The Effect of Work-Family Conflict Mediation on the General Quality of Life and the Quality of Working Life in Employed Women

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ABSTRACT

Background: General life quality and its impact on the quality of working life are among the most important and critical issues in today's organizations. Work-family conflict is an important phenomenon that affects both employees and employers. This study aims to determine the relationship between general life quality and the quality of working life in working women with the role of work-family conflict mediation.

Methods: This descriptive-analytical study was conducted in 2017. The study population was 4266 women working in the health department of Mazandaran University of Medical Sciences. In this study, 351 samples were selected by stratified sampling method in 11 cities of 19 provinces of Mazandaran province. Data were collected using the World Health Organization Quality of Life Questionnaire (WHOQOL-BREF) with 26 questions, Casio quality of work life questionnaire with 29 questions, and Carlson work-family conflict with 18 questions. The results were analyzed using SPSS 24 and AMOS 22 softwares. Furthermore, Kolmogorov-Smirnov tests, structural equation model, path analysis and standard coefficients, Chi-square, fit index, Bootstrap, and Sobel tests were utilized.

Results: Demographic data included age, education, marital status, professional background, employment status, household size, job title, and income. The relationship between general quality of life and quality of working life in employed women was significant (P-value = 0.009). There was a significant and negative relationship between life quality and work-family conflict (P-value = 0.009). The effect of mediating variable of work conflict, between general quality of life and specific quality of working life was not statistically significant (P-value = 0.009).

Conclusion: Since general quality of life has a direct effect on the quality of working life in employed women, proper planning and training courses on time management, life and problem solving skills for employees, especially women working in the health sector can improve general life quality as well as quality of working life and reduce their work conflicts.

Keywords: Quality of Working Life, Work-family Conflict, Employed Women

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Introduction

Family and work are two inseparable parts of the life of most people in the society; therefore, the way to be successful is to adjust goals in these two areas of life. These two domains can have mutual effects on each other (1-2). Interference of these two parts can cause conflict of roles and any conflicts in the two-dimensional roles affects the organization (the workplace) and the individual, simultaneously (3). Usually, women are more likely to experience work-family conflict due to their family expectations (4).

One of the important issues in women's lives is life quality. Work-family conflict affects personal and work life. It can cause depression, anxiety, distress, poor performance of parental and spousal roles, reduction in life satisfaction and lack of mental health(5). This conflict can cause tendency to change job, decreasing job commitment(6), reducing the person's productivity, reducing job satisfaction, increasing absenteeism(7), job burnout(8), and lack of control sense over environment and the outcomes in organizations(9). Workplace is like the second home of people which they spend most of their time there. Therefore, the workplace should meet the least mental and psychological needs of individuals (10). If people have the ability to plan and balance the responsibilities between their occupational and family life, they can prevent conflicts and control the balance in their personal and occupational lives(11). Since the success and development of each organization depends on the manpower, organizations authorities should try to attract and maintain decent and motivated manpower and improve the life quality of individuals, so as a result, the organizations productivity will increase (12).

Today quality of working life is considered as a universal concept in the process of human resource management and organizational development. Understanding the causes and effects of quality of work life and organizational culture are considered as fundamental steps in job satisfaction (13). In order to increase job satisfaction and mental health of employees, organizations must reduce the existing conflicts between family and work as well as the sources of stress in the workplace (14). Due to the complexity and increasing competition in organizations, attention to human resources and the quality of work life has become increasingly important. Study of components of the quality of life provides information that can be used to improve the staff performance, productivity and ultimately the quality of working life (12). If a person feels that the quality of his working life has improved, whether as the result of his own performance or the policies adopted by the organization, will have more power to do the tasks and it consequently increases productivity beyond expected results (15).

Naeemi et al. (16), showed that there was a positive and significant correlation between quality of working life and job performance. Among different dimensions of quality of working life, "development of human capabilities" and "fair and adequate payment" were the most important predictors of job performance. Hekmat et al. (17), showed that there was a negative and significant correlation between work-family conflict and quality of life. Ryan et al.(18), showed that work-family conflict was the main reason for leaving the job among the US food service managers, and the main factor for job relocation in flight attendants. Minot et al. (19). Found that work-life conflict was related to work-pressure, supervisor support, and mental anxiety in medical staff in the United States. Some researchers, including Roostazadeh (20) and Babaei Fard (21) believe that playing multiple roles is beneficial for individuals and make them feel useful both for family and society. However, Thompson et al. (22), claim that multiplicity of roles can endanger the health of individuals. In fact, women's employment is like a two-edged sword that can both strengthen the family and the status of women, and undermine and even destroy the foundations of the family and the status of women (21).

Despite numerous studies on the quality of family life, quality of working life, and family-work conflict in both inside and outside of Iran, a
study that can examine the relationship between quality of life and the quality of working life in working women in the health sector has not been reported, or the researcher has failed to find a study in this regard. Since health care personnel are responsible for the society health, and their health directly affects the health of the community, work-family conflict and its dimensions on women working in health care centers can affect the quality of their performance. This study aimed to determine the relationship between general quality of life and quality of working life in employed women with the role of work-family conflict.

Materials and Methods

This descriptive - analytical study was conducted in Mazandaran province in 2017 for 6 months. The research population consisted of 4266 women working in the health department of Mazandaran University of Medical Sciences. Using Cochran's formula, the sample size was 351 which were selected by stratified random sampling method. At first, by simple random sampling (lottery method) 11 cities from 19 cities of Mazandaran province were selected and the total population of employed women in selected cities was determined. Then by using stratified sampling method, considering the ratio of organizational posts and job title, each group weight (0.109) was estimated and the sample size of each group was obtained. Finally, using simple random sampling, the subjects were selected in each group. Considering the probability of loss of samples, 380 questionnaires were distributed. After that, 362 questionnaires were returned to the researcher; while 351 questionnaires were completed and usable. The responsiveness of the participants was 92.3% to analyze the study hypotheses. Working in health centers for at least one year, lack of experience of severe illness in the last 6 months, not being a student and not having a second job were the inclusion criteria. Getting permission from the authorities of Mazandaran University of Medical Sciences and obtaining informed consent from the participants were the ethical considerations of this study.

Three standard questionnaires were used to collect data:

A: The WHO questionnaire on the quality of life with 26 questions and 5 dimensions of physical health (7 questions), mental health (6 questions), social relationships (3 questions), environmental health (8 items), and quality of life and general health (2 questions) was used. Scoring was based on a 5-point Likert scale. The scores for each dimension were converted to grades 0 to 100. The scores near 100 indicate better general quality of life. The questionnaire validity was confirmed by Nejat et al.. (23), and the Cronbach's alpha showed a reliability of 0.837.

B) Casio quality of working life questionnaire was also used. The questionnaire had 29 questions and 6 components of material privileges (4 questions), education (6 questions), democracy in the organization (6 questions), participation in the decision making (4 questions), job design (5 questions), and the organization workplace (4 questions). The 5 degrees Likert scale from very low (score 1) to very high (score 5) was used. After obtaining the raw scores of each component, a standard score from 0 to 100 was considered. The scores near 100 indicated better quality of work life. Questionnaire validity was evaluated by Rahimian et al. (24), and its reliability was reported 0.843 using Cronbach's alpha.

C- Carlson Work-Life Conflict Questionnaire with 18 questions was used. The questionnaire had 2 dimensions of work-family conflict and family-work conflict, and each dimension had three components of time (6 questions), tension (6 questions) and behavior (6 questions). Scoring was based on a 5-degree Likert scale from completely disagreeing (Score 1) to completely agree (Score 5). After obtaining the raw scores of each component, a standard score of 0 to 100 was considered. Scores near 100 indicate less work-life conflict. This questionnaire was used repeatedly in Iran and its validity was confirmed. Its reliability by Cronbach's alpha test was 0.893.
To analyze the data, descriptive statistics (frequency, mean, variance and standard deviation) and inferential statistics (Kolmogorov-Smirnov test) for examining the normal distribution of variables structural equation modeling, path analysis and standard coefficients (at a significant level less than 0.05) were used. In order to investigate the study hypothesis, to determine the adequacy of the model, the chi-square, the normal fitting index, the adaptive fit index, goodness of fit index, the root of the estimated error, adjusted goodness fit index, incremental fitness index and the non normal fit index were applied. To investigate the role of mediator Bootstrap and Sobol test (at a significant level less than 0.05), SPSS 24 and Amos 22 software were utilized.

This study was conducted with the ethical code of IR.IAU.SARI.REC.1396.41 in Islamic Azad University, Sari Branch.

Results

In this study, the majority of subjects (40.45%) were in age group 30-39 years old (n = 142), and the rest (3.99%) were in age group 50-59 years old (n = 14). Most of them (45.87%) had bachelor's degree (n = 161) and 16.6% had a lower degree than the diploma (n = 16). 302 of the subjects (86.04%) were married and 4 (1.4.1%) were divorced or widowed. Most of the subjects (25.07%, n = 88) had more than 20 years of work experience and 16.52% (n=58) had 11 to 15 years of work experience. 64.39% of the subjects were official employee (n = 226), and 3.99% were contractual employee (n = 14). 40.46% had four members in their family (n =142), and 1.14% were single-person household (n = 4). 29.06% were health workers or health professionals (n =102), and 4.84% were nurses (n = 17). 61.82% had monthly income of 1.5 to 2 million Tomans (n = 217), and 2.28% had monthly income from 3 to 3.5 million Tomans (n = 8).

The means of general quality of life, quality of work life, and work conflict were 88.95 ± 12.91, 80.25 ± 15.31, and 70.52 ± 19.59, respectively. Kolmogorov-Smirnov test showed that the significance level for all variables was greater than 0.05 and the data were normal; therefore, a parametric test was used to test these variables.

To investigate the relationship between the general quality of life and the quality of working life in employed women in the health sector and the role of the work conflict interface, the path analysis, standard coefficients and t values were used, simultaneously. The results showed that there was a significant relationship between general quality of life and quality of working life and also between the general quality of life and work-family conflict (p < 0.05). However, the relationship between work-family conflict and the quality of working life in women working in the health sector of Mazandaran province in 2017 was not significant (P-value = 0.221). Figure 1 shows the output of the AMOS software in standard coefficients.

Table 2 shows the relationship between general quality of life and work-life conflict with the quality of work life based on path analysis.

To investigate the role of mediating variable of conflict, between general quality of life and specific quality of work life, Bootstrapping method in Amos software was used. The results showed that direct effect between general quality of life and quality of working life was less than 0.05 and significant (P-value = 0.001) and coefficients of 0.44. According to this method, indirect effect between the quality of life with the quality of the working life through the work conflict was greater than 0.05 (P-value = 0.199 and coefficients 0.073), as a result the conflict mediating effect was not meaningful. On the other hand, Sobel’s test for investigating the role of mediator of work conflicts, between quality of life and quality of work life was greater than 0.05. The mediating effect of work- conflict was not significant.

After path analysis, examining the adequacy of the main fitted models is necessary. Among the different indices of model fitness, the root mean square of estimation error and goodness of fit index are the best indices and can determine the fitness of the desired model. The result of the Chi-2 ratio and the freedom degree of the model was reported 2.446, when the index is less than 3; the
model has a good fit. Other model fitness indices such as RMSEA, NFI, AGFI, GFI, CFI and IFI were all acceptable and appropriate, and the SRMR index was 0.0009, which indicates the desirability and reliability of the study model.

**Table 1.** Descriptive Indices and Normal Test of Variables (General Quality of Life, Quality of Working Life, Work Conflict in Women Employed in Health Care Department in Mazandaran in 2017)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Kolmogorov-smirnov statistics</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>General quality of life</td>
<td>351</td>
<td>88.95</td>
<td>90</td>
<td>93</td>
<td>12.91</td>
<td>35</td>
<td>126</td>
<td>0.94</td>
<td>0.345</td>
</tr>
<tr>
<td>Quality of working life</td>
<td>351</td>
<td>80.52</td>
<td>82</td>
<td>87</td>
<td>15.31</td>
<td>33</td>
<td>130</td>
<td>1.15</td>
<td>0.142</td>
</tr>
<tr>
<td>Work conflict</td>
<td>351</td>
<td>70.52</td>
<td>67</td>
<td>56</td>
<td>19.05</td>
<td>28</td>
<td>140</td>
<td>1.32</td>
<td>0.079</td>
</tr>
</tbody>
</table>

*Significant at the 0.05 level

**Table 2.** The Relationship between General Quality of Life and Work Conflict with the Quality of Work Life in Women Working in the Health Department of Mazandaran Province in 2017, Based on Path Analysis

<table>
<thead>
<tr>
<th>Factors</th>
<th>Standard coefficients</th>
<th>T value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>general quality of life</td>
<td>quality of work life</td>
<td>0.44</td>
<td>5.924</td>
</tr>
<tr>
<td>general quality of life</td>
<td>work conflict</td>
<td>-0.46</td>
<td>-9.295</td>
</tr>
<tr>
<td>work conflict</td>
<td>quality of work life</td>
<td>0.08</td>
<td>1.223</td>
</tr>
</tbody>
</table>

*Significance: p <0.05

**Table 3.** Fit Index of the Main Model of Relationship between General Quality of Life and Quality of Work Life with the Role of the Work Conflict of Mediation in Women Working in the Health Sector in Mazandaran Province in 2017

<table>
<thead>
<tr>
<th>Indices</th>
<th>Acceptable value</th>
<th>Value of the study</th>
<th>Desirability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>-</td>
<td>151.681</td>
<td>Verification</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>df ≥ 0</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>df &lt; 3</td>
<td>2.446</td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>RMSEA &lt; 0.1</td>
<td>0.064</td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>NFI &gt; 0.8</td>
<td>0.935</td>
<td></td>
</tr>
<tr>
<td>AGFI</td>
<td>AGFI &gt; 0.8</td>
<td>0.907</td>
<td></td>
</tr>
<tr>
<td>GFI</td>
<td>GFI &gt; 0.8</td>
<td>0.936</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>CFI &gt; 0.8</td>
<td>0.960</td>
<td></td>
</tr>
<tr>
<td>IFI</td>
<td>IFI &gt; 0.8</td>
<td>0.961</td>
<td></td>
</tr>
<tr>
<td>SRMR</td>
<td>The closer to zero.</td>
<td>0.0009</td>
<td></td>
</tr>
</tbody>
</table>

*When the index is less than 3, the study model is approved.

**When the Indices are more than 0.8, the study model is approved..
The Effect of Work-family Conflict Mediation on the General Quality of Life in Working Women, the Conflict between Occupational and Family Roles Decreases, and Vice Versa. Work-family conflicts with the quality of work life have created many problems for working women and their families. The purpose of this study was to determine the relationship between general quality of life with the quality of work life and the role of work conflict mediation in women working in the health sector of Mazandaran province in 2017.

Discussion

General quality of life and its impact on the quality of work life are among the most important and critical issues in today's organizations. Incompatibility and inconsistency between family and work roles have created many problems for working women and their families. The purpose of this study was to determine the relationship between general quality of life with the quality of work life and the role of work conflict in the women working in the health sector of Mazandaran province in the form of structural equation modeling and path analysis. The results of this study were consistent with the results of other studies. The researchers did not find a meaningful relationship between work family conflict and quality of work life. The inconsistency of the results can be because of the difference in the statistical population and measurement methods.

In Nassiripour et al. (31), study, the population consisted of nurses working in hospitals affiliated to Tehran University of Medical Sciences and Walton's quality of life questionnaire was used to assess quality of working life. In Naeemi et al. study all samples were married men, using the Walton Quality of Work Life Questionnaire and Rastegar Khalid Job Conflict Questionnaire. The current study was conducted among women working in the health sector of Mazandaran University of Medical Sciences and Casio Quality of Work Life Questionnaire and Carlson Work conflict Questionnaire were used. Given that there was a negative and significant relationship between work-family conflicts with the quality of work life in previous studies, this relation was not reported in the present study, more studies should be conducted in this regard.

The results of the evaluation of the structural equation modeling showed a negative and significant relation between the general quality of life and the work-family conflict. This finding was consistent with the findings of Hekmet et al. (17), Arasian Timur et al. (39), Shenavar et al. (40), Younesi et al. (41), Arshadi et al. (42), and Selvarajan, et al. (43). It is concluded that by increasing the general quality of life in working women, the conflict between occupational and family roles decreases, and vice versa. Work-family

Figure 1. The main model of the study in the form of standard coefficients (the relationship between general quality of life with the quality of work life and the role of work conflict mediation in women working in the health sector of Mazandaran province in 2017)
The effect of work-family conflict mediation on the general quality of life and the quality of working life in employed women in the health sector as well as a negative and indirect relationship between quality of life and work conflict. Since working women transmit work-family conflict in their personal lives and transfer their family problems to workplace, conflicts in the occupational and family roles is unavoidable. Therefore, authorities must pay particular attention to quality of life of their staff, and staff must also try to balance their job and family responsibilities.

Effective organizational interventions such as time management, life skills and problem solving training courses for the individual and family in order to maintain a fair and supportive environment, as well as reducing stress in order to increase staff capacity in the management of job and family responsibilities is essential.

Acknowledgments
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Conflicts in interest
The authors state that they do not have competitive interests and that there is no conflict of interest.

Authors' Contributions
Mahmoudi Gh and Abedi Gh designed study; Zabihi M gathered data; Mahmoudi Gh and Abedi Gh analysed data; All the authors wrote and approved the final manuscript.
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