Quality of Work Life in Nurses:
Family, Career and Psych Contextual Associations

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Abstract: Objective: This study sought to evaluate the relationship and the role of structural job stress, emotion regulation, and family satisfaction in predicting of the quality of working life.

Methods: The sample of the study, all the nurses working in hospitals supported by the army of Islamic Republic of Iran. In order to choose the desired samples of the study, first a multi-stage cluster sampling method was used, and then, simple random sampling method was used (n=400). Data collection tools Walton Quality of life scale (1973), Spiel-Berger job stress scale, Gross and John emotional Regulation (Gross and John 2003, Rose, Beh et al. 2006), and Olson and Wilson (1982) family satisfaction scale (FSS). Data were analyzed by SPSS software and information in the form of descriptive and inferential statistics were expressed.

Results: The data analysis showed that the quality of life working, have positive and significant relationship with the components of emotional regulation and family satisfaction, and also a significant negative relationship with job stress.

Conclusion: These three structures in total can anticipate 30% of the quality of life working changes and can have a significant impact on the quality of work in organizations.

Keywords: Quality of life working, Emotional regulation, Job stress, Family satisfaction.

Introduction

Work and family form two significant aspects of our life. Coordination and consistence between these two domains can provide every aspects of health and wellbeing for individuals; however, the existence of conflict between these two domains often leads to undesirable consequences in individual, familial, and social dimensions (SPECTOR et al., 2007).

Quality of work life is a concept which shows the balance between personal life and professional life of an individual. Olson believes that quality of work life refers to humanizing work environment, democracy in work phases and processes, maximizing motivation, increasing satisfaction, developing and improving the work, creating meaning in work environment, flexibility, and balance between work and life.

In past decades, worry has concerned the scholars in the domain of quality of work life. Better work conditions (generally from staff point of view) and higher organizational effectiveness (generally from the point of view of managers and heads) are major and effective goals of the quality of work life program (Faghih Parvar, Allameh, & Ansari, 2003).

One of the issues which is the subject of deep concern for organizations in workplace and in the work domain is job stress. In stressful conditions, the reaction of individuals to threatening conditions and events is necessary, in which they are required to use their capabilities in order to cope with these threatening events (Sa’atchi, 2010), (Hanif, 2004) has considered job stress as emotional, cognitive, behavioral, and biological reaction to irritating and stressful aspects of the job, work environment, and organizations, and the characteristic of this stress is a high level of arousal and anxiety, which is often accompanied by inability to cope with these aspects.

Greenberg (2002) believes that high job stress leads to job burnout. Absence from work, tendency to leave the job and transfer are among results of job burnout which leads to decreased quality of service delivery (Maslach, Jackson, & Leiter, 2001).

In the personal domain, the issue of emotional regulation has a particular position. Emotion is strongly effective on reason and helps it to fixate. In fact, emotion has a complicated and organized structure which has developed throughout the history of human evolution, and equips humans for responding to environmental and challenging stimulants (Kring & Moran, 2008). Emotions are known as a set of processes, and they include appraisal, physiological sensation, purposefulness, subjective sense, and
motor behavior, and it is effective on interpersonal relationships of individuals in most cases (Leahy, Trich, & Napolitano, 2011). In fact, emotional regulation acts as a controlling system of life balance, which can in fact moderate emotions. Detrimental stress often leads to weak and defective emotional regulation/process (Fao & Kozak, 1986) and on the other hand, job burnout is a sign of weakness in emotional regulation (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010).

In the familial domain, family satisfaction is greatly focused which is a determining factor for life satisfaction. Family satisfaction means that the function of the family occurs inside an efficient structure; and it is shown based on three dimensions of the family’s ability to maintain coherence and unity, ability to get along with changes, and family communications (D. H. Olson & Gorall, 2003). In sum, according to the above mentioned discussions, it can be said that one of the most important characteristics and factors effective on improvement of quality of work life, is determined by human relationships. Accordingly, the present research is aimed to address quality of work life by investigating various domains of human life, that is, career, family, and individual domains, in order that the determining role of emotion regulation, job stress, and family satisfaction components in relation with quality of work life would be determined.

**Method**

**Participants**

The study participants included 400 nurses (first a multi-stage cluster sampling method was used, and then, simple random sampling method was used) that most nurses which include 155 subjects, were between 30 to 39 years of age. Most of them included women by 256 subjects. Most of them had bachelor’s degree which include 269 subjects all of whom were married. Also, most of the studied sample which includes 20 percent, were working in the female surgical ward with 82 subjects.

**Measures**

**Quality of Work Life Questionnaire**

In the present research, the Walton’s Quality of Work Life Questionnaire (1973) has been used for gathering the data required about the quality of work life among staff. This questionnaire has 27 items. The measurement level of the questionnaire is interval, it has been rated based on a 5-point Likert scale, and all the questions except one (overall life space) have been set in positive direction. Mohsen Allameh (Allameh, 1999) has reported that this questionnaire has 0.95 reliability based on Cronbach alpha,
and 0.94 reliability based on retest method (SPECTOR et al., 2007). For determining the validity of this questionnaire, formal validity has been used and the validity of this questionnaire has been confirmed (Javdanyan, 2007).

**Work Stress Questionnaire**

The Job Stress Questionnaire includes 30 questions with 9 close-ended options based on Likert rating scale. This questionnaire has been presented by considering 8 optional features as main components for determining the number of job stress occurrences which has been developed by Turnage & Spielberger (Turnage & Spielberger, 1991) questions for every feature have been shown in the table below. The reliability of this questionnaire was 0.81 based on Cronbach alpha formula which is significant. Also, since this questionnaire was conducted on school principals in the research of Asgari Bigdeli (2003) and vague and irrelevant questions are omitted in the present research and it is of good validity.

**Emotion Regulation Questionnaire**

This questionnaire has been developed by Gross and John (2003) for measuring emotion regulation strategies. This questionnaire includes 2 subscales of reappraisal by 6 items and repression by 4 items. Participants would answer in a 7-point Likert scale from strongly disagree (score 1) to strongly agree (score 7). In Iran, Sadat Hosseini (Sadat Hosseini & Khayer, 2010) reported that the Cronbach alpha was 0.79 for the reappraisal subscale.

**Family satisfaction Scale (FSS)**

The 10-item family satisfaction scale has been developed based on the 14-item scale of Olson and Wilson (Olson, & Wilson, 1982). This scale assesses satisfaction from different aspects of family function such as family intimacy, flexibility, and relationships. Questions of this scale are scored based on a 5-point Likert spectrum from 1 for totally dissatisfying to 5 for totally satisfying. Each individual can obtain a score from 10 to 5. Following Olson (1992) recommendation, the total score was used as an index of satisfaction with family functioning. Based on a sample of 2,465 family members, the 10 item family satisfaction scale has an alpha reliability of .92 and test re-test of .85 (D.H. Olson, 1992).

**Results**

Based on table 1 which show the descriptive indices of mean and standard deviation for the research variables and results of the Kolmogorov-Smirnov test. Accordingly, the mean of quality of work life is 10.99, the
mean of job stress is 156.59, the mean of family satisfaction is 36.55, the mean of reappraisal component for emotion regulation is 28.58, and the mean of repression component for emotion regulation is 14.41. The variables’ scores distribution is normal and the assumption of normality of scores distribution has been met, and parametric tests can be used for examining the research variables.

**Table 1.** Mean and standard deviation for research variables and results of the Kolmogorov-Smirnov test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Z</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of work life</td>
<td>70.99</td>
<td>15.30</td>
<td>0.840</td>
<td>0.481</td>
</tr>
<tr>
<td>Job stress</td>
<td>156.59</td>
<td>46.99</td>
<td>1.20</td>
<td>0.110</td>
</tr>
<tr>
<td>Family satisfaction</td>
<td>36.55</td>
<td>8.41</td>
<td>0.946</td>
<td>0.332</td>
</tr>
<tr>
<td>Reappraisal</td>
<td>28.55</td>
<td>7.76</td>
<td>1.04</td>
<td>0.226</td>
</tr>
<tr>
<td>Repression</td>
<td>14.41</td>
<td>5.33</td>
<td>1.30</td>
<td>0.065</td>
</tr>
</tbody>
</table>

In table 2, results of the linearity test for the relationship of dependent and independent variables have been reported, and since the F value in the linearity factor has not exceeded 0.05, therefore it can be concluded that there is a linear relationship between dependent and independent variables.

**Table 2.** Results of the linearity test for the relationship between predictive variables and quality of work life

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean of squares</th>
<th>F</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress</td>
<td>21740.25</td>
<td>1</td>
<td>21740.25</td>
<td>180.88</td>
<td>0.001</td>
</tr>
<tr>
<td>Family satisfaction</td>
<td>5312.95</td>
<td>1</td>
<td>5312.95</td>
<td>31.34</td>
<td>0.001</td>
</tr>
<tr>
<td>Reappraisal</td>
<td>6528.17</td>
<td>1</td>
<td>6528.17</td>
<td>42.37</td>
<td>0.001</td>
</tr>
<tr>
<td>Repression</td>
<td>1986.85</td>
<td>1</td>
<td>1986.85</td>
<td>9.14</td>
<td>0.003</td>
</tr>
</tbody>
</table>

The data in table 3 show the results of the correlation matrix between the research variables, based on which, the correlations between job stress and repression with quality of work life are negative and -0.482 and -0.146, respectively. Also, based on the results, the correlations between reappraisal and family satisfaction with quality of work life are positive
equaling 0.264 and 0.238, respectively. Correlations between other variables are represented in table 3.

**Table 3.** The correlation matrix between research variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- quality of work life</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- job stress</td>
<td>-0.482 **</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- reappraisal</td>
<td>0.264 **</td>
<td>-0.053</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- repression</td>
<td>-0.146 **</td>
<td>0.167 **</td>
<td>-0.015</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5- family satisfaction</td>
<td>0.238 **</td>
<td>-0.153 **</td>
<td>0.196 **</td>
<td>-0.130 **</td>
<td>1</td>
</tr>
</tbody>
</table>

P < 0.01

**Table 4.** Summary of results of multiple regression with quality of work life variable (criterion)

<table>
<thead>
<tr>
<th>Variables in the equation</th>
<th>Correlation coefficient (R)</th>
<th>Coefficient of determination (R²)</th>
<th>F</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress, reappraisal, repression, and family satisfaction</td>
<td>0.554</td>
<td>0.307</td>
<td>43.82</td>
<td>0.001</td>
</tr>
</tbody>
</table>

In table 4, job stress, reappraisal, repression, and family satisfaction variables were inserted in the equation and their correlation with quality of work life is 0.554, and these variables together explain 30.7 percent of the variance in quality of work life. Based on F and significance level in the above table which answers this question that if the explained variance value by predictive variables is statistically significant or not, it is observed that according to its value (F = 43.82) which is significant at 0.99 confidence level, and therefore, the value of multiple correlation coefficients and the coefficient of determination are significant. The effect of every variable inserted in the regression equation on quality of work life is shown in table 5.
Table 5. Standard and non-standard regression coefficients for predictive variables

<table>
<thead>
<tr>
<th></th>
<th>Non-standard coefficients</th>
<th>Standard coefficients</th>
<th>T</th>
<th>Significance level</th>
<th>Tolerance coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Standard error</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed value</td>
<td>75.55</td>
<td>4.63</td>
<td></td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Job stress</td>
<td>-0.144</td>
<td>0.014</td>
<td>-0.443</td>
<td>-10.33</td>
<td>0.001</td>
</tr>
<tr>
<td>Reappraisal</td>
<td>0.426</td>
<td>0.084</td>
<td>0.216</td>
<td>5.05</td>
<td>0.001</td>
</tr>
<tr>
<td>Repression</td>
<td>-0.152</td>
<td>0.122</td>
<td>-0.053</td>
<td>-1.23</td>
<td>0.217</td>
</tr>
<tr>
<td>Family satisfaction</td>
<td>0.220</td>
<td>0.079</td>
<td>0.121</td>
<td>2.79</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Based on the data on table 5 and the value of $\beta$ it is observed that the effects of reappraisal and family satisfaction in predicting quality of work life are positive, equaling 0.216 and 0.121, respectively, which are significant according to the t value and its significance level. Also, the value of $\beta$ for job stress shows that its effect on quality of work life is -0.443. In addition, it can be noted that the highest effects on quality of life are exerted by job stress, then reappraisal, and finally by family satisfaction.

Discussion

Conclusion of the research after investigating the relationship between family satisfaction and quality of work life indicated that there is a positive and significant association between these two constructs, and family satisfaction can considerably predict the quality of work life among nurses; this finding is consistent with the results of BakhtAzmay and colleagues (Bakhtazmay Bonab, Ebrahimpour, & Ghorbani, 2013). In explaining this finding, we can investigate the components of family satisfaction and quality of work life in detail. As noted before, sense of coherence is a construct which was introduced by Antonovsky (Antonovsky, 1993) for showing successful coping with life stressors, and since these tensions and stressors completely engage the individual themselves, therefore, they take the chance of decision making and having optimum performance in different affairs such as quality of work life. Hence, this is natural that individuals who have the ability to successfully cope with these stressors, and those have high coherence in dimensions of family satisfaction.
Flexibility is another dimension which was defined by Olson as the degree of variations which exist in roles, rules, control and discipline of the family. When this type of management affects the individual and his interpersonal relationships, his quality of personal and work life would also be impacted by his flexibility characters, and consequently, his leadership power would be so high; and this individual would show a high performance in work domains (D. H. Olson, 2000).

The third dimension of the family satisfaction domain was communication, which is a facilitating dimension and is of great importance regarding its role in helping to transfer and move in the other two dimensions. As mentioned, for evaluating this dimension, skills such as listening, talking, self-exposure, transparency, respect, and mutual attention, must be considered (D. H. Olson, 2000). When communication thrives in family and non-work environments, it would certainly affect work environment and its quality, and it would directly and indirectly lead to improvements in quality of work life.

According to this research, there was a significant and reverse statistical association between quality of work life and job stress in staff. These findings are consistent with results of Heinonen & Saarimaa (Heinonen & Saarimaa, 2009; Khosravizadeh, Khalaji, & Shovandi, 2013; Sherzeveni, Nazari, & Yaryari, 2012) Imeni, Karampourian, and Hamidi (Imeni, Karampourian, & Hamidi, 2003) (Kasraei, Parsa, Hassani, & Ghasem-Zadeh, 2014). and Tahmasbi Amaleh (Tahmasbi, 2005) who showed that there is a negative correlation between job stress and quality of work life. One meta-organizational factor which is effective on job stress in this part, is economic and social credit and reputation. Individuals with lower credit and reputation experience higher psychological pressure (Kreitner & Kinicki, 2004). Work shifts are also introduced as stressful factors among the nurses employed in these hospitals. changes in work shifts are often accompanies by physiological consequences such as chronic exhaustion, digestive problems, cardiovascular problems, reduced efficiency, and increased family problems, and it facilitates the ground for work burnout among nurses. According to the findings of the present research, nurses with lower job stress exhibit higher quality of work life. Hence, it is necessary to plan programs for training managers relating job stress and quality of work life in order that effective strategies would be developed for enhancing work conditions and reducing job stress among nurses; such as participation of personnel in decision-makings, supervisor’s support, and reducing the work load.
Also, findings of the present research for confirming the research hypothesis showed that emotion regulation is associated with quality of work life, which is consistent with results of Masah and Samavatyan (2012), Dulewicz & Higgs (2003). Individuals with high emotion regulation, are in a high level in recognizing and controlling their and others’ emotions. Then, if these individuals become the managers of organizations, they can use this advantage in order to play a determining role in achieving organization goals and managing it in the optimum level. Studies have indicated that emotion regulation is related with innovation and creativity. High emotion regulation makes the staff able to identify, understand, manage, and use negative/positive emotions, in order that by bringing consistency between different elements, innovative and creative solutions would be found for problems (Silvestro, Fitzgerald, Johnson, & Voss, 1992). Emotion regulation leads the staff to become able to have the required mastery in various situations and conditions, and be able to make the best decisions which show their management and emotion control. In other words, evaluation of emotion management leads to the fact that if an unequal conditions emerges in the organization, they would not lose control over their emotions/themselves; and they would be able to identify their negative emotions and keep their performance in a steady level based on the thinking-action strategy, which improves their mental/psychological health and, consequently, they can have an appropriate and good understanding of the conditions of work life, and exhibit a more efficient performance.

Conclusion

According to the "Quality of Life in the World in 2016," reported by the Ministry of Cooperation, Labor and Social Welfare, Iran's Quality of Life Index ranked 49 among 61 countries. The highest quality of life index in the 61 countries of the world is Denmark (201.53) and the lowest in Vietnam (31.48).

According to the obtained results, it can be said that, overall, the existence of optimum quality of work life in organization is considered as a motivational factor which can be highly effective on the commitment of organizations’ staff, it can create an enthusiasm for achieving the goal, and an appropriate work relationship can be established in organization. Improvement in these relationships happens in the presence of high emotion regulation in individuals. The existence of this factor leads the individuals to find a better capability of controlling and managing their relationships.
References


