Investigation of the Correlation Between Work-Family Conflict and Compassion Fatigue in Healthcare Professionals

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DOI

https://10.48121/jihsam.1639641

Received

14.02.2025

Accepted

15.04.2025

Published Online

30.04.2025

Key Words

Work-to-Family Conflict, Family-to-Work Conflict, Compassion Fatigue, Burnout

ABSTRACT

While work-family conflict is caused by the difficulties an individual experiences in balancing work and family roles, compassion fatigue is the feeling of exhaustion and burnout that arises because of the process of caring and empathizing with others over a long period of time.

The aim of this study was to examine the relationship between work-family conflict and compassion fatigue in healthcare professionals. The data of this cross-sectional study were collected from 431 healthcare professionals working in private hospitals in Istanbul by using face-to-face survey methods. Socio-demographic questions, Work-Family Conflict Scale and Compassion Fatigue Short-Scale were used as data collection tools.

According to the Pearson correlation analysis applied in the study, there was a moderate, positive and significant relationship between work-family conflict and compassion fatigue ($r=0.662$; $p<0.05$). In addition, these two variables differ according to gender, age, marital status, education level, occupation, number of children, age of children and whether there is a parent in need of care.

There was an interaction between work-family conflict and compassion fatigue in healthcare workers. Considering that these two variables have negative effects, it can be stated that this situation may lead to burnout, psychological strain and decrease in service quality in healthcare professionals.

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Etesaminia, S., Tarım, M. (2025). Investigation of the Correlation Between Work-Family Conflict and Compassion Fatigue in Healthcare Professionals. Journal of International Health Sciences and Management, 11(21), 13-24.

1.INTRODUCTION

Health professionals are essential actors in the provision of healthcare services. This is because health services are based on a teamwork process that is labor intensive and requires coordination. In this context, not only the physical health but also the psychological state of the employees plays a critical role during the delivery of the service. It is observed that healthcare professionals who are in a negative psychological state reflect these moods negatively on patients and other employees in the hospital environment. Healthcare professionals may have to work outside of their normal working hours and days due to the nature of their work. In addition, they also carry family responsibilities such as parents, children and spouses. Healthcare professionals, who are expected to assume different responsibilities and roles outside the work environment, may sometimes experience an imbalance between work and family responsibilities due to this situation. In particular, allocating more time for one side (family or work) and neglecting the other side can lead to conflicts between work and family life.

Healthcare professionals work under high levels of stress, long working hours and an emotional burden due to the nature of their profession. This situation directly affects not only their professional lives but also their family lives. While work-family conflict is caused by the difficulties an individual experiences in balancing work and family roles, compassion fatigue is the feeling of exhaustion and burnout that occurs because of the process of caring and empathizing with others for a long time. In the literature, although the concepts of work-family conflict and compassion fatigue in healthcare professionals have been addressed individually, there is no study directly examining the relationship between these two phenomena. The aim of this study is to examine the relationship between work-to-family and family-to-work conflict and compassion fatigue in healthcare professionals. In addition, it aims to reveal the effects of these factors by evaluating the differentiation of sociodemographic characteristics according to the levels of work-family conflict and compassion fatigue in healthcare professionals.

2. LITERATURE

Work-Family Conflict

Conflicts between work and family usually arise when an individual assumes more than one role (Kahn et al., 1964). These roles can be listed as employee, spouse and parent. Each role consists of relationships that require a certain amount of time and energy. As a result, the individual may encounter situations where he/she may feel overwhelmed between work and family (Senecal et al., 2001). Work-family conflict occurs when an individual experiences incompatibility in work and family areas, resulting in conflict between roles (Posig et al., 2004). In other words, the incompatibility between family life roles as a family member and work life roles as an organizational member creates tension in the individual, disrupts the work-family balance and leads to work-family conflict (Beutell et al., 1985; Irge, 2021).

Work-family conflict is accepted as a type of inter-role conflict that individuals face in society and is defined as “an inter-role conflict situation in which the role in work or family becomes more difficult due to the influence of other roles” (Beutell et al., 1985; Tekingunduz et al., 2015). This conflict emerges bidirectionally in the dimensions of work-to-family conflict and family-to-work conflict and leads to many physical, mental and social problems (Cetinceli et al., 2020; Karaca et al., 2017; Tekingunduz et al., 2015).

Compassion Fatigue

Compassion, a core value in health care, can be defined as an empathic response of individuals to suffering. This concept is a rational process of finding solutions to suffering through specific moral actions and aims to look after people's welfare. Compassion includes the sensitivity to understand the suffering of others, the effort to find solutions to the current situation, and the willingness to improve the welfare of the suffering individual. In this context, compassion plays an important role in alleviating suffering and supporting healing processes at both individual and societal levels (Cingol et al., 2018).

The concept of compassion fatigue was first introduced by Joinson (1992). Compassion fatigue, which was first defined and analyzed by Joinson in 1992, is defined as the phenomenon of burnout and dysfunction that occurs because of prolonged exposure to work-related stress and compassion stress in healthcare workers (Xie et al., 2021). Figley (1995) states that compassion fatigue consists of two main elements: burnout and secondary traumatic stress. Burnout includes emotions such as frustration, anger and depression that develop due to the work environment, while secondary traumatic stress refers to the behaviors and emotions developed by the caregiver of a patient who has experienced a traumatic event. Compassion fatigue may occur unexpectedly and trigger feelings of powerlessness and uncertainty in the individual. This situation is considered as a syndrome that occurs as a result of providing patient care by showing compassion continuously for a long time and not always being able to observe positive healing processes (Branch et al., 2015).

Individuals who experience compassion fatigue experience an inability to sustain their own emotional well-being and a decreased ability to show compassion to others because of witnessing the suffering of others over a long period of time, despite having a desire to

help these people (Nikeghbal et al., 2021). Behavioral changes such as increased absenteeism, difficulty in decision-making processes and decreased work performance can be observed in individuals with this syndrome. It is suggested that burnout and secondary trauma occur as a result of decreased satisfaction with helping behavior (Lluch et al., 2022; Salmond et al., 2019).

Compassion fatigue is a process that progresses over time and has ultimate consequences. It has been suggested that individuals who provide continuous and intensive care to patients for long periods of time may develop both mental and physical problems. Mental symptoms include feelings of burnout, loss of energy, susceptibility to accidents and emotional breakdown, while emotional symptoms include depersonalization, reluctance to care for patients, irritability and emotional exhaustion. Physical symptoms may include weight changes, loss of strength, decreased work performance, decreased endurance, and an increase in physical complaints such as stomach aches and headaches. Psychologically, it is stated that individuals who experience compassion fatigue are likely to develop loss of emotional awareness or mental numbness (Coetzee et al., 2010; Jenkins et al., 2012).

3. MATERIALS AND METHOD

Design and setting

This cross-sectional and descriptive study was conducted in 6 private hospitals in 2023-2024. The population of the study consisted of healthcare professionals working in private hospitals on the Anatolian side of Istanbul. The sample was selected by convenience sampling method. The research data were collected using a face-to-face survey method.

Sample size

In the calculation of the sample size, in cases where the universe is not clearly known, the number 384 is reached with a 95% confidence interval and a 5% margin of error. By adding 10% margin of error to this number, the number 422 was obtained, and this number was determined as the minimum sample size to be reached in the study. In this study, a total of 431 participants from 6 private hospitals were included in the study.

Measurement Tools

The data collection tool in this study is presented as a questionnaire form consisting of three sections. The questionnaire includes socio-demographic questions, Work-Family Conflict Scale and Compassion Fatigue-Short Scale.

Work-Family Conflict Scale

The work-family conflict scale developed by Netenmeyer et al. (1996) was used to measure the work-family conflict levels of employees. The scale consists of two sub-dimensions aiming to measure the levels of work-to-family conflict arising from work life and family-to-work conflict arising from family life. There are five items for each dimension in the scale. The scale was translated into Turkish by Efeoglu (2006) and applied in the pharmaceutical industry. As a result of the reliability analysis, Cronbach's alpha reliability coefficients of the items were determined to be between 0.83 and 0.88.

Compassion Fatigue Scale

The scale developed by Adams et al. (2006) consists of 13 items. This 10-point Likert-type scale is a self-report assessment tool that asks participants to indicate the extent to which each scale item reflects their experiences. The scale consists of two sub-dimensions: secondary trauma and occupational burnout. The scale was adapted into Turkish by Dinc and Ekinci (2019) and the Cronbach's alpha coefficient was reported as 0.87.

Analysis of Data

The data were analyzed utilizing SPSS for Windows version 26.0 and AMOS version 24.0 program. To evaluate the construct validity of the scales, confirmatory factor analysis (CFA) was performed through the AMOS program.

The assumption of normality was verified, including assessment of skewness and kurtosis statistics and visual analysis of histogram plots. The results of these assessments indicated that the data adhered to a normal distribution. Accordingly, Pearson correlation analysis, T-test and ANOVA test were used to investigate the relationships between variables. Since the skewness and kurtosis values are between -1.5 and +1.5, it is assumed that the variables are normally distributed (Tabachnick et al., 2013).

Ethical Approval:

In order to conduct the research, ethical committee approval and permission were obtained from Marmara University Institute of Health Sciences on June 21, 2023 (Approval no. 21.06.2023-67).

4. RESULTS

Demographic characteristics of the participants are presented in Table 1. It was observed that 87% of the participants were female, and 67.1% were associate degree graduates. Additionally, 51.7% of the participants were nurses, and 68.2% were single. Among the participants, 34.8% had one child, while 65.2% had no children under the age of two. Furthermore, 96.3% of the participants did not have a parent in need of care or a disabled parent.

Table 1. Participants' Descriptive Statistics

Gender	Frequency	Percentage
Female	375	87
Male	56	13
Education		
High school	26	6
Associate's degree	289	67.1
Bachelor‟s degree	76	17.6
Master's degree	19	4.4
Ph.D	21	4.9
Occupation		
Doctor	25	5.8
Nurse	223	51.7
Health Technician	155	36
Midwife	28	6.5
Marital Status		
Married	121	28.1
Single	294	68.2
Other	16	3.7
Number of Children		
1 Child	46	34.8
2 Children	35	26.5
3 Children	8	6.1
No Child	43	32.6
Having a child less than two year old		
Yes	46	34.8
No	86	65.2
Having a parent with a disability		
Yes	16	3.7
No	415	96.3
Age (Mean=28, Min=19, Max= 70)		
29 Years and Below	319	74
30-40 Years Old	60	14
41 Years and Over	52	12
Total	**431**	**100**

Based on the confirmatory factor analysis of the work-family conflict scale, it was found that the 10 items formed a two-factor structure.

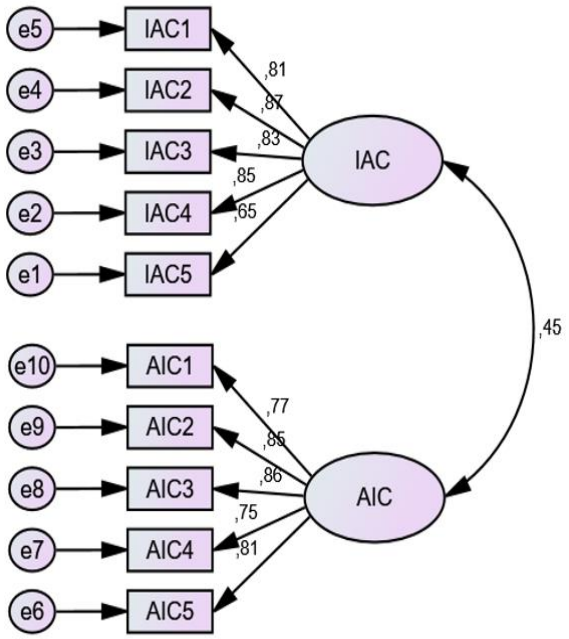
The factor loadings of the items exceeded 0.40, and all correlations were statistically significant. The reliability coefficient for the work-family conflict scale was found to be 0.892 (Table 2).

Table 2. Results of the model of the work-family conflict scale

Factors	Items	Factor Loading	Cronbach's alpha
Work-to-family conflict	WFC 1	0.812	α= 0.900
	WFC 2	0.873	
	WFC 3	0.833	
	WFC 4	0.849	
	WFC 5	0.648	
Family-to-work conflict	WFC 6	0.773	α= 0.904
	WFC 7	0.851	
	WFC 8	0.862	
	WFC 9	0.751	
	WFC 10	0.815	
Total Reliability (α) = 0.892			

The model fit indices of the Work-Family Conflict Scale demonstrated acceptable to good fit values. Specifically, the chi-square to degrees of freedom ratio (CMIN/DF) was 3.671, which is within the acceptable range (≤ 5). The Root Mean Square Error of Approximation (RMSEA) was 0.076, indicating an acceptable model fit (≤ 0.10). The Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) were 0.945 and 0.911, respectively, both exceeding the minimum acceptable threshold of 0.80. Furthermore, the Comparative Fit Index (CFI = 0.967), Tucker-Lewis Index (TLI = 0.957), and Incremental Fit Index (IFI = 0.967) all indicated a very good fit, as their values were well above the acceptable cutoff value of 0.80. Finally, the Standardized Root Mean Square Residual (SRMR) was 0.0501, which is below the recommended maximum of 0.10, further supporting the adequacy of the model.

Figure 1. Model for the first level multifactor confirmatory factor analysis of the work-family life conflict scale



Based on the confirmatory factor analysis of the compassion fatigue scale, it was found that the 13 items formed a two-factor structure. The factor loadings of the items exceeded 0.40, and all correlations were statistically significant. The reliability coefficient for the compassion fatigue scale was found to be 0.902 (Table 3)

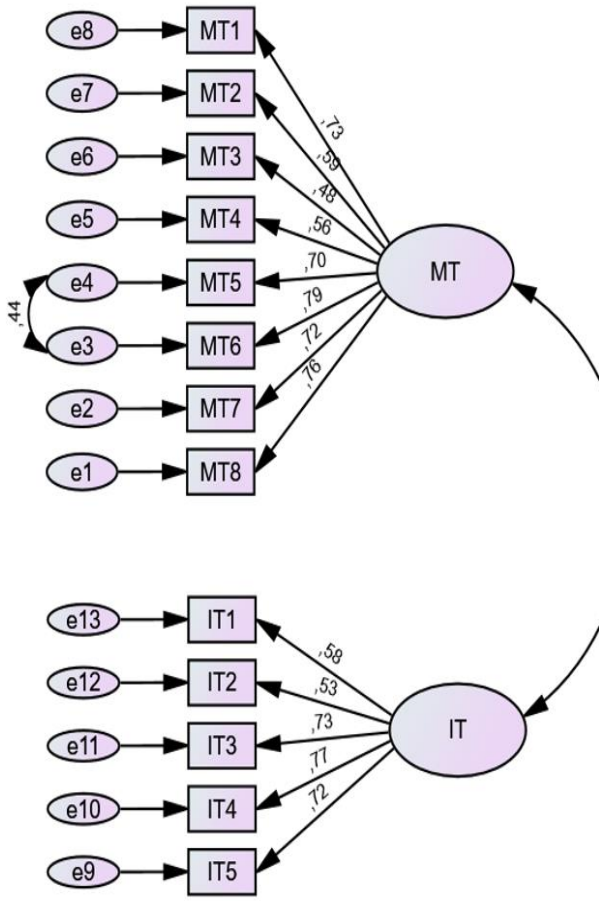
Table 3. Results of the model of compassion fatigue scale

Factors	Items	Factor Loading	Cronbach's alpha
Occupational Burnout	CF 1	0.730	α= 0.870
	CF 2	0.595	
	CF 3	0.480	
	CF 4	0.565	
	CF 5	0.704	
	CF 6	0.787	
	CF 7	0.721	
	CF 8	0.757	
Secondary Traumatic	CF 9	0.576	α= 0.799
	CF 10	0.534	
	CF 11	0.726	
	CF 12	0.769	
	CF 13	0.720	
Total Reliability (α) = 0.902			

The model fit indices for the Compassion Fatigue Scale indicated an acceptable level of model fit. The chi-square to degrees of freedom ratio (CMIN/DF) was 4.632, which falls within the acceptable threshold (≤ 5). The Root Mean Square Error of Approximation (RMSEA) was 0.092, suggesting an acceptable fit (≤ 0.10). The Goodness of Fit Index (GFI = 0.895) and the Adjusted Goodness of Fit Index (AGFI = 0.848) both exceeded the minimum acceptable value of 0.80.

In addition, the Comparative Fit Index (CFI = 0.909), Tucker-Lewis Index (TLI = 0.888), and Incremental Fit Index (IFI = 0.910) all indicated a satisfactory fit, as their values were above the conventional cutoff of 0.80. The Standardized Root Mean Square Residual (SRMR) was 0.0612, which is below the recommended maximum value of 0.10, further supporting the adequacy of the model fit.

Figure 2. Model for the first-order multifactor confirmatory factor analysis of the compassion fatigue scale



The results of the normality analysis for the scales and their factors used in the study are presented in Table 6. The skewness and kurtosis values were observed to fall within the ±1.5 range, indicating that the data followed a normal distribution (Tabachnick et al., 2013).

The total item score average of the participants from the work-family conflict scale was 2.53±0.04. The mean score of the work-to-family conflict item was higher than the mean score (3.12±0.05) of the family-to-work conflict item. The total item score average of the participants from the compassion fatigue scale was 3.60± 0.090. The mean score of the occupational burnout item was higher than the mean score (3.73±0.096) of the secondary traumatic conflict item (Table 4)

Table 4. Descriptive Statistics for Scale and Its Factors

Scale and Factors	Mean± Standard Deviation	Skewness	Kurtosis
General Work-Family Conflict	2.53±0.04	0.513	0.313
Work-to-Family Conflict	3.12±0.05	-0.072	-0.823
Family-to-Work Conflict	1.95±0.04	1.264	1.426
General Compassion Fatigue	3.60± 0.09	0.816	0.299
Occupational Burnout	3.73±0.096	0.770	0.080
Secondary Traumatic	3.39±0.098	0.934	0.306

In order to compare the work-family conflict and compassion fatigue scales and dimensions according to the socio-demographic characteristics of the participants, an independent t-test was applied for two independent group comparisons and one-way analysis of variance (ANOVA) was applied for more than two independent group comparisons (Table 5).

As a result, there was a statistically significant difference between the scores of the compassion fatigue scale, work-family conflict scale and work-to-family conflict sub-dimension according to the gender of the participants ($p>0.05$). It is seen that compassion fatigue, work-family conflict and work-to-family conflict sub-dimensions are higher in female healthcare professionals compared to male participants.

When analyzed according to the participants' having children under the age of two, it is seen that there is a statistically significant difference between the scores of family-to-work conflict sub-dimension, compassion fatigue scale, occupational burnout sub-dimension and secondary traumas sub-dimension ($p>0.05$). It is seen that family-to-work conflict sub-dimension, compassion fatigue scale, occupational burnout sub-dimension and secondary trauma sub-dimension are higher in participants with children under two years of age than in participants without children under two years of age.

There is a statistically significant difference between the scores of the family-to-work conflict sub-dimension according to whether the participants have a disabled or

dependent parent (p>0.05). It is seen that the sub-dimension of family-to-work conflict is higher in participants with a disabled or dependent parent than in participants without a disabled or dependent parent.

There was a statistically significant difference between the scores of the secondary trauma sub-dimension and family-to-work conflict sub-dimension according to the age of the participants (p<0.05). Post-Hoc analysis was applied to determine the group that made a difference. Tukey test was used in Post-Hoc analysis. Accordingly, it is seen that secondary trauma and family-to-work conflict are higher in participants aged between 30-40 years than in participants aged 29 years and younger.

There was a statistically significant difference between the scores of family-to-work conflict sub-dimension and secondary traumatic sub-dimension according to the educational level of the participants (p<0.05). According to the result of Tukey test in Post-Hoc analysis; family-to-work conflict is seen to be higher in participants with a master's degree compared to healthcare professionals with an associate's degree. Secondary trauma is more common in participants with bachelor's degree compared to participants with associate's degree.

It is seen that there is a statistically significant difference between the scores of compassion fatigue scale, occupational burnout sub-dimension and secondary traumatic sub-dimension according to the duties of the participants in the hospital (p<0.05). According to the result of Tukey test in Post-Hoc analysis; it is seen that compassion fatigue is higher in midwife participants than in other occupational groups (nurses, doctors and health technicians). The sub-dimension of occupational burnout was higher in midwife participants than in doctor participants. Secondary trauma was more common in midwife participants than in other occupational groups. In addition, it is seen that it is more in nursing participants than in participants who are health technicians.

There was a statistically significant difference between the scores of the family-to-work conflict sub-dimension and secondary traumatic sub-dimension according to the marital status of the participants (p<0.05). According to the result of Tukey test in Post-Hoc analysis; family-to-work conflict is higher in married participants than in single participants. Secondary trauma was higher in married participants than in single participants.

There was a statistically significant difference between the scores of compassion fatigue scale, occupational burnout sub-dimension, secondary trauma sub-dimension and family-to-work conflict sub-dimension according to the number of children the participants had (p<0.05). According to the result of Tukey test in Post-Hoc analysis, that compassion fatigue and occupational burnout are higher in participants with one child than in participants with three children. Family-to-work conflict and secondary trauma were higher in participants with one child than in participants with no children.

Table 5. Association between work-family conflict and compassion fatigue scores with demographic characteristics of participants

Characteristics	t/ F	WFC	WIF	FIW	CF	OB	ST
T-test							
Sex	T	2.072	2.642	0.713	1.849	1.777	1.613
	P	0.039**	0.009*	0.448	0.044**	0.056	0.081
Having a child less than two year old	T	1.908	0.853	2.446	2.436	2.226	0.028
	P	0.059	0.395	0.016**	0.029**	0,028**	0.019**
Having a parent with a disability	T	1.269	0.294	1.971	0.146	0.150	0.581
	P	0.205	0.769	0.049**	0.884	0.881	0.561
ANOVA							
Age	F	0.978	0.198	2.827	1.374	1.984	3.268
	P	0.377	0.821	0.050**	0.254	0.139	0.039**
Education	F	1.764	0.290	3.644	2.354	2.195	3.428
	P	0.135	0.885	0.006*	0.053	0.069	0.009*
Occupation	F	1.854	1.141	1.842	4.236	2.953	8.129
	P	0.137	0.332	0.139	0.006*	0.032*	0.000*
Marital Status	F	2.400	0.549	5.798	0.754	0.083	3.799
	P	0.092	0.578	0.003*	0.471	0.920	0.023**
Number of Children	F	1.829	0.472	4.412	2.932	3.456	3.592
	P	0.144	0.702	0.005*	0.033**	0.017**	0.014**

*Difference statistically significant at 0.01 level, **Difference statistically significant at 0.05 level

Pearson correlation analysis was used to test the relationship between work-family conflict and compassion fatigue variables and their sub-dimensions. As a result, there is a statistically significant and positive relationship between work-family conflict and compassion fatigue (r=0.662; p<0.05), between work-family conflict and occupational burnout sub-

dimension (r=0.656; p<0.05), between work-family conflict and secondary trauma sub-dimension (r=0.548; p<0.05) (Table 6).

There is a statistically significant and positive relationship between work-to-family conflict sub-dimension and compassion fatigue (r=0.656; p<0.05), work-to-family conflict sub-dimension and occupational burnout sub-dimension (r=0.678; p<0.05), and work-to-family conflict sub-dimension and secondary trauma sub-dimension (r=0.498; p<0.05) (Table 6).

Finally, there is a statistically significant and positive relationship between the sub-dimension of family-to-work conflict and compassion fatigue (r=0.445; p<0.05), between the sub-dimension of family-to-work conflict and occupational burnout (r=0.407; p<0.05) and between the sub-dimension of family-to-work conflict and secondary trauma (r=0.419; p<0.05) (Table 6).

Table 6. Relationship between work-family conflict and compassion fatigue scales and their factors

The variables		1	2	3	4	5	6
1- Work-Family Conflict	r	1.000	0.866	0.816	0.662	0.656	0.548
	p		0.000	0.000	0.000	0.000	0.000
2- Work-to-Family Conflict	r		1.000	0.417	0.656	0.678	0.498
	p			0.000	0.000	0.000	0.000
3- Family-to-Work Conflict	r			1.000	0.445	0.407	0.419
	p				0.000	0.000	0.000
4- Compassion Fatigue	r				1.000	0.954	0.885
	p					0.000	0.000
5- Occupational Burnout	r					1.000	0.705
	p						0.000
6- Secondary Traumatic	r						1.000
	p						

5. DISCUSSION

Although various studies have been conducted in the literature on work-family conflict and compassion fatigue in healthcare professionals, the relationship between these two variables has not been sufficiently examined. In particular, work-family conflict has generally been addressed in one direction, that is, the effect of work on family (work-to-family conflict), whereas the effect of family on work (family-to-work conflict) has been investigated less frequently. According to the results of the analysis, it was determined that there was a moderate and positive significant relationship between work-family conflict and compassion fatigue in healthcare professionals. This finding shows that as work-family conflict increases, the level of compassion also increases. In particular, the disruption of the balance between long working hours, professional burdens and the requirements of family roles increases emotional burnout and secondary trauma symptoms. This may be explained by the time management difficulties of healthcare professionals and the negative reflection of occupational stress and emotional burden on family life. At the same time, in cases where work-family conflict is intense, psychological strain and empathy-based professional wear and tears may further increase compassion fatigue.

In a cross-sectional study of oncologists in Canada, work-family conflict was reported to have a full mediating effect on burnout and compassion fatigue (Kleiner et al., 2017). Our study supports a large number of studies demonstrating the positive relationship between work-family conflict and occupational burnout (Kocalevent et al., 2020; Rhéaume, 2022). Therefore, work-family conflict and family-work conflict can be considered as important

factors that trigger and increase occupational burnout in healthcare professionals.

In the literature, many studies have shown that there is a positive relationship between work-family conflict and job stress (Efeoglu et al., 2015; Kilic et al., 2008; Smith et al., 2018). However, in this study, work-to-family conflict and family-to-work conflict were found to have a positive relationship with secondary trauma. One possible reason for this relationship may be that the conflict between the multiple roles and tasks required by work and family life may directly or indirectly trigger the trauma experiences of healthcare professionals.

The findings of the study show that work-family conflict is higher in female healthcare professionals compared to male healthcare professionals. This result is supported by various studies in literature (Dilmaghani et al., 2022; Efeoglu, 2006; Polat et al., 2018). Female healthcare professionals may feel more burdened in both work and family roles due to the additional responsibilities brought by gender roles. This may increase the difficulties women face in establishing work-family balance, which may lead to the reflection of work problems on family and family problems on work.

In addition, compassion fatigue was found to be higher in female healthcare professionals than male healthcare professionals. Similarly, Hooper et al. (2010) found that female nurses had significantly higher levels of compassion fatigue compared to male nurses. Similar findings were obtained in a study conducted among pediatric emergency nurses in Turkey during the COVID-19 pandemic (Arikan et al., 2023). In the study conducted by Wang et al. (2020) on Chinese nurses, although a relationship was found in the burnout sub-dimension, no relationship was found in the secondary trauma sub-dimension. However, in some studies in literature, no relationship was found between gender and compassion fatigue and its sub-dimensions (Erten et al., 2024; Kanyanta et al., 2023).

It was found that married healthcare professionals experienced more family-to-work conflict compared to single professionals. This finding is consistent with previous studies (Carikci et al., 2009; Carvello, 2023; Efeoglu, 2006 Moreira, 2023). Married employees may feel more pressure to fulfill both work and family roles. Increased family responsibilities, especially when combined with the intense work pace in the health sector, may further deepen family-to-work conflict.

In the study, no significant relationship was found between marital status and compassion fatigue and its sub-dimensions occupational burnout. However, it was observed that the secondary trauma sub-dimension was higher in married health professionals compared to their single colleagues. This finding is like the results of the study conducted by Kanyanta et al. (2023) on nurses in Zambia. Some studies in the literature revealed a significant relationship between compassion fatigue and marital status (Wang et al., 2020; Xie et al., 2023).

It was observed that family-to-work conflict was higher in participants between the ages of 30-40 compared to other age groups. This result is supported in similar studies in literature (Dilmaghani et al., 2022; Zhao, 2023). In this age range, individuals are often dealing with major life events in parallel, such as buying a house, caring for young children and career development. While this increases efforts to achieve both high performance at work and economic security within the family, it can also trigger conflict between work and family.

According to the findings, secondary trauma was found to be higher in healthcare professionals between the ages of 30-40 compared to healthcare professionals younger than this age. Wang et al. (2020) found that nurses aged 36 years and older experienced higher secondary trauma than other age groups. In a study conducted on nurses in Turkey, it was observed that compassion fatigue was higher in nurses aged 30 years and older (Erten et al., 2024). However, in another study, no significant relationship was found between age and compassion fatigue and its sub-dimensions (Kanyanta et al., 2023).

It was found that healthcare professionals with a master's degree experience more family-to-work conflict compared to healthcare professionals with a bachelor's degree. This finding is supported by various studies in literature (Wu et al., 2021; Zhao 2023). Increasing education level may increase employees' responsibilities, managerial tasks and professional burdens. In addition, as the level of performance and contribution expected from the organization increases, this may lead to family-to-work conflict. This relationship may explain the difficulties employees face in balancing their professional and personal lives.

In this study, no significant relationship was found between educational level and compassion fatigue. However, it was observed that the secondary trauma sub-dimension was higher in healthcare professionals with bachelor's degree compared to associate's degree graduates. In various studies conducted both in Turkey and in different countries, it was found that there was no significant relationship between compassion fatigue and educational level (Arikan et al., Erten et al., 2024; 2023; Hooper et al., 2010; Wang et al., 2020; Xie et al., 2023;). These findings suggest that educational level does not have a significant effect on compassion fatigue, but different results may emerge in specific sub-dimensions such as secondary trauma.

In this study, it was determined that work-family conflict and its sub-dimensions did not differ according to different occupational groups. This finding is similar to a study conducted on healthcare professionals in Turkey (Secgin et al., 2022). It is thought that working conditions in hospitals may have similar levels of work-family conflict for different occupational groups in

general. This may indicate that the general work pace, workload and organizational structures in the health sector create similar levels of conflict regardless of occupational groups.

Among the health professionals who participated in the study, it was observed that the scores of compassion fatigue, occupational burnout sub-dimension and secondary trauma sub-dimension were higher in midwife participants compared to other health professionals working in hospitals. The service provided by midwives makes it possible for them to experience compassion fatigue. In a study, it was found that midwives who intervened in traumatic births experienced compassion fatigue and were under threat (Sokmen et al., 2021). Empathy between the midwife and the pregnant woman has revealed that traumatic birth stories can negatively affect midwives psychologically (Rice et al., 2013). The bond between the midwife and the woman giving birth is very strong and any complication or loss during the birth process can deeply affect midwives. In particular, spending a long time with the mother during labor may cause midwives to feel guilt and responsibility more intensely than other health professionals. This can lead to emotional distress for midwives (Rice et al., 2013). Since midwives carry the health responsibility for both the mother and the baby during the birth process, this process takes place in an intense emotional environment. Working with situations such as high-risk pregnancies and infant loss may increase the likelihood of midwives experiencing compassion fatigue and traumatic stress.

It was found that healthcare professionals with children experienced higher levels of family-to-work conflict compared to their colleagues without children. This finding is supported by many studies in literature (Carvello, 2023; Moreira, 2023; Secgin et al., 2022). Having children may lead to an increase in employees' existing responsibilities, additional roles such as fulfilling parenting duties, and family problems may negatively affect job performance. These findings suggest that having children has an increasing effect on family-to-work conflict.

Compassion fatigue, occupational burnout sub-dimension and secondary trauma sub-dimension were found to be higher in participants who had a child compared to other participants. However, Xie et al. (2023), in their study on emergency room nurses in China, reported that compassion fatigue was higher in nurses who did not have children compared to nurses who had children. This finding suggests that the effect of the number of children on compassion fatigue may vary depending on different cultural and work conditions.

Healthcare professionals with children under two years of age experience higher levels of family-to-work conflict compared to other workers. Previous studies confirm that having a young child is associated with work-family conflict (Unruh et al., 2016). In addition, it was observed that participants with children under two years of age had higher levels of compassion fatigue, occupational burnout sub-dimension and secondary trauma sub-dimension. A possible reason for this situation is that babies under the age of two are more dependent on their parents during this period, as well as challenging processes such as breastfeeding, sleep irregularities, and teething. These factors create additional responsibilities for working parents and emphasizing motherhood/fatherhood roles may lead to family-to-work conflict, feelings of burnout and fatigue.

It was found that the level of family-to-work conflict was higher in healthcare professionals with disabled or dependent parents. This finding is consistent with many studies in the literature (Carvello, 2023; Dilmaghani et al., 2022; Efeoglu, 2006). Individuals with parents in need of care have care responsibilities within the family in addition to their workload. Especially since they are healthcare professionals, they create more expectations for care from family members. These additional responsibilities negatively affect the work-family balance and lead to increased conflict.

6. CONCLUSIONS

In conclusion, this study shows that there is an interaction between work-family conflict and compassion fatigue in healthcare professionals. Considering that these two variables have negative effects, it can be stated that this situation may lead to burnout, psychological strain and decreased service quality in healthcare workers. The findings suggest that health managers and policy makers should develop strategies to support employees' work-family balance. Policies such as flexible working hours, family support services and psychological support practices can reduce burnout levels and improve the quality of healthcare services by reducing work-family conflict and compassion fatigue. In addition, the fact that the levels of conflict and fatigue experienced by different sociodemographic groups vary points to the importance of targeted intervention strategies. For example, offering special arrangements for employees with children or elderly care responsibilities, such as flexible working hours, nursery support and parental leave, can significantly contribute to employees' work-family balance. In addition to such policies, providing guidance to healthcare professionals on stress management, time management, maintaining empathic distance and work-family balance through training and awareness programs can be an effective approach to prevent compassion fatigue.

Future studies may focus on longitudinal designs to examine the causal relationship between work-family conflict and compassion fatigue over time. In addition, exploring the mediating or moderating roles of

variables such as organizational support, resilience, or coping strategies could provide deeper insights into this relationship. Qualitative studies may also be conducted to identify context-specific factors that influence these phenomena from the perspective of healthcare professionals. Comparative research across different healthcare settings or professions may further enrich the understanding of contextual dynamics.

Acknowledgments:
I would like to thank all healthcare professionals who contributed to this study.

Conflict of Interest:
The authors declare that they have no conflict of interest.

Ethical Approval:
In order to conduct the research, ethical committee approval and permission were obtained from Marmara University Institute of Health Sciences on June 21, 2023 (Approval no. 21.06.2023-67).

Funding:
No financial support was used in this study.

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