Emotional Exhaustion: Does it Mediate the Relation between Work Family Conflict and Job and Family Satisfaction?

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تحية طيبة ١٢٥٠و١٢٥٠٨٣ وأتمنى

بالإشارة إلی البحث المقدم من سبادتك بمlarınız:

"Emotional Exhaustion: Does it mediate the relation between Work Family Conflict and Job and Family Satisfaction"

- نتشرف بالإحاطة بأن بحث سبادتك بالعنوان عالمية مقبول النشر وسوف يتم نشره بمشيئة الله في المجلد الواحد والعشرون عدد ديسمبر ٢٠١٧ م.
- وتفضلوا بقبول وافر التحية والاحترام """" """

عميد الكلية ورئيس تحریر المجلة

أ.د. محمود صادق محمد الرشيدی
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Sahar Mohamed Badawy *

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Abstract

This study aimed at investigating the relationship between work-Family conflict and job and family satisfaction. Moreover, the mediating effect of emotional exhaustion in this relationship was also investigated. The sample consisted of 496 employees working at construction companies registered in the Egyptian Construction and Building Union in Cairo. The sample included engineers, accountants and administrators with a reasonable mix of demographic characteristics. The data were obtained using a structured questionnaire to assess Work Interfere with Family (WIF), Family Interfere with Work (FIW), Emotional exhaustion, job satisfaction and family satisfaction. Hierarchical regression and Structural Equation Modelling were used to test the hypothesised relations. Work Interfere with Family (WIF) was found to predict family satisfaction whereas Family Interfere with Work (FIW) was found to predict job satisfaction. The mediation role of Emotional exhaustion was supported by SEM. These results were discussed in line with extant literature. Conclusion and practical implications were reported..

Keywords: Egypt, Work-Family Conflict, Work Interfere with Family, Family Interfere with Work, Emotional Exhaustion, Job Satisfaction, Family Satisfaction.
1. Introduction

The last decades have witnessed a dramatic change in workforce structure. Women became a fundamental, unquestionable component that consist more than 48% of the global workforce (World Bank, 2012). On the other hand, dual-earner families are becoming a prevalence trend (Lee, Kim, Park, & Yun, 2013) where both partners work and share responsibility for family (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Associated with these two trends, increase in number of working hours for individuals, the diminishing of traditional boundaries between work and home due to the technological development all are affecting individuals daily life (Michel, Kotrba, Mitchelson, Clark, & Baltes, 2010). Work and family are the main domains of individual’s life and balancing between these two domains has become a part of everyday life for millions of adults that require a great amount of time, efforts, and energy (Lee et al., 2013; Michel et al., 2010).

The real challenge is balancing the limited resources of time and efforts to satisfy work and family roles’ requirements. This challenge is increasing in developing countries where families are struggling to improve their economic and marital status. In Egypt about 70% (CAPMAS, 2014) of families are dual earned families and 30% are families that depend economically on a single parent (CAPMAS, 2014). To maintain a satisfactory economic level, individuals have to put greater efforts and time in their work which, most likely, affects their personal life and personal responsibilities. Seeking to satisfy both family and work requirements can increase interpersonal and intrapersonal conflict (Lee et al., 2013), resulting in work-family conflict.

Work-family conflict (WFC) is a form of conflict between individuals’ different roles within work and family domains, where the requirements and demands of the two domains are discordant (Rathi & Barath M., 2013). High level of WFC has serious effects on both personal and organizational life (Crawford, Shanine, Whitman, & Kacmar, 2016).

One of the important outcomes of WFC is the decrease in Domain satisfaction presented in both job and Family satisfaction which, in return, leads to depression and negative psychological consequences (Beigi, Ershadi, & Shirmohammadi, 2012).
relation between WFC and both job and family satisfaction is debatable as researchers argue that the direction of the conflict (work to family or family to work) will have different effects on different domains’ satisfaction. Investigating this relation was recommended by other researchers (Brough, O’Driscoll, & Kalliath, 2005; Anafarta, 2011; Crawford et al., 2016) and may help in directing practitioners to control the negative effects of WFC. On the other hand, Karatepe (2013) called for more investigation on the moderating and mediating variables that may affect the relation between WFC and personal and organizational outcomes with emphasis on satisfaction. In response to this call, this current research presenting Emotional Exhaustion as a mediator that leads to a decrease in both job and family satisfaction. Emotional Exhaustion as an outcome of WFC and as an antecedent of satisfaction could mediate the relationship between WFC and satisfaction (Karatepe, 2013; Rathi & Barath, 2013).

This research aims at (1) investigating the relation between Work-Family Conflict dimensions, and job and family satisfaction and (2) examining the mediating role of emotional exhaustion on the relationship between WFC and job and family satisfaction. In the coming sections this research will attempt to answer the following research questions:

1- Is there as significant relationship between Work-Family and Family-Work conflict and both job and family satisfaction?

2- Does Emotional Exhaustion mediate the relation between WFC and job and family satisfaction?

2. Literature Review

2-1 Work-Family Conflict

Work-family conflict is defined as “inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, P.77). As seen from the definition, WFC refers to the negative side of the interaction between work and family domains where individuals take high responsibilities in both domains (Choi & Kim, 2012) while the positive side is addressed by Work-Family Facilitation (WFF) concept (Choi & Kim, 2012; Voydanoff, 2005).
The WFC concept has its roots in Conflict Theory (Beigi et al., 2012). Conflict theory states that people involved in different roles with different demands will be forced to make choices between these demands, which creates a conflict, where satisfying the demands of a specific role will, most likely, affect other roles demands (Powell & Greenhaus, 2010). With the scarcity assumption in mind, individuals with multiple roles will have to take difficult decisions regarding allocating their resources (e.g., time and energy) between work and family demands (Hassan, Dollard, & Winefield, 2010; Crawford et al., 2016. According to Voydanoff (2005) WFC is considered as a cognitive evaluation process, where individuals evaluate their current resources (in both work and family domains) and compare it with their demands in both domains. Only when individuals perceive that the resources cannot satisfy the demands, then WFC occurs.

Originally, WFC was seen as a one dimensional concept (Greenhaus & Beutell, 1985). Recent research has differentiated between two WFC dimensions based on the direction of the conflict (Chelariu & Stump, 2011; Voydanoff, 2005; Ito & Brotheridge, 2012; Carlson, Kacmar, & Williams, 2000; Lapierre, et al., 2008; Crawford et al., 2016). These two dimensions are: Work Interfere with Family (WIF), where work activities interfere and prevent the fulfilling of family demands and responsibilities, and Family Interfere with Work (FIW), where family activities interfere and prevent the fulfilling of work demands and responsibilities (Beigi et al., 2012; Rathi & Barath, 2013). These two dimensions are distinct forms of inter-role conflict (Chelariu & Stump, 2011). Despite the existence of correlation between the two dimensions, studies provided support for the distinction between the two dimensions (Rathi & Barath, 2013) and the distinction between their antecedents and consequences (Beigi et al., 2012; Lapierre, et al., 2008).

Within these two dimensions conflict takes three types: behaviour based, time based and strain based (Greenhaus & Beutell, 1985). It can be noticed that these three types reflect: demands, resources and emotions. Behaviour based conflict occurs when a specific role requires a specific behaviour (demand) that makes it difficult to fulfil requirements of another (Netemeyer, Boles, & McMurrian, 1996). Time based conflict occurs when time is limited (resource) that it could not satisfy requirements of both roles, accordingly fulfilling the requirement of one role (family or work) will hinder or prevent the fulfilling
of other role requirements (Ito & Brotheridge, 2012). Finally, Strain based conflict occurs when the requirements of one role (work or family) creates a strain (emotions) that will prevent individuals from satisfying other role requirements (Ito & Brotheridge, 2012).

Combining these three types into the two dimensions, Work Interfere with Family (WIF) is operationally defined as “a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities” (Netemeyer et al., 1996, p. 401). On the other hand, Family Interfere with Work (FIW) is defined as “a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities.” (Netemeyer et al., 1996, p. 401). Conflict between work and family can be found across all cultures and environments (Chelariu & Stump, 2011; Crawford et al., 2016) and this justifies the increasing interest in this topic.

While trying to understand the dynamics of WFC, researchers classified variables that affect WIF/FIW into: work related variables and family related variables. Work related variables include supervisors’ support, peer cohesion, work justice, flexible working systems, job demands, role ambiguity, role stress, role conflict, job stressors, job involvement and hours spent at work. Researchers suggest that work related variables are more correlated to WIF (Beigi et al., 2012; Eby et al., 2005; Michel et al., 2010; Beutell, 2010; Carlson, Grzywacz, & Kacmar, 2010).

Family related variables include; family / spouse support, number of children, dual-career couple, parental help, spousal involvement, social help, single parents, family stressors, family involvement, family commitment, parental demands, marital status. These variables is found to be more correlated to FIW (Chelariu & Stump, 2011; Baltes, Zhdanova, & Clark, 2011; Beigi et al., 2012; Rath & Barath, 2013; Allen, et al., 2014). In addition to these two sets of variables, demographic and personal variables also affect WFC (Beigi et al., 2012). Gender, age, education and personality are found to affect WFC (Baltes et al., 2011).

On the other hand, consequences of WFC (with its two dimensions) are categorised into individual and organizational outcomes (Farradinna & Halim, 2016). Work related outcomes include decrease in job performance, job satisfaction, organizational
commitment and organisational citizenship behaviours and increase in job stress, turnover intentions, absenteeism, job anxiety, burnout and emotional exhaustion (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Beutell, 2010; Choi & Kim, 2012; Hsu, 2011). Individual related outcomes include decrease in life and marital satisfaction and increase in psychological distress with its stress related outcomes (Chelariu & Stump, 2011; Posig & Kickul, 2004). The relationship between WFC and both job and family satisfaction is an important relation (Ellis, Osabutey, & Gbadamosi, 2016). Satisfaction, in both domains, is seen as the optimal goal for individuals (Anafarta, 2011; Devi & Rani, 2016).

2-2 Job and Family satisfaction

Job and family satisfaction have their route in the Subjective Wellbeing Construct (Diener, 2009). As stated by Diener “SWB includes diverse concepts ranging from momentary moods to global judgments of life satisfaction, and from depression to euphoria” (Diener, 2009, p.67). SWB is a multi-dimensional phenomena, which includes: emotional responses (Positive and Negative Affect), domain satisfactions (with Work, Family, Marriage, Health, and Leisure), and Global Life Judgments (Life satisfaction, Fulfilment, Meaning, and Success) (Diener, Inglehart, & Tay, 2013). Although these three dimensions are closely related, in business literature only job satisfaction have received extensive attention (Davar & Bala, 2012) due to its direct effects on employees’ behaviours and attitudes within both work and family domains. Family satisfaction was rarely investigated in business literature (Brough et al., 2005).

Satisfaction is generally known as a happy or pleased feeling because of something that we did or something that happened to us (Diener et al., 2013). Humans tend to evaluate elements of their life (as general or in specific domain) and the result of this evaluation that causes happiness in case of satisfaction or sadness in case of satisfaction (Diener et al., 2013).

On the work domain, job satisfaction is defined as “a pleasurable emotional state that results from an individual appraisal of one’s job” (Brown & Peterson, 1993, p.64). Job satisfaction is a variable that has been linked to the majority of organizational variables. As explicitly expressed by Steven and Robert (1993) “More than 30 constructs have been
investigated empirically as antecedents or consequences of job satisfaction” (p.64). The effects of job satisfaction extends to influence a wide range of work outcomes (Davar & Bala, 2012).

On the family domain, the first operational definition for family satisfaction was developed by Olson in 1989 where family satisfaction is defined as “the degree to which family members feel happy and fulfilled with each other” (Olson, 1995, p.1). Olson (2000) developed the Circumflex Model where 3 dimensions were introduced for the assessment of family satisfaction including: cohesion, flexibility and communication (Olson, 2000). The effects of family satisfaction on individules’ life has been studied extensivly in psychology and family therapy reseraches (Olson, 2000). However, Few reseraches studied the effects of family satisfaction withen the organizational context (Brough et al., 2005). The relations bewteeen the different facets of domain satisfaction (family, job, marritle, life) are supported based on the spillover theory (Olson, 2000)

2-3 Emotional Exhaustion

Emotional exhaustion is a feeling that the emotional resources a person has have been drained due to overwhelming demands that consumes his/her time and energy (Avdija & Roy, 2013). It is a feelings of being strained and exhausted due to the decrease of one’s emotional and physical resources (Maslach, 2003). Emotional exhaustion is the dominant and most obvious dimension of burnout syndrome and the one that recieves most of reserachers attention (Posig & Kickul, 2004; Lee et al., 2013). The main cause of Emotional Exhaustion is stress triggered by several antecedents including job demands, workload, time pressure, role conflict, role ambiguity, lack of feedback and autonomy and Family-work conflict (Maslach, 2003).

Consequences of Emotional Exhaustion inlude absenteeism, intention to leave, lower productivity, decreased job satisfaction, commitment, employee engagement, and organizational citizenship. On the personal level, several outcomes may accrue including decrease in life satisfaction, anxiety, depression, sleep disorders and health problems (Maslach, 2003; Avdija & Roy, 2013; Hall, Dollard, Tuckey, Winefield, & Thompson,

3. Research model and hypotheses:

3-1 Work-Family Conflict and Job / Family satisfaction

The relationship between WFC and both job and family satisfaction has been investigated with a greater emphasis on job satisfaction rather than family satisfaction (Ellis, et al., 2016) Although research found a significant relation between WFC and job and family satisfaction (Ellis, et al., 2016; Bruck, Allen, & Spector, 2002; Kinnunens, Geurts, & Mauno, 2004), the relationship between the two dimensions of WFC and both job and family satisfaction is debated (Lapierre, et al., 2008). The interaction between WIF and FIW from one side and the relation between job satisfaction and family satisfaction on the other side makes it difficult to decide which type of conflict is more related to job satisfaction and which type is more related to family satisfaction. This issue will be investigated in this research peering in mind that these two dimensions are related but at the same time distinct in their antecedents and consequences (Chelariu & Stump, 2011; Rathi & Barath, 2013; Beigi et al., 2012; Lapierre, et al., 2008).

Starting with WIF, most of research emphasis on the relation between WIF and job satisfaction. This relation is found to be true in some research (Hsu, 2011; Lapierre et al., 2008; Bruck et al., 2002). WIF was found to be significantly related to job satisfaction among women (Grandey, Cordeiro, & Crouter, 2005), whereas job satisfaction functioned as an antecedent of WIF among men which was attributed to the gender role theory (Kinnunens et al., 2004). In another research WIF was found to have no significant relation to job satisfaction (Brough et al., 2005; Hassan et al., 2010), which implies that although the relation is possible but there is no agreement about it.

On the other hand WIF was found to predict family stress and consequently it results in low levels of family and life satisfaction and not job satisfaction (Brough et al., 2005). It was also found to predict withdrawal from family and not withdrawal from work. A meta analysis research about work and family satisfaction and conflict found that work domain
variables predicted family satisfaction, whereas family domain- variables predicted job satisfaction (Ford, Heinen, & Langkamer, 2007).

The nature of WIF suggests that family satisfaction is more affected by this interface (Ford et al., 2007). It is assumed that WIF indicate that more resources (e.g. Time, energy, emotions...) are allocated to work instead of family which creates a stress on the family and most likely to lead to decrease in family satisfaction (feelings of lack of communication, lack of cohesion, and lack of flexibility) more than job satisfaction (Hassan et al., 2010). This research suggests that WIF will be related to family satisfaction and that changes in WIF can explain changes in family satisfaction. Accordingly the following hypotheses is examined:

H1: WIF is negatively correlated to Family Satisfaction

As for Family Interfere with Work (FIW), again, most of research emphasised on its effect on job satisfaction. FIW is found to predict job satisfaction rather than family or life satisfaction. (Bruck et al., 2002), especially among women (Grandey et al., 2005). FIW was found to lead to a decrease in job satisfaction (Hassan et al., 2010). On the other hand, the relation between FIW and family satisfaction was not supported (Hassan et al., 2010).

Following the same logic, it is assumed that FIW will affect the time and efforts allocated to job which will most likely affect job performance and consequently lead to decrease in job satisfaction (Ford et al., 2007). This is supported by previous research where FIW (and not WIF) was found to affect intrinsic satisfaction and job satisfaction (Bruck et al., 2002). Accordingly the following hypotheses is examined:

H2: FIW is negatively correlated to Job satisfaction

3-2 The mediating role of Emotional Exhaustion

As previously illustrated there is a significant relation between WFC and job and family satisfaction and, at the same time, there are inconsistent results regarding the existence and the direction of this relation when examining both WIF and FIW (Zhao, Qu, & Richard, 2011). Accordingly, it can be suspected that these differences in the results could be attributed to a mediating variable that may affect the relation. WFC is a form of
stress that imply a sacrifice with resources in order to satisfy the requirement of confronting domains (Amstad et al., 2011). According to the Conservation of Resources (COR) theory individuals tend to keep resources in order to feel secure and reduce stress caused by the loose of resources (Grandey et al., 2005). According to this theory, a domino effect caused by the loss of resources is assumed. This effect is explained by the spiral loss hypothesis (Demerouti, Bakker, & Bulters, 2004). According to this hypothesis each time a resource is lost, a decrease in the available resources that are dedicated to deal with other situation occurs, consequently, another loss will happen due to shortage of resources (Demerouti et al., 2004). Accordingly individuals how experience loss of resources in one domain are most likely to experience more losses in other domains (Demerouti et al., 2004) which creates continuing stress.

Based on this theoretical background, this research suggest that emotional exhaustion, as a result of untreated stress, could be a mediator in the relation between WFC and job and family satisfaction. This research argue that the negative effects of WFC alone do not cause decrease in domain satisfaction (job and family), only when the stress of WFC creates a state of emotional exhaustion then a decrease in domain satisfaction occurs (Halbesleben, 2009; Hall et al., 2010; Baeriswy, Krause, & Schwaningerm, 2016). A mediation role requires a direct significant relation between variables. So, in the coming paragraphs the relation between Emotional exhaustion and WFC, on one hand, and job and family satisfaction, on the other hand, will be discussed.

Starting with WFC, Emotional exhaustion is seen as an outcome of WFC where direct relation was found between WFC and Emotional exhaustion (Farradinna & Halim, 2016; Jensen & Rundmo, 2015). WFC also mediated the relation between Emotional exhaustion and other variables including work-role expectations (Posig & Kickul, 2004) work climate (Yu et al., 2010) shift work (Halbesleben, 2009) and social support (Lee et al., 2013). Emotional Exhaustion also mediated the relation between WFC and Job Embeddedness and professional self-efficacy (Karatepe, 2013). Other Research supported a reciprocal relationship between WFC and Emotional Exhaustion, (Hall et al., 2010). So research supports the existence of a significant positive direct relation between WFC and Emotional Exhaustion.
With regard to job and family satisfaction, a direct negative relation was found between emotional exhaustion and job satisfaction (Avdija & Roy, 2013; Baeriswy et al., 2016). Also when investigating the relation between Job satisfaction and Emotional Exhaustion (as a component of job burnout) the negative relation between the two variables also exist (Crawford et al., 2016). Which implies that emotional exhaustion will lead to decrease in job satisfaction.

When considering Family satisfaction, as far as the researcher’s knowledge, research did not investigate the relation between emotional exhaustion and family satisfaction which could be a contribution of this current study.

There is enough evidence on the relation between emotional exhaustion and both WFC and Job satisfaction which suggests a mediating role that emotional exhaustion can play leading to change in the effect of WFC on job and family satisfaction. This means the more the conflict the more the feelings of emotional exhaustion that leads to decrease in job and family satisfaction. Accordingly, the following hypothesis is investigated:

H3: Emotional Exhaustion mediate the relation between WFC and Job and Family Satisfaction

The hypothesised mediation relationship can be illustrated in Figure 1.
4. Research Methodology

4-1 Population and Sample

This research targeted the Construction and Building sector in Egypt. Official statistics reveals that 11.3% of the working force in Egypt works in the Construction and Building Sector (CAPMAS, 2014). Construction and Building Sector is rarely investigated in Egypt. The average weekly working hours is 45.8 increases to 54 in private sector (CAPMAS, 2014). The nature of this sector demands a lot of effort and time which could lead to WFC.

The information were obtained from the Egyptian Construction and Building Union (ECBU). The targeted companies were the construction companies registered in the ECBU. The employees are categorized into: Engineers, Accountants and administrators, skilled workers, assisting workers. The targeted categories (population) were Engineers, Accountants and administrators, working at the construction companies registered in the ECBU (first Class) allocated in Cairo. These categories were chosen because they work as full-timers and can be accessed through their companies. Using statistical power test at $\alpha = 0.05$, $\beta = 0.05$ and power = 0.95, for the targeted population (N=20746) a sample size of 643 is expected to be representative.

A formal letter was attached to the survey instrument where anonymity was guaranteed to the participants. Participants were visited in their workplaces and were asked to complete the questionnaire. The response rate was 77% (496), 15 responses were omitted because of incomplete data, and 481 were valid to be used in the analysis.

The majority of participants (58.1%) were male. The age ranged between 23 to 55 years (average 33.25, SD 8.636). 73.1% of the participants are working regular hours, whereas, 26.9% are working shifts. As for the marital status 26.6% were not married, 33.3% married and 40.1% married with children and none is divorced or widower. The participant were 58.8% engineers and 41.2% accountants and administrators. These characteristics indicate a reasonable mix of demographic groups represented in the data.

4-2 Instrument

WFC was measured using the Multidimensional Measure of Work–Family Conflict
developed by Carlson et al. (2000). The scale measures the two directions of conflict (WIF /FIW) using 27 item for each direction. The items measure time based conflict (10 items), strain based conflict (10 items) and behavioural based conflict (7 items). The reported coefficient alpha ranged from .83 to .89. Responses ranged from 1 (strongly disagree) to 5 (totally agree) on a 5 point Likert scale.

Emotional Exhaustion (EEx) was measured using 5 items extracted from Maslach MBI-General Survey. The reported coefficient alpha was .79. Responses ranged from 1 (Never) to 5 (Every day) on a 5 point Likert scale.

The Generic Job Satisfaction Scale developed by Macdonald & MacIntyer 1997 was used to measure job satisfaction. The scale has 10 items with a reported coefficient alpha .77. For Family Satisfaction (FS), Olson ‘Family Satisfaction Scale was used to measure family satisfaction. The scale has 10 items with a reported coefficient alpha .85. The responses for both scales (job and family satisfaction) were ranged 1 (totally agree) to 5 (strongly disagree) on a 5 point Likert scale.

A fifth part was added to the questionnaire measuring demographic variables (gender, age, education and marital status, working system). The four scales were translated into Arabic and vice-versa (back translation). Reversed items were indicated for the date entry.

4-3 Reliability and validity

Reliability: Internal consistency of the subscales was examined for the data collected and the reported Cronbach’s alpha coefficient appears to be reasonably reliable (above 0.6). Table 1 Shows reliability results for study’ concepts.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>WFC</th>
<th>WIF</th>
<th>FIW</th>
<th>E Ex</th>
<th>JS</th>
<th>FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s coefficient alpha</td>
<td>0.894</td>
<td>0.855</td>
<td>0.831</td>
<td>0.681</td>
<td>0.712</td>
<td>0.731</td>
</tr>
</tbody>
</table>

Validity: Validity was examined by panel of 10 experts (5 academics and 5 from construction companies). Some of the wordings (in 8 Items in WFC scale) were modified to comply with the Egyptian culture and the construction environment.
5. Analysis and findings

Descriptive analysis was conducted to reveal correlations between variables. Table 2 presents the descriptive statistics and correlations for research variables.

Pearson correlation analysis’ results support the significant correlation between research variables. The mediator (Emotional Exhaustion) has significant correlation with both the independent variables WIF (.429) and FIW (.217) and the dependent variables job (-.434) and family (-.246) satisfaction which is an important condition for mediation role. The correlation between WIF and Family satisfaction was relatively strong (r= -.588 / p=0.01) whereas it was significant but relatively weak with job satisfaction (r= -.169 / p=0.05). The correlation between FIW and Job satisfaction was strong (r= -.730 / p=0.01) whereas it was weaker with family satisfaction (r= -.215 / p=0.01).

These results supports the negative correlation between WIF and family satisfaction (H1), and the negative correlation between FIW and job satisfaction (H2). However, taking into consideration the significant correlation found between WIF and job satisfaction on one hand, and between FIW and family satisfaction on the other hand, Hierarchal regression was conducted to investigate the power of the independent variables (WIF and FIW) in predicting the dependent variables (job and family satisfaction). The first regression analysis was conducted to investigate the ability of WIF and FIW to predict variance in family satisfaction. Table 3 presents the results of this regression analysis.

As seen in table 3, the effect of WIF on family satisfaction was significant. (R=-.588/
R2 = .346 / F=116.519 / p=0.0001) which means that WIF can explain 34% of the change occurred in family satisfaction. When FIW was entered, the results showed a little insignificant change (R2 change = .004 / p=.250) which means that the effect of WIF on family satisfaction is significant regardless of FIW. Regression coefficient between variables was also significant (b=.134 / β=.588 / t=11.167/ p=0.0001). This means that WIF can statistically predict changes in family satisfaction. **Accordingly the first hypotheses is supported.**

**Table 3 : Hierarchal regression analysis for Family satisfaction**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Change Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R² Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>-.588a</td>
<td>.346</td>
<td>.343</td>
<td>.346</td>
<td>116.519</td>
</tr>
<tr>
<td>2</td>
<td>-.592b</td>
<td>.350</td>
<td>.344</td>
<td>.004</td>
<td>1.332</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), WIF

b. Predictors: (Constant), WIF, FIW

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>353.004</td>
<td>1</td>
<td>353.004</td>
<td>116.519</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>666.509</td>
<td>220</td>
<td>3.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1019.514</td>
<td>221</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Regression</td>
<td>357.033</td>
<td>2</td>
<td>178.517</td>
<td>59.013</td>
<td>.000c</td>
</tr>
<tr>
<td>Residual</td>
<td>662.480</td>
<td>219</td>
<td>3.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1019.514</td>
<td>221</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.701</td>
<td>.869</td>
</tr>
<tr>
<td>WIF</td>
<td>.134</td>
<td>.012</td>
</tr>
</tbody>
</table>

The second hierarchal regression was conducted to test the power of WIF and FIW in predicting job satisfaction. Table 4 presents the results. As seen in table 4, the effect of FIW on job satisfaction was also significant (R= -.730 / R²=.532 / F=250.469/ p=0.0001) which means that WIF can predict 53% of the change occurred in job satisfaction. When WIF was entered, insignificant change was recorded (R2 change = .003 / F= 1.211).
Regression coefficient also supported the suggested prediction relation ($b=.295 / \beta .730 / t=15.826/ p=0.0001$). This means that the significant change happened in job satisfaction can be predicted by FIW and not by WIF. Accordingly **the second hypotheses is supported**.

**Table 4**: Hierarchal regression analysis for Job satisfaction

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Change Statistics</th>
<th>ANOVAa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R² Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>-0.730a</td>
<td>.532</td>
<td>.530</td>
<td>.532</td>
<td>250.469</td>
</tr>
<tr>
<td>2</td>
<td>-0.734b</td>
<td>.539</td>
<td>.533</td>
<td>.003</td>
<td>1.211</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FIW
b. Predictors: (Constant), FIW, WIF

To test the third hypothesis and the mediation model Structural Equation Model (SEM) using AMOS 21 was used. Table 5 represents path analysis and fit indexes for the hypothesised model.
Table 5: Path analysis and Fit indexes for the mediation model

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Estimate</th>
<th>Standardized</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIF → F.Sat.</td>
<td>-2.16</td>
<td>-.305</td>
<td>37.147</td>
<td>0.0001</td>
</tr>
<tr>
<td>WIF → E. Ex.</td>
<td>.869</td>
<td>.247</td>
<td>22.091</td>
<td>0.0001</td>
</tr>
<tr>
<td>FIW → J. Sat.</td>
<td>-1.687</td>
<td>-.250</td>
<td>24.645</td>
<td>0.0001</td>
</tr>
<tr>
<td>FIW → E. Ex.</td>
<td>.666</td>
<td>.201</td>
<td>19.818</td>
<td>0.001</td>
</tr>
<tr>
<td>E. Ex. → J. Sat.</td>
<td>-.911</td>
<td>-.184</td>
<td>27.514</td>
<td>0.001</td>
</tr>
<tr>
<td>E. Ex → F. Sat.</td>
<td>-1.251</td>
<td>-.330</td>
<td>25.115</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standardized Total Effects</th>
<th>S. Direct Effects</th>
<th>S. Indirect Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIF</td>
<td>E. Ex</td>
<td>WIF</td>
</tr>
<tr>
<td>E. Ex.</td>
<td>.247</td>
<td>.000</td>
</tr>
<tr>
<td>F. Sat.</td>
<td>.491</td>
<td>.330</td>
</tr>
<tr>
<td>FIW</td>
<td>E. Ex</td>
<td>FIW</td>
</tr>
<tr>
<td>E. Ex.</td>
<td>.201</td>
<td>.000</td>
</tr>
<tr>
<td>J.Sat.</td>
<td>.287</td>
<td>.184</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X²</th>
<th>df</th>
<th>x²/df</th>
<th>CFI</th>
<th>IFI</th>
<th>SRMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>392.7</td>
<td>210</td>
<td>1.87</td>
<td>0.97</td>
<td>0.99</td>
<td>0.053</td>
<td>0.062</td>
</tr>
</tbody>
</table>

As seen in table 5 the indirect effects (.330 and .254) is greater than the direct effects (.182 and .033). Fit indexes illustrated in figure 2 shows a reasonable good fit for the model (x²/df ≤ 2 / CFI, IFI ≥ .95 and SRMR, RMESA < 0.8) and supports the third hypothesis and the acceptance of the mediation model.
6. Discussion

According to research’ results, the sampled engineers, accountants, and administrators within the construction and building sector are experiencing moderate levels of WIF (M=69.445/ SD 9.4416), FIW (M=70.292/ SD= 11.3647), emotional exhaustion (M=15.2613/ SD= 3.38271), job satisfaction (M=26.049/ SD= 4.5691) and family satisfaction (M=25.594/ SD= 4.1478). It was expected to find higher levels of perceived conflict and exhaustion among sample as 73.4% of the respondents are married. The moderate levels of WIF and FIW can be attributed to role segmentation which is an essential component of eastern cultures (Allen, French, Dumani, & Shockley, 2015). Role segmentation not only reduce conflict but also reduce spillover effects between domains (Powell & Greenhaus, 2010). In other words the segmentation of roles between men and women contributing in reducing perceived conflict as men, within eastern cultures, are mainly responsible for family financial support, accordingly it is expected and accepted for men that more efforts and resources could be directed to work (WIF) (Allen et al., 2015; Lu & Yu-Yueh, 2014), and knowing that 58% of the sample are male could support this argument. On the other hand, women are responsible for family and children, and accordingly it is expected and accepted for women that more efforts and resources are directed to family (FIW) (Allen et al., 2015; Lu & Yu-Yueh, 2014). However, examining the effect of gender and marital status was not intended in this research. Further research on the moderating effect of gender, marital status and culture could add to our understanding of the topic.

Literature review pointed at the relation between WIF and job, family, and life satisfaction (Zhao et al., 2011; Crawford et al., 2016), but most of research emphasised on job satisfaction as it is more related to the organizational context (Turliuc & Buliga, 2014).
However, this relation is debatable and there is no agreement on the significance of the relation between WIF and job satisfaction. Based on previous empirical and meta-analysis research that supported the significance of WIF in predicting family related outcomes (including family satisfaction) and not job related outcomes (Ford et al., 2007; Turliuc & Buliga, 2014; Amstad et al., 2011), this research suggested that WIF will relate mainly to family satisfaction and not job satisfaction. It is proposed that WIF will lead to a decrease in resources allocated to family (time, energy, efforts....) and consequently to a decrease in family satisfaction, thus the ability of WIF to predict family satisfaction was examined. The results supported the suggested relation between WIF and family satisfaction. Pearson correlation showed a relatively strong significant correlation between WIF and family satisfaction ($r=-.588/\text{p}=0.01$) whereas the correlation between WIF and job satisfaction was weak but significant ($r=.169/\text{p}=0.05$) which supports the proposed relation. When examining the prediction relation, WIF was able to significantly predict 34% of the change in family satisfaction whereas FIW was not. This result second the results of previous research, although those researches did not investigate the direct relation between WIF and family satisfaction but they investigated the relation between WIF and family related outcomes (Ford, et al., 2007; Turliuc & Buliga, 2014; Amstad et al., 2011; Crawford et al., 2016).

Following the same logic, it is expected that when family demands interfere in work and affects the time, efforts, and energy dedicated for work people will not be able to perform as expected and they most probably be less satisfied about their job especially intrinsic satisfaction (Bruck et al., 2002). So it was proposed that FIW will predict job satisfaction. Results showed significant strong correlation ($r=.730/\text{p}=0.01$) between FIW and job satisfaction, whereas it was relatively weaker but significant with family satisfaction ($r=.215/\text{p}=0.05$). The ability of FIW to predict job satisfaction was examined and the results reveals that FIW predicted 53% of the change in job satisfaction but WIF do not. This supports previous research results (Ford et al., 2007; Turliuc & Buliga, 2014; Amstad et al., 2011). However there is limited researches that investigated the proposed relations between WIF/FIW and job and family satisfaction. More research in this relation could enhance our understanding.
Finally, this research proposed a mediating role for emotional exhaustion in the WFC-job and family satisfaction relationship. The results supported the mediating role of emotional exhaustion and the proposed mediation model has good fit indexes. This result implies that WIF and FIW lead to decrease in satisfaction only when they cause stress that could not be treated and turns to emotional exhaustion. Although results reveals moderate levels of emotional exhaustion, but it also implicitly point at the absence of organizational and personal supporting factors that could prevent or reduce perceived emotional exhaustion. The mediating role of emotional exhaustion open the way for more alternate ways to deal with the decrease in both job and family satisfaction. To eliminate the effect of WFC (with its two dimensions) on job and family satisfaction, practitioners could apply two strategies. The first by interventions to reduce WFC including supervisors’ support, flexible working systems and family support programs (Michel et al., 2010; Beutell, 2010; Carlson et al., 2010). The second by interventions to reduce levels of emotional exhaustion including stress management programs, coping strategy. These interventions could reduce WFC and emotional exhaustion and accordingly enhance quality of life and increase job and family satisfaction.

7. Conclusion

This research investigates an important phenomena that affects peoples ‘daily life which is the conflict between work and family demands that causes several personal and organizational negative consequences. The negative effects of WFC can spillover between domains (marital, family and life) (Ford et al., 2007; Zhao et al., 2011; Crawford et al., 2016). Understanding the variables that contribute to the negative effects of WFC (with its two dimensions) could help in reducing theses effects and enhance employees’ quality of life (Jensen & Rundmo, 2015). This research aims at (1) investigating the relation between the two dimensions of Work –Family Conflict (WIF / FIW) and job and family satisfaction and (2) examining the mediating role of emotional exhaustion.

The results reveal that employees working in the construction and building sector in Egypt experience moderate levels of WFC and emotional exhaustion. They are also moderately satisfied about their jobs and families. The results supported the ability of WIF
and FIW to predict change in job and family satisfaction. Emotional exhaustion is also found to mediate this relations. This mediating role is considered as a contribution for the current research.

These results have **theoretical implications**. First, WIF and FIW should be studied separately as the variables contribute to their occurrence and their outcomes are different. This separation could make it more visible for researchers to emphasis more accurately on understanding the dynamics of each direction. Second, the ability of WIF to predict Family satisfaction and the ability of FIW to predict job satisfaction emphasises the interaction and spillover between domains (Ford et al., 2007; Amstad et al., 2011) which pointes to the importance of more investigation for spillover mechanisms. Third, the mediating role of emotional exhaustion emphasis the nature of WFC as a stressor that should be addressed in earlier stages.

These results also have **empirical implications**. First, practitioners are required to rethink current working systems and their effect on employees’ organizational and personal live. Second, WFC is not properly addressed in the Egyptian context (Burke & El-Kot, 2010) and the moderate levels of perceived conflict most probably caused by role segmentation and not because of the current systems, hence interventions to create family friendly working environment (Brough et al., 2005) is becoming a must.

**Limitation and future research.** First, this research was applied on construction and building sector in Egypt which has specific characteristics that are different than other sectors, which may limit the generalizability of the results. Hence, replication of the research in different sectors is recommended. Second, this research used cross-sectional design that could add insights to the research topic but it do not capture the change in variables that could occur through time. A longitudinal study for the proposed relations could add more valuable understanding of the interaction between variables.
References


