC = work-to-family conflict, FWC = family-to-work conflict, WFPS = Work-to-family positive spillover, FWPS = Family-to-work positive spillover, JS = job satisfaction

Structural Model
The first step in structural model assessment is to examine the collinearity of the predictor constructs through variance inflation factor (VIF). Multicollinearity problem exist when two or more predictors in the model are highly correlated (Sekaran & Bougie, 2009). Table 4 indicates that the VIF values for all the predictor variables are far below the threshold of 5 (Hair et al., 2014), indicating no problem of multicollinearity.

Table 4: Collinearity Statistic

<table>
<thead>
<tr>
<th>Key variables</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family-to-work conflict</td>
<td>1.285</td>
</tr>
<tr>
<td>Family-to-work positive spillover</td>
<td>1.318</td>
</tr>
<tr>
<td>Work-family conflict</td>
<td>1.227</td>
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<tr>
<td>Work-to-family positive spillover</td>
<td>1.301</td>
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</tbody>
</table>
As suggested by Hair et al. (2014), bootstrapping procedure with 5000 resamples was employed to obtain the t-values of structural model path coefficient. Table 4 summarizes the results for structural model analysis.

Figure 1: PLS Path Model Estimation with factor loadings Path Coefficients, and Coefficient of Determinants (R²)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Std Beta</th>
<th>Std error</th>
<th>t-value</th>
<th>Decision</th>
<th>f²</th>
<th>R²</th>
<th>Q²</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a WFC -&gt; JS</td>
<td>0.014</td>
<td>0.044</td>
<td>0.328</td>
<td>Not Supported</td>
<td>0</td>
<td>0.340</td>
<td>0.177</td>
</tr>
<tr>
<td>H1b FWC -&gt; JS</td>
<td>-0.204</td>
<td>0.042</td>
<td>4.846**</td>
<td>Supported</td>
<td>0.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2a WFPS -&gt; JS</td>
<td>0.407</td>
<td>0.032</td>
<td>12.907**</td>
<td>Supported</td>
<td>0.193</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2b FWPS -&gt; JS</td>
<td>0.162</td>
<td>0.037</td>
<td>4.401**</td>
<td>Supported</td>
<td>0.030</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p< 0.01
Note. WFC = work-to-family conflict, FWC = family-to-work conflict, WFPS = work-to-family positive spillover, FWPS = family-to-work positive spillover, JS = job satisfaction

Table 5 showed that only FWC that exerted significant negative relationship with job satisfaction (β = -0.204, p < 0.01). The relationship between WFC and job satisfaction appeared to be insignificant (β = 0.014, p > 0.05). As such, H1b is supported, but not H1a. On the other hand, both WFPS (β = 0.407, p < 0.01) and FWPS (β = 0.162, p < 0.01) were positively related to job satisfaction. Both H2a and 2b were supported. In addition, the predictors in this study explaining 34% of the variance in job satisfaction (R² = 0.34).

P-value (statistical significant) indicates that an effect exist, but it does not reveal the size of effect (Sullivan & Feinn, 2012). Hence, there’s need to report the effect size (f²), which show the influence of the exogenous on the endogenous construct in terms of the share of the variance (Hair et al., 2014). Effect size of 0.02, 0.15, and 0.35 indicate small, medium, and large effect size respectively (Cohen, 1988). The results
as presented in Table 5 demonstrated that WFC construct has no effect on job satisfaction. On the other hand, FWC and FWPS constructs contributed to explanation of job satisfaction with a weak effect. Lastly, WFPS has a medium effect for the contribution to the job satisfaction construct. Next, the Stone Geisser test Q2 value was assessed through blindfolding procedure in order to determine the predictive relevance of the model (Hair et al., 2014). Blindfolding procedure is relevant for the current study as the endogenous construct is a reflective measurement model (Hair et al., 2014). Results from blindfolding procedure (omission distance = 7) showed that Q2 value was 0.177, which is greater than zero. This suggests that the model has a good predictive relevance.

**DISCUSSION**

Contrary to expectation, only FWC (but not WFC) exerts significant negative relationship with job satisfaction. In general, majority of the findings obtained in the prior studies (e.g. Anderson et al., 2002; Rathi & Barath, 2013; Shockley & Singla, 2011) reported negative relationship between WFC, FWC, and job satisfaction. Nevertheless, such results were not entirely conclusive. Namasivayam and Zhao (2007) gained the same result as present study, job satisfaction among Indian hotel employees not affected by WFC, but decline due to FWC. Insignificant relationship between WFC and job satisfaction also found in other studies (e.g. Aryee et al., 1999; Lyness & Thompson, 1997). Interestingly, Zhang, Griffeth, and Fried's (2012) findings failed to gain support for the inverse relationship between WFC and turnover intentions, as well as WFC and job attitude (i.e. affective commitment) in a sample of 264 managers from mainland China. Cultural influence may have an impact to the result of present study. Asian culture generally perceive that work and family roles are different but they can complement each other rather than competing (Aycan, 2008; Zhang et al., 2012). Work can enhance individual and family benefits (e.g. economic benefits) and it is essential in maintaining living standard (Zhang et al., 2012). Similar to the Chinese culture (China and Hong Kong), Malaysian culture is regarded as high power distance and collectivism. Hence, it is possible that when work interferes with family, the employees view it as an opportunity, rather than threat (Yang, Chen, Choi, & Zou, 2000). On the other hand, in the case of FWC, individuals may experience psychological strain that limit their ability to meet job demands or perform well in the job, which subsequently affect the intrinsic and extrinsic rewards received as well as their job satisfaction (Aryee et al., 1999). The results from this study obviously demonstrated that cross-domain perspective explained better than the source attribution (same domain) perspective in predicting the outcomes of work-family conflict. FWC appeared to be a better predictor of job satisfaction, as compared to WFC.

As predicted, hypothesis 2a and 2b, which posited that the increase perception of WFPS and FWPS will enhance job satisfaction among the healthcare professionals, were well supported. The result is consistent with prior empirical evidences, such as Haar and Bardoel (2007) and Hanson et al. (2006). In this study, WFPS showed greater influence on job satisfaction as compared to FWPS. This means that WFPS has greater influence on the outcome of the originating domain than the receiving domain. This is congruent with Shockley and Singla's (2011) finding, whereby source attribution perspective is more prevalent for positive side of work-family interface. Healthcare professionals learn different behaviors and values at work, such as consideration, patience and attention to detail, which can be useful in improving family function. Similarly, values and behavior at home (e.g. respect others and patience) are useful for their profession as well (Hanson et al., 2006). Such positive spillover across the two domains is crucial in determining job satisfaction.

**IMPLICATIONS**

This study respond to the urge to examine the bidirectional influence of positive and negative work-family interface (Hanson et al., 2006). Mere focus on work-family conflict limits the understanding on work and family linkage. In addition, this study also provides insight on the source attribution and cross-domain effect of work-family interface and job satisfaction among the healthcare professionals in a South-East Asia country, which is a valuable addition to the vast majority of the studies found in the West. Research on how work-family interface is related to job satisfaction is critical so that the management of the hospital can design a constructive strategy or supportive interventions to promote work-family
balance. By having satisfied employees, the management can attract talented candidates and to retain current employees. Turnover of skillful and experienced healthcare employees are indeed a great loss of human capital to the organizations. Though the connection between WFC and job satisfaction was not discovered in this study, failure of hospital administrator in providing adequate work-family support program will lead to declining WFPS, which may have substantial impact on other areas of individual well-being and performance. Besides, the ignorance of the need for more balanced work-life may lead to growing dissatisfaction among the healthcare professionals.

It is important for the organization to recognize that involvement in family or personal life activities bring benefits to job outcomes and benefit the company. The organization should create a supportive work-family culture for their staff (Andreassi & Thompson, 2008). The management can provide adequate care provisions to the healthcare employees, such as offer on-site childcare center or collaborate with other companies nearby to have a common childcare center (Poelmans, Odle-Dusseau, & Beham, 2009). It is also possible that the management negotiates with childcare center for better discounts or reimburses employees for childcare expenses (Poelmans et al., 2009). Such provision is not very common in Malaysia, most Malaysian has to rely on foreign maid, parents or pay for private childcare center to take care of their children while they are working. In addition, adequate training should be provided to the management personnel so that they are furnished with sufficient skill and knowledge to execute family-responsive policies. The management should encourage their subordinates to apply and share their ability and competency from their profession with family members. In addition, the hospital administrator should clearly communicate the work-family policies to the employees and provide more flexibility on leave arrangement.

LIMITATIONS AND FUTURE RESEARCH

There are several limitations of the present study. Firstly, self-report questionnaire has been used in the present study, which is commonly subject to social desirability bias. There’s tendency that respondents may answer the questions provided in the research instrument based on what is considered as more favorable to the current social norms and standards regardless of their true feelings (Sekaran & Bougie, 2009). As such, multi-source data collection can be an option to reduce the problem of mono-method bias (Miao & Kim, 2009). Next, present study used a cross-sectional design study that has the limitation to infer causality, as such carefully design longitudinal study will be able to increase the generalizability of the result. Furthermore, future research may consider examining the mediating effect of work-family conflict and work-family positive spillover between individual personality, job demands, job resources and job satisfaction. In addition, the potential influence of cultural values on the relationship between work-family conflict and work outcomes should be further explored. Next, the sample of present study is restricted to healthcare employees found in specific location. As such, future study may extend the analysis to the employees in other sectors.

REFERENCES


