

## The behavioral model of emotional intelligence effect on work-family conflict and organizational citizenship behavior among nurses

Mohammad Kazem Bighami \*  
Heshmat Khalifesoltani \*\*  
Farshid Abdi \*\*\*  
Mohsen Seyed Aliakbar \*\*\*\*

### Abstract

*This paper examines the relations among emotional intelligence, work-family conflict and organizational citizenship behavior of nurses and the mediating effect of work-family conflict between emotional intelligence and organizational citizenship behavior among nurses. a questionnaire survey was carried out to explore the relations among emotional intelligence, work-family conflict and organizational citizenship behavior. a ۵۱-item questionnaire which consist of emotional intelligence, work-family conflict and organizational citizenship behavior parts was carried out to investigate the relations among these variables. Some basic socio-demographic questions were included. The study resulted emotional intelligence was significantly and negatively related to work-family conflict ( $r = -.۲۲, p < .۰۱$ ) and significantly and positively related to organizational citizenship behavior ( $r = .۶۲, p < .۰۱$ ). The negative relation between work-family conflict and organizational citizenship behavior was also significant ( $r = -.۲۷, p < .۰۱$ ). it was found that work-family conflict is a partial mediator between emotional intelligence and organizational citizenship behavior. The other finding of the study was that emotional intelligence, work-family conflict and organizational citizenship behaviors and some of their dimensions are significantly related to each other.*

**Keywords** - emotional intelligence, mediating effect, nurses, organizational citizenship behavior and work-family conflict.

---

\* PNU, Tehran Graduate Center, Tehran, Iran. m\_k\_bighami@yahoo.com. (Corresponding Author)

\*\* Research Fellow, AOBM, Tehran, Iran. skhsoltani@yahoo.com

\*\*\* School of Industrial Engineering, IAU, South Tehran Branch, Tehran, Iran. farshidabdi@azad.ac.ir

\*\*\*\* School of Industrial Engineering, IAU, South Tehran Branch, Tehran, Iran. Hamid\_aliakbar۲۰۰۳@yahoo.com

## 1. Introduction

Emotional intelligence, work-family conflict and organizational citizenship behavior are of particular importance to healthcare organizations. Since nurses give an important primary-care-giver function within hospitals, and hospitals are the major pillars of an important health care system, the behavior of nurses in hospital environments remain a critical research issue (Tallman and Bruning, 2005). This research focuses on the investigation of the relations among emotional intelligence, work-family conflict and organizational citizenship behavior; and the mediating effect of work-family conflict between emotional intelligence and organizational citizenship behavior; as well as the behavioral model of relations among emotional intelligence, work-family conflict and organizational citizenship behavior dimensions.

Emotional intelligence is an interesting issue for research, and many academic studies have focused on how emotional intelligence affects non-task related behaviors of employees (Cote and Miners, 2006; Cartwright and Pappas, 2008). Non-task related behaviors are those that are not employee duties, but employees do these tasks voluntarily. The concept of emotional intelligence as a type of social intelligence first was introduced by Salovey and Mayer (1990). They defined emotional intelligence as the ability of an individual to perceive accurately, appraise, and express emotion; the ability to access and generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth. According to Turner (2004) the emotional intelligence is the softer component of total intelligence and it helps both personal and professional lives. Thus emotional intelligence is necessary for employees who perceive and control their own emotions and those of customers in the course of performing their emotional labor (Mayer and Salovey, 1997). According to Abraham (1999) emotional intelligence would have a positive effect on the employee performance, organizational commitment, congruence between self and supervisor appraisals of performance and organizational citizenship. Emotional intelligence is conceptualized as composed of four distinct dimensions (Wong and Low, 2002).

- (١) Self-emotional appraisal (SEA), appraisal and expression of emotion in the self: the ability of individual to understand their emotions and naturally to express these emotions.
- (٢) Others' emotional appraisal (OEA), appraisal and recognition of emotion in others: the ability of individuals to perceive and understand the emotions for others those are around them.
- (٣) Regulation of emotion (ROE), regulation of emotion in the self: the ability of individuals to regulate their emotions when they face psychological distress.
- (٤) Use of emotion (UOE), use of emotion to facilitate performance: the ability of people to make use of their emotions by directing them towards personal performance and constructive activities.

The second variable of the study, work-family conflict, is a form of inter-role conflict between the competing demands of family and work roles (Greenhaus and Beutell, ١٩٨٥). Three types of conflict; time, strain and behavior based conflict; were proposed specifically. Each conflict occurs bi-directionally from family-to-work and work-to-family. This study considers just time and strain conflicts bi-directionally. Previous studies on work-family conflict using the big- $\Delta$  model showed that neuroticism is a predictor of both directions of work-family conflict (Wayne et al, ٢٠٠٤). And it is related to work-family conflict positively (Bruck and Allen, ٢٠٠٣). Studies have shown that people with low work-family conflict have greater organizational commitment (Thompson; Beauvais and Lyness, ١٩٩٨), and increased job satisfaction (Kossek and Ozeki, ١٩٩٨). While other studies have shown these same variables to be antecedents of greater engagement in organizational citizenship behavior (Organ and Ryan, ١٩٩٥). Work-family conflict and organizational citizenship behavior are two highly important issues in organizational literature today (Levy, ٢٠٠٣). These research issues are very important in modern organizations because of their effects on personal lives of employees and on organizational success (Kossek and Ozeki, ١٩٩٨; Organ and Ryan, ١٩٩٥). Today with the various use of telecommunication technologies and information and the use of flexible

working patterns, family and work life have become increasingly interrelated (e.g., Valcour and Hunter, ۲۰۰۵). According to Brawn and Brooks (۲۰۰۲) "an understanding of emotion, both our own and those of other people, plays an important part in organizational life". In this study we want to show employees with high in emotional intelligence have lower conflict between their work and family.

The third variable, organizational citizenship behaviors, refers to the individual contributions in the workplace that go beyond role requirements (Organ and Ryan, ۱۹۹۵). Organizational citizenship behavior has been shown to have favorably contributed to organizational outcomes, such as organizational commitment (Podsakoff, Mckenzie and Bommer, ۱۹۹۶), service quality (Bell and Mengué, ۲۰۰۲), job involvement (Dimitriades, ۲۰۰۷) and leader-member exchange (Bhal, ۲۰۰۶). In the previous studies organizational citizenship behavior has been vastly used as it has been shown to affect the whole organizational effectiveness (Walz and Niehoff, ۱۹۹۶). Organizational citizenship behavior is famous as extra-roles behaviors that go beyond the employment contract, and do non-obligatory task without to want recognition and explicit rewards (Organ, ۱۹۸۸). So, understanding reasons and determining conditions that lead to such behaviors are useful to generate an insight in to when and how these behaviors happen. A great deal of studies have studied that there are five basic factors that affect most of the variance in personality (e.g., Costa and McCrae, ۱۹۹۲). This research, adopts Organ's definition of organizational citizenship behavior with five factors and each dimension is discussed more in the following part:

- (۱) Altruism (ALT): altruism refers as voluntary behaviors that an employee helps an individual with a particular problem to cover her or his task under unusual statuses.
- (۲) Courtesy (COUR): courtesy refers to an individual encourage other workers when they feel discouraged about their professional development. According to Padsakoff et al (۲۰۰۰) employees with high courtesy would reduce inter-group conflicts.
- (۳) Civic virtue (CIV): civic virtue refers to the responsibility of the

employees to participate in the life of the organizations such as keeping up with the changes in the firm and attending meetings that are not required by the organization (Organ, 1988).

- (ف) Conscientiousness (CON): Conscientiousness refers to as dedication to the job that goes beyond formal requirements such as volunteer to perform jobs besides duties and working long hours (Organ, 1988).
- (د) Sportsmanship (SPO): sportsmanship refers to the behavior of warmly tolerating the irritations which main parts of nearly every organizational are setting (Organ, 1988). Good sportsmanship would increase the moral of the work group (Podsekaff and Mackenzie, 1997).

The main hypotheses of the study are the following:

**Hypothesis 1.** Nurses' emotional intelligence associates negatively and significantly with their work-family conflict.

**Hypothesis 2.** Nurses' emotional intelligence associates positively and significantly with their organizational citizenship behavior.

**Hypothesis 3.** Nurses' work-family conflict associates negatively and significantly with their organizational citizenship behavior.

**Hypothesis 4.** Work-family conflict is a mediator between emotional intelligence and organizational citizenship behavior.

**Hypothesis 5.** Nurses' emotional intelligence dimensions are related to the aspects of work-family conflict.

**Hypothesis 6.** Nurses' emotional intelligence dimensions are related to the dimensions of organizational citizenship behavior.

In this study, structural equation modeling (SEM) was used to investigate the effect of emotional intelligence and work-family conflict on organizational citizenship behavior. SEM is a family of statistical techniques that integrates and incorporates factor analysis and path analysis. SEM can do a large number of exogenous and endogenous variables, as well as latent variables as linear combination of observed variables specifically. It has been vastly used in number of disciplines including healthcare, information, management, banking, marketing, logistics, tourism management and psychology.

## ۲. Method

### ۲.۱. Study setting

There are total of five university hospitals in Kashan, Iran. Since Dr. Beheshti university hospital has more nursing staff (۴۶۵) than the other university hospitals, it was chosen as the place for the questionnaire survey. The nursing were informed by the Nursing Room<sup>۱</sup> of the hospital about the objective of the research and that their participation is voluntary. All the nursing staff was invited to participate voluntarily to do so. The data was gathered in June ۲۰۱۲.

### ۲.۲. The questionnaire survey

A total of ۴۶۵ questionnaires were submitted to the Nursing Room of the hospital to collect data, and ۲۹۳ questionnaires were returned. ۱۵ questionnaires were incomplete (there was no pattern between incomplete questionnaires) and were excluded from analysis and ۲۷۸ questionnaires were fully completed and were included.

Following Brislin (۱۹۷۶)'s guidelines, by two different bilingual researchers structured questionnaire consisting of three separate surveys, was back and forward translated. Back and forward translated questionnaire by related experts was recommended without adaptations or changes. The response format was a ۵-point Likert-type scale ranging from "strongly disagree" to "strongly agree".

"Emotional intelligence questionnaire" developed by Wong and Law (۲۰۰۲) was used to assess emotional intelligence. To measure the different dimensions of emotional intelligence: OEA; SEA; UOE; ROE, the ۱۶-item emotional intelligence questionnaire was classified into ۴ of ۴ questions.

---

۱. Nursing Room is a center in a hospital that manages and organizes the nurses in the hospital different parts.

The ۲۴-item scale developed by Padsakoff, Mackenzie, Moorman and Fetter (۱۹۹۰) was used to measure the five dimensions of organizational citizenship behavior: Altruism; Sportsmanship; Courtesy; Civic virtue and Conscientiousness.

Stephens and Sommer (۱۹۹۶) developed a work-family conflict scale to measure three types of conflict; time, strain and behavior-based conflicts. Each conflict occurs bi-directionally from family to work and work to family. We used this questionnaire but in this study we omitted questions related to behavior-based conflict (to limit our study in this part) and measured just two types of conflict: time and strain.

### ۲.۳. Data analysis

Data analysis was done by using Amos ۱۸. And the statistical program package SPSS. P- Value equal or lower than ۰.۰۵ were considered significant statistically. Exploratory factor analysis was carried out on all ۱۶ items of the emotional intelligence. Principle component analysis (PCA) pointed out four factors, dimensions of emotional intelligence, each indicator loading significantly to its hypothesized construct. Exploratory factor analysis on all ۱۲ items of work-family conflict pointed out four factors, time-based work-family conflict (T.WFC); strain-based work-family conflict (S.WFC); time-based family-work conflict (T.FWC); strain-based family-work conflict (S.FWC), consistently with hypothesized items. Each indicator item loadings were significant. Exploratory factor analysis on all items of organizational citizenship behavior excluded five factors with significant item loadings too.

Confirmatory factor analysis was used on Amos ۱۸ to evaluate convergent validity. The measurement model with three variables was assessed. To evaluate the fit of the model to the data, several indices were calculated: chi-square statistic ( $\chi^2$ ),  $\chi^2/d.f.$ , p, root mean square error of approximation (RMSEA), CFI and IFI. With the following indices:  $\chi^2 = ۱۷۷۰$ , p = ۰;  $\chi^2/d.f. = ۱.۴۸۳$ ; RMSEA = ۰.۰۵۹; PClose = ۰.۶۰۴; CFI = ۰.۸۹۹; IFI = ۰.۹۰۲, the measurement model exhibited a good fit to data. All the loadings

of the indicators to their constructs were significant at  $.01$  levels, referring convergent validity (Güldal Güleriyüz et al., 2008). None of the correlation coefficients between the indicators of the constructs (emotional intelligence, work-family conflict and organizational citizenship behavior) was greater than  $.5$  and indicator items for each construct were significantly correlated to each other (Fig. 1).

In terms of cronbach's  $\alpha$  and composite reliabilities, reliability analysis was conducted for all the study variables. Cronbach's  $\alpha$  coefficient went beyond  $.5$  for all cases. The results of the reliability analysis for emotional intelligence and its dimensions, work-family conflict and its aspects as well as organizational citizenship behavior and its aspects are given in table 1.

## 3. Results

### 3.1. A profile of the nurses

The participants were about 90% female with age ranging from 20 to 40 years old. About 90% of them were four years university graduate and had been working at Dr. Beheshti university hospital between 1 to 15 years. The sample of the nurses in this study was all registered nurses. About 80% of the nurses were married.

### 3.2. Correlation analysis

The correlation coefficient for the study variables are given in table 1. A look on the dimensions of emotional intelligence showed that, not all the dimensions of EI have significant correlation with work-family conflict and organizational citizenship behavior and not all the aspects of work-family conflict have significant correlation with organizational citizenship behavior. There was evidence in table 1 that all the dimensions of emotional intelligence have negative correlation with work-family conflict and all the aspects of work-family conflict have negative correlation with organizational citizenship behavior, but there is a positive correlation between dimensions of emotional intelligence and organizational citizenship behavior. A closer

The behavioral model of emotional intelligence effect on ...

look revealed that emotional intelligence is correlated with work-family conflict negatively significant; the correlation between emotional intelligence and organizational citizenship behavior is positively significant; and the correlation between organizational citizenship behavior and work-family conflict is negatively significant confirming the first three hypotheses of this study.

Table 1  
Correlation matrix and reliability result for study variables

variables	OEA	UOE	SEA	ROE	T.WFC	T.FWC	S.FWC	S.WFC	ALT	CON	COUR	CIV	SPO	EI	WFC	OCB
OEA	1															
UOE	.246**	1														
SEA	.462**	.056**	1													
ROE	.170*	.262**	.414**	1												
T.WFC	-.222	-.249**	-.167**	.060	1											
T.FWC	-.206**	-.190**	-.178**	-.050	.244**	1										
S.FWC	-.142**	-.160**	-.108**	-.083	.202**	.016**	1									
S.WFC	-.24	-.221**	-.102**	-.076	.318**	.222**	.400**	1								
ALT	.401**	.290**	.060**	.178**	-.19	-.216**	-.171**	-.112	1							
CON	.219**	.182**	.182**	.246**	.161**	.044	.017	.140*	.281**	1						
COUR	.288**	.262**	.292**	.109**	-.040	-.228**	-.221**	.029	.001**	.278**	1					
CIV	.134*	.217**	.219**	.211**	.079	-.026	-.061	-.022	.228**	.270**	.206**	1				
SPO	-.048	.027	-.057	.082	-.222**	-.107**	-.220**	-.200**	-.016	-.110	-.076	.028	1			
EI	.090**	.290**	.086**	.092**	-.120*	-.228**	-.206**	-.102*	.224**	.280**	.202**	.207**	.044	1		
WFC	-.144**	-.262**	-.220**	-.070	.000**	.222**	.089**	.270**	-.140*	.111	-.146**	-.028	-.278**	-.266**	1	
OCB	.202**	.270**	.444**	.278**	-.026	-.266**	-.288**	-.109	.206**	.020**	.076**	.042**	.220**	.488**	-.207**	1
Cronbach's	.902	.969	.801	.908	.882	.881	.880	.882	.820	.902	.962	.962	.904	.988	.812	.949

Table ۱  
Correlation matrix and reliability result for study variables

variables	OEA	UOE	SEA	ROE	T.WFC	T.FWC	S.FWC	S.WFC	ALT	CON	COUR	CIV	SPO	EI	WFC	OCB
OEA	1															
UOE	.۲۴۶**	1														
SEA	.۴۶۲**	.۵۶۶**	1													
ROE	.۱۳۵*	.۳۶۲**	.۴۱۹**	1												
T.WFC	-.۰۲۲	-.۲۰۹**	-.۱۶۷**	.۰۶۰	1											
T.FWC	-.۳۵۶**	-.۱۹۰**	-.۱۷۸**	-.۰۵۵	.۲۴۹**	1										
S.FWC	-.۱۹۲**	-.۱۶۰**	-.۱۵۸**	-.۰۸۵	.۲۵۳**	.۶۱۶**	1									
S.WFC	.۰۲۴	-.۲۲۱**	-.۱۵۳**	-.۰۷۶	.۳۱۸**	.۲۲۲**	.۴۵۵**	1								
ALT	.۴۰۱**	.۲۹۰**	.۳۶۰**	.۱۷۳**	.۰۱۹	-.۲۱۶**	-.۱۷۱**	-.۰۱۳	1							
CON	.۲۱۹**	.۱۸۳**	.۱۸۲**	.۲۴۶**	.۱۶۱**	.۰۴۴	.۰۱۷	.۱۴۰**	.۳۸۱**	1						
COUR	.۳۸۰**	.۳۶۳**	.۳۹۲**	.۱۵۹**	-.۰۴۵	-.۳۳۸**	-.۲۱۱**	.۰۲۹	.۵۰۱**	.۳۷۸**	1					
CIV	.۱۳۴*	.۲۱۷**	.۳۱۹**	.۲۱۱**	-.۰۷۹	-.۰۲۶	-.۰۶۱	-.۰۲۲	.۴۳۸**	.۲۷۵**	.۳۰۶**	1				
SPO	-.۰۴۸	.۰۳۷	.۰۵۷	.۰۸۲	-.۲۱۳**	-.۱۵۷**	-.۳۳۵**	-.۳۵۵**	-.۰۱۶	-.۱۱۰	-.۰۷۶	.۰۲۸	1			
EI	.۶۳۰**	.۷۶۵**	.۸۶۶**	.۶۶۲**	-.۱۳۰**	-.۲۶۸**	-.۲۰۶**	-.۱۵۴*	.۴۲۴**	.۲۸۰**	.۴۵۲**	.۳۰۷**	.۰۴۴	1		
WFC	-.۱۹۴**	-.۲۶۲**	-.۲۲۰**	-.۰۷۵	.۵۰۰**	.۷۳۲**	.۸۴۸**	.۷۶۵**	-.۱۴۵*	.۱۱۱	-.۱۹۶**	-.۰۲۸	-.۳۷۹**	-.۲۶۶**	1	
OCB	.۳۵۳**	.۳۶۵**	.۴۴۴**	.۲۷۳**	-.۰۲۶	-.۲۶۳**	-.۲۸۶**	-.۰۹۹	.۷۵۶**	.۵۲۰**	.۷۰۶**	.۶۹۲**	.۳۳۰**	.۴۹۸**	-.۲۵۷**	1
Cronbach's	.۰۷۰۲	.۰۷۶۹	.۰۸۰۱	.۰۷۰۸	.۰۸۹۲	.۰۸۹۱	.۰۸۹۰	.۰۸۹۲	.۰۸۲۰	.۰۷۰۲	.۰۷۶۲	.۰۷۶۲	.۰۷۰۴	.۰۷۸۷	.۰۸۱۳	.۰۷۴۹

\*\* . Correlation is significant at the .۰۰۱ level (tailed).

\* . Correlation is significant at the .۰۰۵ level (tailed).

EI=emotional intelligence; WFC=work-family conflict; OCB=organizational citizenship behavior; SEA=self-emotional appraisal; OEA=others' emotional appraisal; UOE=use of emotion; ROE=regulation of emotion; T.WFC=time-based work-family conflict; S.WFC=strain-based work-family conflict; T.FWC=time-based family-work conflict; S.FWC=strain-based family-work conflict; ALT=altruism; CON=conscientiousness; COUR=courtesy; CIV=civic virtue; SPO=sportsmanship.

### ۳.۳. The mediating effect of work-family conflict between emotional intelligence and organizational citizenship behavior

There are several methods to assess the mediating effect of variables using SEM techniques and regression (Holmbeck, ۱۹۹۷). The mediating effect in this study was measured according to the SEM suggestions of Holmbeck. Model was constructed from the view that emotional intelligence predict lower work-family conflict(e.g., Laura Biggart, ۲۰۱۰) and work-family conflict cause low organizational citizenship behavior (e.g., Barbara, ۲۰۱۰). In this study, standardized direct path coefficients tested for the model are given in table ۲. In the figures, error terms are presented with circles, indicator variables are presented with rectangle and latent variables are presented with ellipse.

The direct path between emotional intelligence and work-family conflict; emotional intelligence and organizational citizenship behavior; work-family conflict and organizational citizenship behavior were tested (for example to test the direct path from emotional intelligence to organizational citizenship behavior the coefficient of path from work-family conflict to organizational citizenship behavior was constrained to zero). The direct path coefficients were all significant in the predicted directions (table ۲). Next the result of the following was compared: (a) fit of the model in fig. ۱ when the direct path from emotional intelligence to organizational citizenship behavior is constrained to zero (full mediated model); (b) fit of the model in fig. ۱ when direct path from emotional I intelligence to organizational citizenship behavior is not constrained (partial mediated model).

Table ۲, Direct paths tested for analysis.

Model ۱: direct path		Coefficient <sup>a</sup>
WFC	EI →	-.۲۶**
	EI →	.۶۲**
OCB	WFC →	-.۲۷**
OCB		

Note: EI=emotional intelligence; WFC=work-family conflict; OCB=organizational citizenship behavior.  
<sup>a</sup> standardized values are presented.

\*  $p < .05$ .

\*\*  $p < .01$ .

The result revealed that, addition of the direct path between emotional intelligence and organizational citizenship behavior to the model improved the overall fit of the partial mediated model. According to finding, work-family conflict is a mediator between emotional intelligence and organizational citizenship behavior, confirming the fourth hypothesis of this study. The partial mediational model in fig. 1 indicated a good fit to the data with appropriate goodness of fit indices and significant path coefficients. (table 3)

Table 3. Comparing fit indices of the partially mediated and fully mediated models

Model	AIC	RMSEA	PCLOSE	CFI	IFI	RMR	$\chi^2$	$\chi^2/DF$
Partially mediated model	2034.047	.09	.74	.899	.902	.099	1770.047	1.483
Fully mediated Model	2060.716	.11	.402	.889	.892	.070	1798.716	1.000

#### 3.4. Behavioral model of the relation of emotional intelligence dimensions with the aspects of work-family conflict

To assess the extent to which the dimensions of emotional intelligence affect the aspects of work-family conflict as well as the behavioral model of this relation, according to the findings, study hypotheses and the literature the structural model was constructed. Direct paths from each dimension of emotional intelligence to each aspects of work-family conflict were tested simultaneously. All the direct path coefficients from the dimensions of emotional intelligence to the aspects of work-family conflict were significant in proposed directions, except for the paths between pairs, ROE-S.WFC; ROE-S.FWC; ROE-T.FWC and SEA-T.WFC. After eliminating the insignificant paths, the fit of the model without direct path from ROE to S.WFC, S.FWC and T.FWC; and from SEA to T.WFC was assessed. According to fit indices, the model exhibit a good fit to data (fig. 2). As a result, all the dimensions of emotional intelligence have significant relation with the aspects of work-family conflict except the pairs, ROE-S.WFC;

ROE-S.FWC; ROE-T.FWC and SEA-T.WFC.

So, fifth hypothesis of the study was confirmed except for the pairs, ROE-S.WFC; ROE-S.FWC; ROE-T.FWC and SEA-T.WFC.

#### **۳.۵. Behavioral model of the relation of emotional intelligence dimensions with the dimensions of organizational citizenship behavior**

To assess the extent to which the dimensions of emotional intelligence affect the dimensions of organizational citizenship behavior as well as the behavioral model of these relations, the structural model was constructed according to the finding, study hypotheses and the literature. Direct paths from each dimension of emotional intelligence to the each aspect of organizational citizenship behavior were tested simultaneously. None of the dimensions of emotional intelligence were related significantly to "sportsmanship", so "sportsmanship" was omitted from the model. Also UOE and SEA, were not significantly related to the dimensions of OCB, so these two were omitted from the model too. All the other dimensions were tested simultaneously.

After eliminating the insignificant paths, the fit of the model without insignificant direct paths was assessed. According to fit indices, the model exhibit a good fit to data (fig. ۳). As a result ROE, has significant relation with CON, and OEA has significant relation with CON, COUR, CIV and ALT.

So, sixth hypothesis of the study was confirmed for the pairs, CON-ROE; OEA-CON; OEA-COUR; OEA-CIV and OEA-ALT.

#### **۴. Discussion**

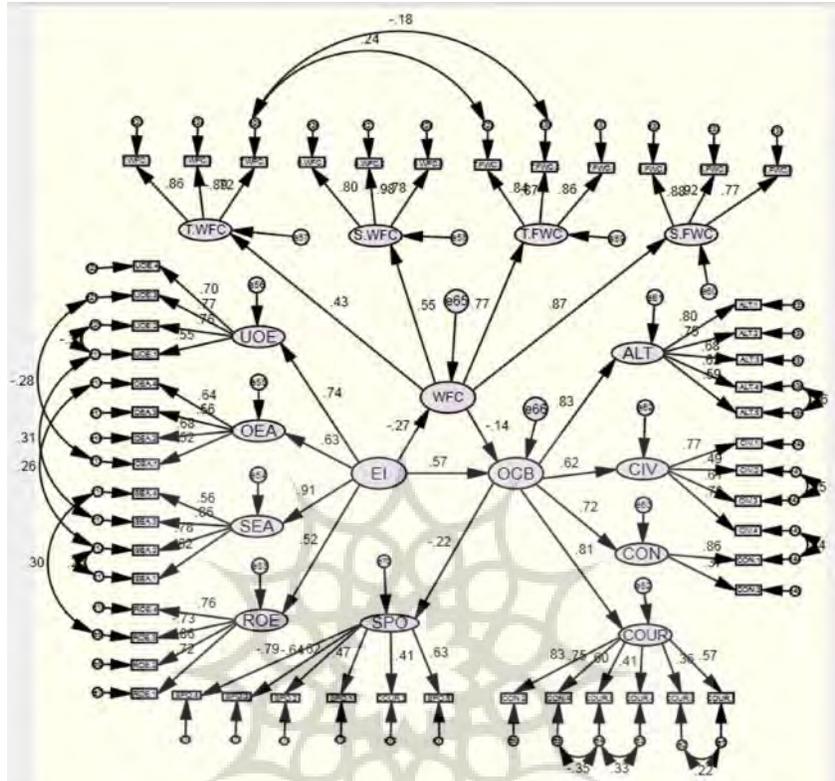
According to the literature review, this study is the first study that considers emotional intelligence, work-family conflict and organizational citizenship behavior simultaneously and the only study that focuses on the mediating effect of work-family conflict between emotional intelligence and organizational citizenship behavior. In the literature there are few studies analyzing the relation between emotional intelligence-work-family conflict (e.g., Laura Biggart, ۲۰۱۰; Nancy J. Yanchus, ۲۰۱۰); emotional intelligence-organizational citizenship behavior (e.g., Yaghoubi, ۲۰۱۱); and work-family conflict-organizational citizenship behavior (Jennifer Denicolis, ۲۰۰۵;

Barbara Beham, ۲۰۱۰). The current study found a positive relationship between emotional intelligence and work family conflict of the nurses. Nurses with high in emotional intelligence are more likely to have higher levels of organizational citizenship behavior. The result supports the findings of Hayo Sun (۲۰۱۰). As mentioned above, Barbara Beham (۲۰۱۰) studied the relation between work-family conflict and

Fig. ۱. Structural Model



The behavioral model of emotional intelligence effect on ...



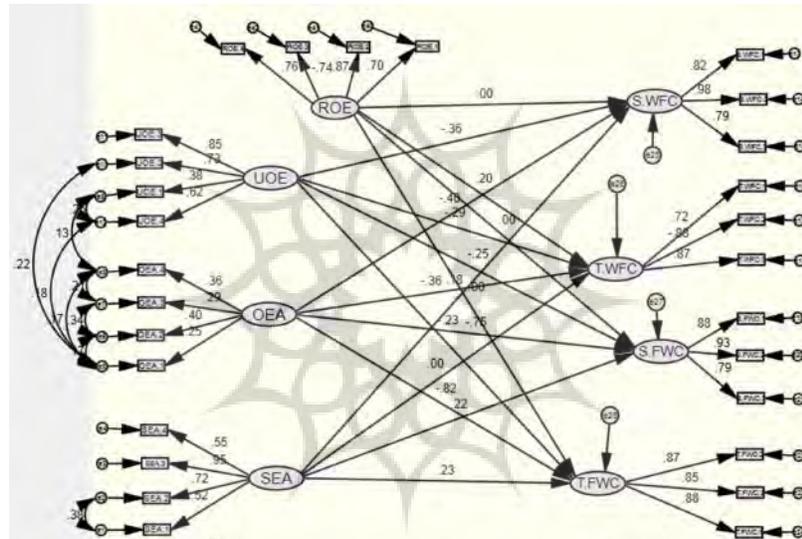
Note:  $\chi^2 = 111.547$ ,  $p = .$ ;  $\chi^2/d.f. = 1.483$ ; RMSEA =  $.059$ ; PClose =  $.604$ ; CFI =  $.899$ ; IFI =  $.902$ . EI=emotional intelligence; WFC=work-family conflict; OCB=organizational citizenship behavior; SEA=self-emotional appraisal; OEA=others' emotional appraisal; UOE=use of emotion; ROE=regulation of emotion; T.WFC=time-based work-family conflict; S.WFC=strain-based work-family conflict; T.FWC=time-based family-work conflict; S.FWC=strain-based family-work conflict; ALT=altruism; CON=conscientiousness; COUR=courtesy; CIV=civic virtue; SPO=sportsmanship.

organizational citizenship behavior and the findings of this study showed that employees with low work-family conflict are more likely to have higher levels of organizational citizenship behavior, so Barbara's study is along with current study. This finding is also supported by Jennifer's study (2005)

in management literature.

The first three hypotheses of the study were about the existence of significant relationship between emotional intelligence, work-family conflict and organizational citizenship behavior. As the result of the analysis, emotional intelligence has significant negative relationship with work-family conflict. This finding is also supported by Laura Biggart (2010) in management literature. Nurses who are high in emotional intelligence are less likely to have work-family conflict. Analysis for the two other

Fig. 2. Structural Model



Note:  $\chi^2 = 093.730$ ,  $p = .$ ;  $\chi^2/d.f. = 1.800$ ; RMSEA =  $.067$ ; CFI =  $.897$ ; IFI =  $.901$ . the insignificant paths were omitted and were not included in the calculation of indices. SEA=self-emotional appraisal; OEA=others' emotional appraisal; UOE=use of emotion; ROE=regulation of emotion; T.WFC=time-based work-family conflict; S.WFC=strain-based work-family conflict; T.FWC=time-based family-work conflict; S.FWC=strain-based family-work conflict.

variables, emotional intelligence and organizational citizenship behavior, showed that emotional intelligence has significant positive relationship with organizational citizenship behavior, this finding is also along with Hayo Sun's study (2010) in literature. Nurses who are high in emotional

intelligence are more likely to have higher organizational citizenship behavior. The analysis of relation between work-family conflict and organizational citizenship behavior that is a rare study in literature, showed that work-family conflict has significant negative relationship with organizational citizenship behavior as it has been studied in literature (Barbara Beham, ۲۰۱۰). Nurses with work-family conflict are less likely to have organizational citizenship behavior. Generally speaking, emotional intelligence and organizational citizenship behavior are very important for nurses specially in relation of patient satisfaction, nurses who can control their emotions and can understand patient emotions and do more than their duties for patients makes them happy and satisfied. Also nurses who can understand, control and manage their emotions, are satisfied themselves in the hospital as well as their work-family conflict will be decreased subsequently. This study is a contribution to the literature on emotional intelligence, work-family conflict and organizational citizenship behavior.

The forth hypothesis of the study was about the mediating effect of work-family conflict between emotional intelligence and organizational citizenship behavior. As the result of the analysis, the findings of this study showed that emotional intelligence has effect on organizational citizenship behavior but this effect appears partially through work-family conflict. Also emotional intelligence has significant negative relationship with work-family conflict, so nurses with high emotional intelligence have high organizational citizenship behavior and their conflict will be decreased potentially. This study makes a contribution to the literature on emotional intelligence and organizational citizenship behavior through the findings on the mediating effect of work-family conflict between the two variables.

The fifth hypothesis of the current study was the relationship between the dimensions of emotional intelligence and the aspects of work-family conflict. As a result of the analysis, all the direct path coefficients from the dimensions of emotional intelligence to the aspects of work-family conflict were significant in proposed directions, except for the paths between pairs, ROE-S.WFC; ROE-S.FWC; ROE-T.FWC and SEA-T.WFC. So nurses who can't regulate their emotions but can understand their emotions and other emotions and can use their emotions to facilitate their work, decrease their work-family conflict. This part of the study is a contribution to the literature on the dimensions of emotional intelligence and work-family conflict aspects.

The sixth hypothesis of the current study was the relationship between the dimensions of emotional intelligence and the aspects of organizational

citizenship behavior. Direct paths from each dimension of emotional intelligence to the each aspect of organizational citizenship behavior were tested simultaneously. None of the dimensions of emotional intelligence were related significantly to "sportsmanship", one of the dimensions of OCB, so "sportsmanship" was omitted from the model. Also UOE and SEA, dimensions of emotional intelligence, were not significantly related to the dimensions of OCB, so these two were omitted from the model too.

After eliminating the insignificant paths, the fit of the model without insignificant direct paths was assessed. As a result, nurses who are sportsmanship are not necessarily with high emotional intelligence, and nurses who can just understand other emotions and control their emotions have high organizational citizenship behavior. This part of the study is a contribution to the literature on the dimensions of emotional intelligence and the dimensions of OCB.

Overall, this research about Iranian nurses states that there is an effect of emotional intelligence on work-family conflict as well as organizational citizenship behavior partially through work-family conflict. Although this study is not a cross-cultural one and the surveys and concepts used in this research are western based ones, the results are along with other studies such as Laura Biggart (۲۰۱۰); Hayo Sun's study (۲۰۱۰); Nancy J. Yanchus (۲۰۱۰).due to cultural impact, each culture may response to the survey questions differently. Nursing because of its job characteristics, demands similar requirements among cultures and this can explain why the results of this research are along with the results of other researches.

Emotional intelligence can play an important role in the behaviors of nurses, so it is very important for nursing ,and improving the emotional intelligence of nursing is a challenge. As emotional intelligence is an important requirement for nursing, courses related to improving emotional intelligence such as communication and self-management, psychology, ethics and sociology have to be added to the nursing schools curriculum ;and in the recruitment process to select potentially effective job applicants measure of emotional intelligence must be considered (Palmer, ۲۰۰۳). As emotional intelligence can be taught or learned, therefore development programs and employee training have to design for nurses subsequently. Nurses with good emotional capacity would be good at controlling their feelings, dealing with other's feelings effectively, knowing their own feelings and understanding their own behaviors and that of others. Because of this, program about stress management, coaching, counseling, conflict

management, anger management and time management can help nurses to improve their emotional intelligence.

#### ۴.۱. Study limitation

One of the limitations of the study is that emotional intelligence, work-family conflict and organizational citizenship behavior were measured by self-report questionnaires. With self-report measures, response distortion and social desirability biases due to defense tendencies were a concern (Sy et al., ۲۰۰۶).

The study focuses on emotional intelligence, work-family conflict and organizational citizenship behavior. It is a limitation that all other factors affecting these variables were omitted. Also because of the nature of the job, cultural effects were thought not to impact the results dramatically. Therefore, if there are any possible outcomes of cultural impacts, were neglected.

The relationship between emotional intelligence, work-family conflict and organizational citizenship behavior was studied for the first time, but the pairwise relations were widely considered. To compare the results of this study, there were no other studies in the literature review.

By the fact that all the respondents belong to Dr. Beheshti university hospital and the results cannot be generalized to all hospitals, the generalizability of the findings is limited potentially. Nurses with stress and heavy burden of job necessities have no time to complete the questionnaires sincerely. The questionnaires in this study were filled voluntarily, however the net response rate is still at the level of the literature (low).

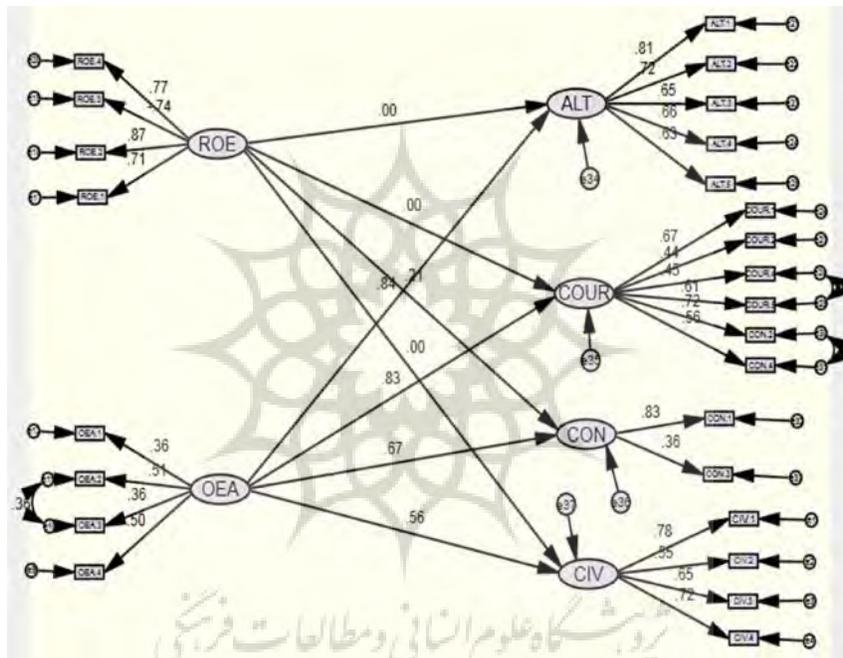
Generally speaking, the limitation of this study mentioned above, constrain its generalizability to other organizations. Because of this, a future study has to be repeated in different hospitals or organizations.

#### ۵. Conclusion

Emotional intelligence, work-family conflict and organizational citizenship behavior were found to have significant relationship with each other. And work-family conflict is found to be a partial mediator between emotional intelligence and organizational citizenship behavior. When the dimensions of emotional intelligence and the aspects of work-family conflict were taken in to account, all the direct path coefficients from the dimensions of emotional intelligence to the aspects of work-family conflict were significant in proposed directions, except for the paths between pairs, "regulation of emotion" with "strain-based work-family conflict" , "strain-based family-work conflict" and "time-based family-work conflict" ; and

"self-emotional appraisal" with "time-based work-family conflict". Finally when the relations of the dimensions of emotional intelligence and the dimensions of organizational citizenship behavior were analyzed, was found that "regulation of emotion" has significant relation with "conscientiousness", and "other emotional appraisal" has significant relation with "conscientiousness", "courtesy", "civic virtue" and "altruism". This study fills an important gap both in nursing literature and management, although to make a generalization, further research is needed.

Fig. ۳. Structural model



Note:  $\chi^2 = ۳۵۰.۷۷۱$ ,  $p = .$ ;  $\chi^2/d.f. = ۱.۳۱۴$ ; RMSEA =  $۰.۰۴$ ; CFI =  $۰.۹۲۵$ ; IFI =  $۰.۹۲۷$ . The insignificant paths were omitted and were not included in the calculation of indices. SEA=self-emotional appraisal; OEA=others' emotional appraisal; UOE=use of emotion; ROE=regulation of emotion; ALT=altruism; CON=conscientiousness; COUR=courtesy; CIV=civic virtue; SPO=sportsmanship.



پروپوزیشن کا نام: علم انسانی و مطالعات فرہنگی  
پرتال جامع علوم انسانی

## 9. References

- Abraham, R. (1999). Emotional intelligence in organizations: a Conceptualization. **Genetic, Social, and General Psychology Monographs**, 120, 209-244.
- Bell, S. J., & Menguc, B. (2002). The employee-organization relationship, organizational citizenship behaviors, and superior service quality. **Journal of Retailing**, 78, 131-146.
- Beham, B. (2010). Work-family conflict and organizational citizenship behavior: empirical evidence from Spanish employees. **Community, Work & Family**, 14, 73-80.
- Bhal, K.T. (2006). LMX-citizenship behavior relationship: justice as a mediator. **Leadership and Organizational development journal**, 27, 106-117.
- Biggart, L., Corr, P., Obarien, M., Cooper, N. (2010). Trait emotional intelligence and work family conflict in fathers. **Personality and Individual Differences**, 48, 911-916.
- Bragger, J., Srednicki, O., Kutcher, E., Rosner, E. (2000). Work-family conflict, work-family culture, and organizational citizenship behavior among teachers. **Journal of Business and Psychology**, 21.
- Brislin, R. (1976). **Translation: Application and Research**. New York: Wiley.
- Brown, R. and Brooks, I. (2002). Emotion at work: identifying the emotional climate of night nursing. **Journal of Management in Medicine**, 16, 327-44.
- Bruck, C. S., & Allen, T. D. (2002). The relationship between big five personality traits, negative affectivity, Type A behaviour and work family conflict. **Journal of Vocational Behavior**, 63, 407-422.
- Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: an examination among senior managers. **Journal of Management Psychology**, 18, 788-813.
- Cartwright, S., Pappas, C. (2008). Emotional intelligence its measurement and implications for the workplace. **International Journal of Management Review**, 10, 149-171.
- Cheung, F., Tang, C. (2012). The effect of emotional dissonance and emotional intelligence on work family interference. **Canadian Journal of Behavioral Science**, 44, 50-58.
- Costa, P. T., Jr., & McCrae, R. R. (1992). The revised NEO personality inventory (NEO PIR) and NEO five factor Inventory (NEO-FFI) professional manual. Odessa, FL: **Psychological Assessment Resources**.
- Cote, S., Miners, C.T.H. (2006). Emotional intelligence, cognitive intelligence and job performance. **Administrative Science Quarterly**, 51 (1), 1-28.
- Dimitriades, Z.S. (2007). The influence of service climate and job involvement on customer-oriented organizational citizenship behavior in Greek service organizations: a survey. **Employee Relations**, 29, 469-491.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. **Academy of Management Review**, 10, 76-88.

- Güleryüz, G., et al. (2008). The mediating effect of job satisfaction between emotional intelligence and job satisfaction: a questionnaire survey. **International journal of nursing studies**, 45, 1620-1630.
- Holmbeck, G. (1997). Toward terminological, conceptual and statistical clarity in the study of mediators and moderators: examples from the child-clinical and pediatric psychology literatures. **J. Consult. Clin. Psychol**, 65 (4), 599-610.
- Jung, H., Yoon, H. (2011). The effects of emotional intelligence on counterproductive work behaviors and organizational behaviors among food and beverage employees in a deluxe hotel. **International Journal of Hospitality Management**, 31, 369-378.
- Korkmaz, T., Arpacı, E. (2009). Relationship of organizational citizenship behavior with emotional intelligence. **Procedia Social and Behavioral Science**, 1, 2432-2435.
- Kossek, E. E. & Ozeki, C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. **Journal of Applied Psychology**, 83, 139-159.
- Lenaghan, J. (2007). An examination of the role of emotional intelligence in work family conflict. **Journal of Management Issues**, 1, 76-94.
- Levy, P. E. (2003). **Industrial/organizational psychology: Understanding the workplace**. Houghton Mifflin, Boston, MA .
- Mayer, J.D., Salovey, P. (1997). *What is emotional intelligence? In: Salovey, P., Sluyter, D. (Eds.), Emotional Development and Emotional Intelligence: Educational Implications*. Basic Books, New York, NY. 3-24.
- Organ, D.W. (1988). A restatement of the satisfaction performance hypothesis. **Journal of Management**, 14 (4), 047-007.
- Organ, D. W. & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. **Personnel Psychology**, 48, 770-802.
- Palmer, B., Gardner, L., Stough, C. (2003). The relationship between emotional intelligence, personality and effective leadership. **Paper Presented at the 14th Australia Industrial and Organisational Psychology**, Melbourne
- Podsakoff, P., MacKenzie, S., Bommer, H. (1996). Meta-analysis of the relations between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions, and performance. **Journal of Applied Psychology**, 81, 380-399.
- Podsakoff, P., MacKenzie, S., Moorman, R., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behavior. **Leadership Quarterly**, 1(2), 107-122.
- Podsakoff, P., MacKenzie, S., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. **Journal of Management**, 26(3), 013-063.
- Salovey, P., & Mayer, J. (1990). Emotional intelligence. **Imagination, cognition, and**

- personality, ۹(۳), ۱۸۵-۲۱۱.
- Stephens, G. K., & Sommer, S. M. (۱۹۹۶). The measurement of work to family conflict. **Educational and Psychological Measurement**, ۵۶, ۴۷۵-۴۸۶.
- Suliman, A., Al-sheikh, F. (۲۰۰۷). Emotional intelligence at work: links to conflict and innovation. **Employee Relations**, ۲۹, ۲۰۸-۲۲۰.
- Sy, T., Tram, S., O'hara, L.A. (۲۰۰۶). Relation of employee and manager emotional intelligence to job satisfaction and performance. **J. Vocat. Behav.**, ۶۸, ۴۶۱-۴۷۳.
- Tallman, R., Bruning, N. (۲۰۰۵). Hospital nurses' intentions to remain. **Health Care Manager**, ۲۴ (۱), ۳۲-۴۳.
- Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (۱۹۹۹). When work family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. **Journal of Vocational Behavior**, ۵۴, ۳۹۲-۴۱۵.
- Turner, L. (۲۰۰۴). Emotional intelligence ---our intangible asset? **Chartered Accountants Journal of New Zealand**, ۸۳(۳), ۲۹-۳۱.
- Valcour, P.M., Hunter, L.W. (۲۰۰۵). Technology, organizations, and work-family integration. **Work and family integration: Organizational, Cultural, and Individual Perspectives**, ۶۱-۸۴.
- Wayne, J. H., Musisca, N., & Fleeson, W. (۲۰۰۴). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. **Journal of Vocational Behavior**, ۶۴, ۱۰۸-۱۳۰.
- Wong, C., Law, K. (۲۰۰۲). The effects of leader and follower emotional intelligence on performance and attitude: an exploratory study. **Lead. Quart.**, ۱۳, ۲۴۳-۲۷۳
- Yanchus, N., Eby, L., Lance, C., Drollinger, S. (۲۰۱۰). The impact of emotional labor on work-family outcomes. **Journal of Vocational Behavior**, ۷۶, ۱۰۵-۱۱۷.
- Yaghoubi, E. et al. (۲۰۱۱). An analysis of correlation between organizational citizenship behavior (OCB) and emotional intelligence (EI). **Modern Applied Science**, ۵, ۱۱۹.

پژوهشگاه علوم انسانی و مطالعات فرهنگی  
پرتال جامع علوم انسانی