The Relationship between Work-Family Conflict and Job Satisfaction: A Structural Equation Modeling (SEM) Approach

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Abstract

The aim of this study is to investigate the relationship between work-family conflict, family-work conflict and job satisfaction using structural equation modeling. The data is obtained from 226 health service staff (doctors and nurses) in Turkey. Considering the findings, it is concluded that health employees experience work-family conflict more than they experience family-work conflict. Results obtained from the structural equation modeling indicate that there is a reciprocal relationship between work-family conflict and family-work conflict and that work-family conflict has an influence on job satisfaction whereas family-work conflict does not affect job satisfaction.

Keywords: Work-family conflict, Family-work conflict, Job satisfaction, Structural equation modeling, Turkey

1. Introduction

Work-family conflict is considered to be an important issue in today’s business world (Burke & El-Kot, 2010; Grandey, Cordeino, & Crouter, 2005). In recent years, there has been an increasing interest in the conflict between work and family life domains, and recent studies highlight the conflict experienced by individuals between their roles in the family and at work, which is covered under the heading called work-family conflict. While the findings obtained mainly in Western countries and the related theories refer to the obvious relationship between work demands and work-family conflict (Spector, Allen, Poelmans, Lapiere, Cooper, & Widerszal-Bazyl, 2007), it is indicated that long working hours, duty and heavy work load have a direct influence on work-family conflict (Boyar, Maertz, Mosley, & Carr, 2008; Kim, Leong, & Lee, 2005). Thus, it is essential to establish a successful balance between work and family domains so that several demands in both domains could be met efficiently, and the required resources could be attained and used easily (Bass, Butler, Grzywacz, & Limney, 2008).

In Greenhaus and Boutell’s study (as cited in Willis, O’Conner, & Smith, 2008), work-family conflict is defined as a consequence of inconsistent demands between the roles at work and in the family. In other words, work-family conflict exists when the expectations related to a certain role do not meet the requirements of the other role, preventing the efficient performance of that role (Greenhaus, Tammy, & Spector, 2006). Therefore, it could be said that the conflict between work and family domains tends to stem from the conflict between the roles. Several studies reveal that work and family are not two separate domains as they are highly interdependent, having a dynamic relation with one another. While family life is affected by the factors at work, the reverse is also experienced (Trachtenberg, Anderson, & Sabatelli, 2009; Namisivayam & Zhao, 2007).

Balancing work and family is challenge in an adult’s life. The increase in dual-career couples and single-parent households and the decrease in traditional, single-earner families mean that responsibilities for work, housework, and childcare are no longer confined to traditional gender roles (Byron, 2005). Further, employees find themselves struggling to juggle the competing demands of work and family. The excessive pressure and scarcity of free time may adversely affect their ability to cope. This can lead to dissatisfaction, absenteeism, poor personal relations, and decreased work performance (Davidson & Cooper, 1992; O’Laughlin & Bischoff, 2005).
Studies indicate that work-family conflict creates negative consequences on both the individuals and the organizations. Empirical studies conclude that there is positive correlation between work-family conflict and the impacts on individuals, such as drinking alcohol, exhaustion, work depression, work anxiety and physical problems (Warner & Hausdorf, 2009; Ballout, 2008; Wilson, Polzer-Debrwyne, Chen, & Fernandes, 2007; Rotondo, Carlson, & Kincaid, 2003). Not being limited only by the employees and their families, work-family conflict leads to many other organizational consequences, such as work dissatisfaction, low performance, organizational commitment, irregular attendance at work and high turnover rate (Willis et al., 2008; Kim et al., 2005).

WFC and FWC have been found to have similar relationships with particular outcomes. Both FWC and WFC have shown a negative relationship with work outcomes such as job satisfaction and organizational commitment (Carlson, Grzywacz, & Kaemar, 2010; Carly, Allen, & Spector, 2002; Netemeyer, Boles, & McMurrion, 1996). Perrew, et al., (1999), found that value attainment partially mediated the relationship between work-family conflict and job satisfaction; that is work-family conflict was associated with diminished value attainment, which was associated with low levels of job satisfaction (Greenhaus et al., 2006). It is reasonable to expect that a similar process operates in the family domain to produce dissatisfaction with the family role. The relationships between job satisfaction and both work-family conflict and family-work conflict are more important in today’s societies becoming modernized. The consequences of the conflict could be seen as a reduction in the level of an individual’s satisfaction from his/her job, family, or life (Burke & El-Kot, 2010; Ryan & Sagas, 2009; Anafarta & Irmak, 2009).

According to a study by Hofstede that covers 40 countries, Turkey is a collectivist country (Sargut, 2001). Majority of the countries in the populated region, where Turkey is also located, are those that are under the influence of oriental culture. Turkish society is the product of a culture that gives priority to acting collectively. In the current Turkish society, family factor seems to keep its importance and maintain its impacts and individuals regard themselves as a component of the family (Bakan, Büyükbeş, & Bedestenci, 2004). In this context, the family of the employees offer the necessary support to settle family problems and meet the family demands. Generally in literature there are many studies which examine the relationship between work-family conflict and job satisfaction in the individualistic societies (e.g. Behan & Drobnic, 2010; Carlson et al., 2010; Calvo-Salguero, Carrasco-Gonzalez, & Salinas Martinez, 2010; Lourel, Ford, Gamassou, Gueguen, & Hartmann 2009; Cohen, 2009; Carly et al., 2002). However there are relatively less studies in the collectivist societies (e.g. Baral & Bhargava 2010; Md-Sidin, Sambasivan, & Ismail, 2010; Ergeneli, Ilsev, & Karapınar, 2009; Hassan, Dollard, & Winefield, 2010).

On the basis of the above discussion, the aim of this study is to pursue the following research propositions in the context of public health sector.

1. To investigate the relationship between work family conflict and family work conflict.
2. To investigate the relationship between work family conflict and job satisfaction.
3. To investigate the relationship between family work conflict and job satisfaction.

1.1 Research Model and Hypotheses

The research model that includes the hypothesized relationships is shown in Figure 1. The model investigates the relationship between work-family conflict (WFC), family-work conflict (FWC) and job satisfaction. This model proposes a reciprocal relation between WFC and FWC. The model claims that job satisfaction of doctors and nurses decreases when they experience more work-family conflict or family-work conflict, based on which the hypotheses in this study are:

H1: There will be a positive reciprocal relationship between work-family conflict and family-work conflict.
H2: Work family conflict is negatively related to health employees’ job satisfaction.
H3: Family-work conflict is negatively related to health employees’ job satisfaction.

Insert Figure 1

2. Methodology

2.1 Sample

The sample in this study consists of health employees (doctors and nurses) working in public hospitals in Antalya, which is one of the cities with a high population density and a high rate of immigration. There are two
public hospitals in Antalya and 520 full-time health employees (doctor and nurses) are working in these hospitals. The questionnaire was distributed to 520 health employees and 43.5% of the questionnaires turned back with 226 usable questionnaires.

2.2 Instruments

The data for this study was gathered through survey method. The questionnaire is made up of 3 parts. The scale for family-work conflict and work-family conflict including 11 items, developed by Grandey et al. (2005) using the work spillover measures of Small and Riley (1990), is in the first part of the questionnaire. Responses to the six WFC items and the five FWC items were made on a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Job satisfaction scale is used in the second part. It was adapted from Lytle (1994), and it is comprised of five items: (1) I consider my job pleasant, (2) I feel fairly-well satisfied with my present job, (3) I definitely like my work, (4) My job is pretty interesting, and (5) I find real enjoyment in my work (Kim et al., 2005). A greater total score corresponded to a greater level of job satisfaction. Items were scored on five-point Likert scale (1=strongly disagree; 5=strongly agree). Demographic questions are found in the third part of the scale.

2.3 Data Analysis

Reliability of the scales has been measured by Cronbach alpha. Confirmatory Factor Analysis has been used for the validity of WFC and FWC scales. SPSS 13.0 has been used for descriptive statistics. Structural Equations Modeling has been referred to test the hypotheses in the study and LISREL 8.54 (Jöreskog & Sörbom, 2001) has been used to test them.

2.4 Reliability and Validity

Reliability of WFC and FWC has been measured with internal consistency coefficient Cronbach alpha, and found to be 0.778 and 0.919 consecutively, which indicate a quite high internal consistency (Hair, Anderson, Tatham, & Black, 1998). Alpha value for the job satisfaction scale is 0.849.

The validity of an instrument refers to the extent to which it measures what was intended to be measured. The validity of the scales utilized in this study was assessed for construct validity. Some research has employed measures of work-family conflict that did not distinguish between the directions of conflict. However, the fact that these two concepts are different from each other was revealed in further studies (Mesmer-Magnus & Viswesvaran, 2005). To better understand the antecedents and consequences of these two forms of conflict, researchers have begun measuring levels of work-family conflict using this bi-directional conceptualization (Frone, Yardley, & Markel, 1997). Confirmatory factor analysis has been made using both single factor and two factor models in order to test whether the concepts of WFC and FWC are similar concepts. We began by testing a single factor, eleven item model, labeled Model1. Model2 is a two factor model. Goodness of fit indices is reported in Table 1. The two factor model (Model2) of WFC and FWC provides good fit as compared to the single factor model (Model1). All fit indices for the single factor model are poor. The $\chi^2$ of 599.94 (36), $p=0.00$ is quite high and significant.

Insert Table 1

The AGFI of 0.40 suggests the model parsimony is poor. Model2 provides improved fit. The $\chi^2$ of 94.53 (39), $p=0.00$ is significantly lower. The AGFI=0.88, TLI=0.96. Thus, it could be concluded that WFC and FWC are different constructs, so WFC and FWC are considered as separate constructs in this article.

3. Results

3.1 Demographic Findings

72.6% of the respondents are females and 27.4% are males. 78.8% of them are married; 55.75% are doctors and 44.25% are nurses (see Table 2). Majority of the respondents (83.2%) are over the age of 30, 96% having children, 60% of whom are going to school. 38.5% of them have a parent whom they have to take care of. 63.7% of them are university graduates and 77.4% have been working for more than 10 years.

Insert Table 2

3.2 Descriptives

Averages and correlations related to WFC, FWC and job satisfaction are given in Table 3. It is noted that work-family conflict is higher than family-work conflict for both doctors and nurses. However, considering WFC and FWC, there is not a meaningful difference between the averages of doctors and nurses. Average job
satisfaction of the employees is low. Especially, job satisfaction of nurses is meaningfully lower than that of doctors.

The relationship between WFC and FWC is low, though meaningful (r=0.295). It is also noted that there is a low, but meaningful negative correlation between job satisfaction and work-family conflict (see Table 3). The relationship between family-work conflict and job satisfaction does not seem to be statistically meaningful.

3.3 Structural Model Results

Research model in Figure 1 has been studied using LISREL 8.54 and the obtained path analysis results are given in Figure 2. The hypothesized model was tested across the sample (n=226). The resulting $\chi^2$ is 96.97 with 99 degree of freedom ($p=.000$); GFI=.92; AGFI=.90; RMSEA=.051; NFI=.95; CFI=.96, which suggests that the hypothesized model fits the data.

4. Discussion

The main aim of this research is to study the relationship between work-family conflict (WFC, FWC) and job satisfaction. When the related literature is considered, research regarding WFC is observed to be made in various fields mainly in North America and Western European countries (Anderson, Mikulić, Vermeylen, Yrjanainen, & Zigante, 2009; Trachtenberg et al., 2009; Powell, Francesco, & Ling, 2009; Mortazavi, Pedhiwala, Shafiro, & Hammer, 2009; Çetin, Urfalıoglu, & Uysal, 2009; Luk & Shaffer, 2005). This study has been made with health employees working in state hospitals who have heavy work load, irregular work schedule and difficult work environment.

One of the significant findings in this study is that health employees experience WFC more than they do FWC. Previous research results indicate that family domain is more permeable compared to work domain, adding that in practice understanding WFC is more important than understanding FWC, and that WFC is more often experienced than FWC (Garies, Barnett, Ertel, & Berkman, 2009; Anderson et al., 2009). Studies carried out in the USA propose that WFC is more often experienced since continuous work demands create stress (Yang, Chen, Choi, & Zou, 2000). A recent study carried out with 2031 people in the USA shows that the averages of the experienced WFC and FWC are very close (Garies et al., 2009). A study with nurses in 10 European countries states that WFC is more often experienced than FWC in each of these countries. Similar results were obtained in a study carried out in Israel with 213 computer experts and lawyers (Cinamon & Rich, 2005).

Different from the research carried out in Western countries, this study reveals that health employees experience lower levels of FWC, which is consistent with the findings of a study carried out in Hong Kong with nurses (Shiu, 1998). On the other hand, similar findings were also obtained in some studies carried out in various sectors in Turkey (Çetin et al., 2009; Anafarta & Irmak, 2009). In Hofstede’s study (as cited in Mortazavi et al., 2009), individualism and collectivism are cultural dimensions that help understand the relationship between work and family, influencing one’s behavior and attitude towards work. It is noted that much lower levels of FWC is experienced in many collectivist societies in the world compared to individualistic societies (Powell et al., 2009; Spector et al., 2007). It is not surprising that in Turkish society, being a collectivist society, similar findings are obtained. In collectivist societies, children live together with the family and this relation is expected to be reciprocal. Family members depend on one another, each having the responsibility of supporting others both financially and emotionally. In collectivist societies, each family member offers actual support to one another so as to reduce work-family conflict (Powell et al., 2009).

Another finding in this study is that there is a low level and positive relation between WFC and FWC. In other words, while WFC affects FWC positively, FWC also affects WFC. This finding is consistent with the findings of Frone et al. (1992). It is also noted in the literature that there is a difference between WFC and FWC, either affecting the other positively and that there is a reciprocal relation between both (Judge, Ilies, & Scott, 2006; Hill,
Yang, Hawkins, & Ferris, 2004; Voydanoff 2002). These findings were obtained from the sampling made up of IBM employees in 48 different countries, which is one of the most recent studies. However, this relation seems to be weaker in Western countries compared to Eastern countries (Garies et al., 2009).

The other significant finding in this study is the low level of job satisfaction of doctors and nurses who make up the sampling of the research, which is partially consistent with the previous studies in the literature related to health employees (Kaur, Sharma, Talwar, Verma, & Singh, 2009; Gül, Oktay, & Gökçe, 2008; Tengilimoğlu & Yiğit, 2005; Yüksel, 2003). Low level of job satisfaction was observed in a study carried out with 250 doctors in a teaching hospital in Delhi (Kaur et al., 2009). Actually, job satisfaction is significant not only for the doctors and nurses who work under stress in the health sector, but also for the quality, effectiveness of the service provided and the efficiency of the health institutions, since it is probable that health employees with low level of job satisfaction feel exhausted and have high absenteeism rate in addition to providing low quality of service. The findings of this study are significant in the sense that managers in the health sector are made aware of the need for developing successful strategies so as to increase job satisfaction of health employees.

The main purpose of this study is to find out whether the WFC of the health employees affect their job satisfaction. It is noted that there is a low, meaningful and reverse-direction relation between WFC and job satisfaction. Health employees who experience high level of WFC have lower level of job satisfaction. When work causes difficulties in fulfilling family responsibilities, the individual gets lower satisfaction from work; however, the findings in this study do not lead to the conclusion that WFC has a dominant effect on the job satisfaction of the employees. The findings in this study are partially consistent with the meta analysis findings of Kossek & Ozeki (1998) and other studies in various concepts in the related literature (Md- Sidin et al., 2010; Steenbergen, Ellemers, & Elianne, 2009; Höge, 2009; Nadeem & Abbas, 2009). In the study carried out with IBM employees in 48 different countries, a high relationship is noted between WFC and job satisfaction (Hill et al., 2004). Some studies in the related literature show that the relationship between work-family conflict, job satisfaction and turnover intentions is much stronger among individuals working in Australia, Canada, New Zealand, UK and US than among those working in Asia and Latin America (Brough & Kalliath, 2009). Furthermore, the findings are consistent with the theory stating WFC affects job satisfaction more in collectivist societies than it does in individualistic societies (Spector et al., 2007). In this study, a possible reason for the fact that WFC affects job satisfaction but FWC does not affect job satisfaction could be the working conditions of the health employees in the sample of this study. Heavy work load, frequent overtime work, limited number of labor force, unability to benefit from annual leave and official excused leave, and low payment are among the main work related stress factors of health employees, which affect job satisfaction negatively (Yılmaz & Sultan 2006; Kahraman & Baykal 2009). The other possible reason could be that for Turkish people, work is a means of fulfilling family responsibilities. Thus, it is highly likely for health employees to perceive that work responsibilities conflict with family demands. It is noteworthy that in this study the findings related to the effect of FWC on job satisfaction is different from the findings in other studies. It is significant why in Turkey, which is a collectivist country, FWC is not effective on job satisfaction. A possible reason could be that in Turkish society, still in the development stage, work is not given the priority and family demands are not regarded as a burden on time and energy to be devoted to work. Furthermore, when social networks are taken into consideration, in collectivist societies, WFC seems to be more effective on job satisfaction than FWC. According to Spector (2007), the conflicts experienced at work are seen from a negative point of view in collectivist societies and therefore, job satisfaction in such societies is much more affected than in individualistic societies where social relations are more important.

5. Conclusion
This study is important in the sense that it gives general information about the relationship between work-family conflict and job satisfaction in a collectivist society. Moreover, this study is expected to contribute to the literature related to WFC and job satisfaction concerning health employees. This study also offers some implications for the managers of health institutions, who have to focus on WFC so as to provide the needs of health employees. Health institutions should be aware of the cost of WFC on them, and paying close attention to WFC, they should try to reduce it.

Considering the findings in this study, health officials, managers and the government that determines the policies for public hospitals can evaluate the consequences of WFC and lack of job satisfaction. Health employees, on the other hand, can be aware of the fact that WFC that they experience is effective on their lack of job satisfaction. In brief, remedies can be developed to avoid the negative effects on work.
6. Limitations and Future Research

There appears to be some problems related to the generalization of research findings. One is that self-reported data has been referred to in this research, so the views of spouses and partners have not been taken into consideration. Secondly, majority of the sampling is made up of females since nurses in Turkey are mostly all females. In further studies, it would be worthwhile to carry out a similar study with a sample made up of equal number of males and females to investigate the impact of gender, too.

It is significant to focus on the relationship between WFC and culture in further studies. Carrying out similar studies especially in collectivist societies and comparing the results would contribute greatly to the related literature. In further studies, studying work-family conflict by taking into consideration the cultural beliefs, values and norms which are closely related to work and family issues would be helpful to better understand WFC in the Turkish society.

Also, in Carlson and Perrewé’s study (1999) they claim that social support from superiors and coworkers helps reduce the conflict between the roles and role ambiguity, leading to lower work-family conflict and higher job satisfaction. In this context, research is to be made to find out the relationship between work-family harmonization and various factors such as individual (work-family identity), work (support of the superiors, family-friendly programs) and family (support of the spouse). It is also worthwhile to focus on the relationship between the conflict and such outcomes as organizational citizenship behavior and organizational commitment.

References


Kahraman, B., & Baykal, Ü. (2009). Yöneticîhemşirelerininhemşirelik hizmetlerinin personelini yönetirken yaradıkları insan kaynakları yönetimine ilişkin sorunlar ve bu sorunlara karşı alınan önlemler (The problems related to human resources management that nurse managers encounter while managing nursing services personnel and the precautions taken against these problems). 17. Yönetim ve Organizasyon Kongresi, Sakarya.


<table>
<thead>
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<th>Table 1. Model fit</th>
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<tr>
<td><strong>Model</strong></td>
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<tr>
<td></td>
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<tr>
<td>Model1</td>
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<tr>
<td>Model2</td>
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<table>
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<tr>
<th>Table 2. Sample characteristics</th>
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</thead>
<tbody>
<tr>
<td><strong>Demographic variables</strong></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<tr>
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<tr>
<td>Men</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<tr>
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<td>26-30</td>
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<td>31-35</td>
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<tr>
<td>36-40</td>
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<tr>
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<td>University</td>
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<tr>
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<td>Nurse</td>
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<td>All older than school age</td>
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Table 3. Descriptive statistics and intercorrelations among research variables

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<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Doctor</th>
<th>Nurse</th>
<th>t</th>
<th>WFC</th>
<th>FWC</th>
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<tbody>
<tr>
<td>Work-family conflict (WFC)</td>
<td>3.72</td>
<td>3.68</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family-work conflict (FWC)</td>
<td>3.32</td>
<td>3.16</td>
<td>1.14</td>
<td>.295*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction (JS)</td>
<td>2.81</td>
<td>1.87</td>
<td>10.44*</td>
<td>-.299*</td>
<td>-.198</td>
<td></td>
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</tbody>
</table>

* p < .01

Table 4. Estimates for the structural parameters in Figure 1

<table>
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<tr>
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<th>Parameter</th>
<th>Estimate</th>
<th>t Value</th>
<th>Hypothesis</th>
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<tbody>
<tr>
<td>H1</td>
<td>WFC→FWC</td>
<td>.52</td>
<td>4.89*</td>
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</tr>
<tr>
<td></td>
<td>FWC→WFC</td>
<td>.45</td>
<td>3.59*</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>WFC→JS</td>
<td>-.34</td>
<td>-2.73*</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>FWC→JS</td>
<td>-.18</td>
<td>-1.87</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Note: Standardized solutions are reported and * p < .01

Figure 1. Hypothesized model of the direct effects of WFC, FWC and job satisfaction

Figure 2. Path model