The Role of Perceived Social Support and Aspects of Personality in the Prediction of Marital instability: The Mediating Role of Occupational Stress

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This study is aimed at investigating aspects of personality effects and perceived social support on marital instability regarding the mediating role of occupational stress among married female nurses in Shiraz hospitals. Utilizing Cochran’s formula as sample population and random sampling method for selection, among female nurses with at least three years of marriage (2245 nurses), 246 nurses was calculated. According to this method, all sample nurses had equal chance to be selected. Data collection was carried out using four standard questionnaires of NEO personality inventory (Costa & McCrae, 1986), the multidimensional scale of perceived social support (Zimet et al, 1988), nurse job stress inventory (Gray-Toft & Anderson, 1981) and marital instability questionnaire (Booth et al., 1983). The descriptive analysis was done by SPSS 16 and LISREL structural equations were used to validate the model. The results showed that majority of subjects have a consistent and conscientious character, high social support and moderate occupational stress. They had the lowest marital instability with 22% possibility of divorce. The correlation test results showed that neuroticism has a positive relationship and other aspects of personality have a negative relationship with the marriages instability. The perceived social support has a negative relationship
and the occupational stress has a positive relationship with marital instability. Structural equation modeling results showed that the conceptual model had a good fitting. Therefore, the aspects of personality and perceived social support had a direct and indirect impact on marital instability. Finally, the personality aspects were determined as the most important prediction variable of marital instability in nurses.

**Keywords:** personality aspects, perceived social support, occupational stress, marital instability, nurse

Family is the oldest organization since the emergence of humans and it is the most important unit in communities (Javanmard and Mohammadi Gargozlou, 2013), which provides an important part of the mental health in a community and protects couples living with proven permanent and strong relations between them called marriage. Marital stability is a situation, in which women and men enjoy relative peace and love created by mutual understanding and paying attention to each other without the intention of separation (Adesanya, 2002). Marital instability is against marital stability. Hahlweg and Richter (2010) define marital instability as the tendency of couples to divorce. In their opinion, this includes both cognitive (considering if their marriage is in a difficult position) and behavioral (an act that the person feels as a result of or in conversations with his/her spouse about divorce) features. Contextual-individual factors, socio-cultural factors, and individual characteristics are the factors affecting marital incompatibility (Shakerian, Nazari, Ibrahami, Fatemi, and Danaei, 2012). Personality features are one of the individual features, which are at the center of attention for communication between couples more than 60 years (Zare, Nasir, Anvar Mastour, Shahrzad, 2013). Personality has been defined as the internal organization of emotional, cognitive, and conceptual systems. One of the important theories of aspects of personality is Costa and McCrae's five-factor model of personality. This model divides individuals into five aspects of neuroticism, extraversion, agreement, openness, and
conscientiousness (Shakerian, 2013). Researches of Dimkpa, 2011; Javanmard and Mohammadi Gargozlou, 2013; Sadeghi et al. 2012; Botwin, Buss, and Shackeourd, (1997) have shown that there is a negative relationship between neuroticism and marital satisfaction and there is a negative relationship positive between the aspects of (extraversion, agreement, and conscientiousness) marital satisfaction. Among personality aspects, neuroticism has a stronger ability to predict marital dissatisfaction. Workplace and occupational stress are also factors affecting marital relationship. Today, occupational stress is known as one of the most important challenges of organizations, which affects people's physical and mental health and it leads individuals towards the negative consequences and disintegration of marital relationship. The National Institute of occupational safety and health has defined occupational stress as the exciting and traumatic physical responses caused by the lack of balance and congruence of occupational demands with one's talents (Peyman Pak, Mansour, Sadeghi, Pourebrahimi, 2012). In the last few decades, attention given to the phenomenon of occupational stress in women became particularly important in the world due to the increasing number of employed women with different personality structures and vulnerability to stress, (Molaei et al., 2011) because employment of women is one of the factors affecting marital satisfaction (Dimkpa, 2011). The factors that cause stress in nurses create consequences including loss of work, loss of mental health, marital dissatisfaction, and instability in marriage (Wong, Leung & So, 2001). Roberts and Levenson (2001) evaluated the effect of occupational stress and burnout on the involvement of 19 police (women and men) for a month. They found that occupational stress affects the interaction of couples at the end of a working day. High levels of occupational stress and negative emotions lead to the formation of marital conflicts and increase the risk of separation in the future. Generally, researches show a negative relationship
between occupational stress and marital satisfaction (Nasiri Zarin Ghabaei et al. 2016, Rajabi et al. 2013; Chi et al., 2011). One solution to reduce occupational stress for nurses is supporting them. Social support is a set of general and specific supportive behaviors that modify the psychological pressure inflicted on a person. As one of the emotion-oriented coping methods, it helps individuals to assess stressful events that have less threatening aspects (Hegeston and Cohen, 2004). Researches indicate the influence of social support on stress reduction (Abualrub, Omarif, and Abualrub, 2009; Abualrub, 2004; Mohammadi Fakhar, Rafiei & Heshmat Haghani, 2012) and neutralizing negative effects of occupational stress on marital satisfaction (Conner, 2015; Chi et al., 2011; Abualrub et al., 2009). According to a decrease in the average duration of marriage, and obligation to have an imposed life, the ascending trend of divorce rate in recent years, and the dire consequences of marital conflict and divorce for family and community members, researchers and therapists are attempting to find the causes of social problems and methods through which it can be reduced and prevented. This topic provides the context for the study of marriage and marriage instability (Sadeghi et al., 2012). Given the mentioned contents, some researches have been conducted on the relationship between personality aspects, social support and occupational stress with marital dissatisfaction. However, the relationship between these variables was not considered together. Therefore, this study will investigate the relationship between these variables and determine the direct and indirect effects of personality aspects and social support and occupational stress with marital dissatisfaction.
Hypotheses
1. Occupational stress is expected to mediate (at least partially) the effect of perceived social support on marital instability.
2. Occupational stress is expected to mediate (at least partially) the effect of personality aspects on marital instability.
3. Perceived social support has a direct effect on marital instability.
4. Aspects of personality also have a direct effect on marital instability.

Method
The survey research follows a correlational descriptive studies pattern. The statistical population consists of married female nurses in hospitals under the supervision of the Shiraz University of Medical Sciences. The sample size was determined through random sampling according to the population standard deviation and using Cochran formula at 95% confidence interval, which is equal to 246 subjects. Questionnaires were distributed after coordination with Shiraz
University of Medical Sciences, visiting the hospitals and gaining the consent of nurses.

Correlation, descriptive data and structural equation modeling were used for data analysis in SPSS and LISREL. For this purpose all these variables were conceptualized in the form of a conceptual model and the relationships between variables were plotted (Figure 2).

![Figure 2. Structural Model of Variables Affecting Marital Instability](image)

**Booth, Johnson, and Edwards’ marital instability Index**

Is a 14-item instrument, which was used for the first time in 1980 for 2034 married men and women under 55 years old. The validity of this scale has been confirmed in several studies and its positive correlation with the scale of marital discord and problems and its negative correlation with the scales of marital interaction and satisfaction have been confirmed. The reliability of this scale has been reported by Cronbach's alpha. Yaripour (2000) in Iran reported the validity coefficient of .70 using the correlation method between the two halves (Nazari, Sahebdel, and Asadi, 2010). The obtained Cronbach's alpha in this study was .88.

**NEO Five-Factor Personality Inventory**
Is a 60-item questionnaire to assess the five factors of neuroticism, extraversion, flexibility, accountability, and pleasantness? The questionnaire was created in 1988 by Costa and McCrae and it is suitable for people ages 17 years and older. Azimzadeh Parsi (2011) obtained reliability of the main factors of neuroticism, extraversion, flexibility, pleasantness, and conscientiousness, .68, .56, .73, .86, .87, respectively using the internal consistency method (Azimzadeh Parsi, 2011). The reported Alpha coefficient by Costa and McCrae was between .74 and .89 (Gholizadeh et al, 2010). The obtained Cronbach's alpha in this study was .86.

Nurse Job Stress Scale (NSS)

Has been prepared by Gray-Toft & Anderson (1981) and it is the first instrument to measure nurses' stress instead of the general occupational stress. This scale contains 34 terms in 7 fields: suffering and death (7 terms), conflict with physicians (5 terms), lack of knowledge (3 terms), lack of support sources (3 terms), conflict with other nurses (5 terms), working pressure (6 terms), and the lack of uncertainty of treatment (5 terms). The validity of the questionnaire was approved by the Faculty of Nursing and Midwifery, Iran University of Medical Sciences, Tehran, Shahid Beheshti and Tarbiat Modarres University. The reliability was obtained by retest method r=.87. Cronbach's alpha coefficient was calculated .93 (Peyman Pak et al. 2012). The obtained Cronbach's alpha in this study was .96.

Multidimensional Scale of Perceived Social Support

Is designed by Zimet et al. (1988). It provides a subjective assessment of the adequacy of social support in three resources (family, friends, and significant others). It contains 12 questions
and each question is graded on a seven-point range from strongly disagree (1) to strongly agree (7). In the study of Shokri (2011) Cronbach's alpha coefficient of three aspects of perceived social support and triple aspects of family, friends, and significant others in Iran's sample were respectively, .91, .85, .84, .89. These values in the Swedish samples were respectively, .92, .86, .87, .91, which were totally, .94, .84, .89, .92. The obtained Cronbach's alpha in this study was .95.

**Results**

According to the results, the average age of nurses was 32-30 years and mostly less than 30 years old. The average work experience of nurses was 9 years and mostly less than 10 years. The average of marital duration was about 9 years. The majority of nurses had moderate stress. The studied subjects had the lowest marital instability, i.e. (0-2) with 22% probability of divorce. The majority of nurses had a conscientious and consistent character.

**Correlation Analysis between Personality Aspects, Social Support Aspects, and Occupational Stress with Marital Instability**

According to the results of Table 1, the marital instability of nurses has a positive and significant relationship with neuroticism and occupational stress. It also has a significant and negative relationship with other aspects of personality (extraversion, openness, consistence and conscientious), as well as the variables of perceived social support from family, friends and special people.
Table 1
The Relationship between Personality Aspects, Social Support Aspects, and Occupational Stress with Marital Instability of Nurses

<table>
<thead>
<tr>
<th>The First Random Variable</th>
<th>The Second Random Variable</th>
<th>R Coefficient</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td></td>
<td>.726***</td>
<td>.000</td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td>-.681***</td>
<td>.000</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td>-.606***</td>
<td>.000</td>
</tr>
<tr>
<td>Compatibility</td>
<td></td>
<td>-.695***</td>
<td>.000</td>
</tr>
<tr>
<td>Marital instability</td>
<td>Conscientiousness</td>
<td>-.659***</td>
<td>.000</td>
</tr>
<tr>
<td>Social support of friends</td>
<td></td>
<td>-.624***</td>
<td>.000</td>
</tr>
<tr>
<td>Social support of family</td>
<td></td>
<td>-.670***</td>
<td>.000</td>
</tr>
<tr>
<td>Social support of special people</td>
<td></td>
<td>-.638***</td>
<td>.000</td>
</tr>
<tr>
<td>Occupational stress</td>
<td></td>
<td>.678***</td>
<td>.000</td>
</tr>
</tbody>
</table>

*p < .05.    **p < .01.    ***p < .001.

Assessment of the Structural Model of Effective Variables on Marital Instability

According to the studied criteria for evaluating the model given in the table, it is observed that all measures confirm the proper fitness of model. Therefore, our studied conceptual model and the relationship between internal and external verification latent variables are confirmed and the latent variable of marital instability are affected by the exogenous variables of personality aspects, social support and the internal variable of occupational stress (Table 2).
Table 2
Fitness Indicators of Effective Variables Structural Model on Marital Instability

<table>
<thead>
<tr>
<th>Index</th>
<th>The desirable level of statistic *</th>
<th>The reported amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>The root mean square error of approximation (RMSEA)</td>
<td>≥.080</td>
<td>.073</td>
</tr>
<tr>
<td>Root mean square residual (RMR)</td>
<td>0 &lt; x &lt; 1</td>
<td>.57</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>≥.85</td>
<td>.85</td>
</tr>
<tr>
<td>Adjusted goodness of Fit Index (AGFI)</td>
<td>≥.80</td>
<td>.80</td>
</tr>
<tr>
<td>Comparative analysis (CFI)</td>
<td>≥.90</td>
<td>.98</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>≥.80</td>
<td>.97</td>
</tr>
<tr>
<td>Non-Normed fit index (NNFI)</td>
<td>≥.80</td>
<td>.97</td>
</tr>
<tr>
<td>Incremental Fit Index (IFI)</td>
<td>≥.90</td>
<td>.98</td>
</tr>
</tbody>
</table>

* Source: Kalantari, 2009; Schreiber et al, 2006

Assessment of the Reliability and Validity of the Predictor Variables of Marital Instability

According to the squared values of multiple correlations ($R^2$) in Table 3, which indicate the reliability or validity of explanatory exterior latent variables of internal latent variables. The reliability of all external variables is acceptable and higher than 0.6. According to the results, latent variables of personality aspects, social support, and occupational stress explain 82% of the latent variable of marital instability. In addition, the variables of personality aspects and social support explained 87% of the variance of occupational stress, which is very high.
### Table 3
Estimated Effects of Independent Variables on the Dependent Variables along with the Standard Error and T Values

<table>
<thead>
<tr>
<th>The effect of independent variables</th>
<th>On dependent variables</th>
<th>Symbol in Model</th>
<th>The estimated path coefficient</th>
<th>Standard error</th>
<th>T value</th>
<th>R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>personality aspects</td>
<td>Personal</td>
<td>MariInsta</td>
<td>.30</td>
<td>.090</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>social support</td>
<td>Marital instability</td>
<td>SocSupMariInsta</td>
<td>-.40</td>
<td>.048</td>
<td>-8.20</td>
<td>.82</td>
</tr>
<tr>
<td>Occupational stress</td>
<td>JobStres</td>
<td>MariInsta</td>
<td>.36</td>
<td>.084</td>
<td>4.26</td>
<td></td>
</tr>
<tr>
<td>Personality aspects</td>
<td>occupational stress</td>
<td>PersonalJobStres</td>
<td>.75</td>
<td>.043</td>
<td>17.34</td>
<td>.87</td>
</tr>
<tr>
<td>Social support</td>
<td></td>
<td>SocSupJobStres</td>
<td>-.33</td>
<td>.044</td>
<td>-7.43</td>
<td></td>
</tr>
</tbody>
</table>
Determining the Direct and Indirect Effects

According to Table 4, the personality aspects had the highest effect on marital instability variable with the overall effect of .65. After that, the social support was at the second ranking with effect value of -.64 and occupational stress was in third place with the value of .41. The negativity of social support relationship indicates the adverse effect of social support variable on marital instability. Occupational stress had only a direct effect on marital instability.

Table 4
Direct, Indirect and Overall Effects on the Dependent Variable of Marital Instability

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable</th>
<th>Path</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>overall effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality aspects</td>
<td>Marital instability</td>
<td>Personal → MariInsta</td>
<td>.30</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Personal → SocSup</td>
<td>-</td>
<td>.35</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MariInsta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational stress</td>
<td>Marital instability</td>
<td>JobStres → MariInsta</td>
<td>.41</td>
<td>-</td>
<td>.41</td>
</tr>
<tr>
<td>Social support</td>
<td>Marital instability</td>
<td>SocSup → MariInsta</td>
<td>-.52</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SocSup → JobStres</td>
<td>-</td>
<td>-.12</td>
<td>-.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MariInsta</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3. Non-Standardized Values of the Internal and External Latent Variables of the Model

Structural equation
According to the non-standardized values of internal and external latent variables of the model, the structural equation for the dependent variable marital instability is as follows, according to which, a unit change in social support variables (SocSup) causes .52 reductions in the marital instability.

\[
\text{MarInsta} = + .30 \text{ (Personal)} + .41 \text{ (JobStres)} - .52 \text{ (SocSup)}
\]

Hypotheses
According to the path coefficients and t values in Table 3, All hypotheses were confirmed as follows:
- Occupational stress mediated (at least partially) the effect of perceived social support on marital instability.
- Occupational stress mediated (at least partially) the effect of personality aspects on marital instability.
- The perceived social support had a direct effect on marital instability.
- The personality aspects had a direct effect on marital instability.
Discussion

According to the results, occupational stress plays an important role between perceived social support and marital instability. In fact, perceived social support can affect marital instability by the resolution role of occupational stress due to positive correlation between occupational stress and marital instability. Thus, if perceived social support increases, it will decrease marital instability through decreasing occupational stress. Also, occupational stress is a mediating variable between personality aspects and marital instability. Therefore, personality aspects can influence marital instability through its influence on occupational stress. In other words, there is an indirect effect of personality aspects and perceived social support on marital instability by mediating role of occupational stress. Also, results showed that all aspects of personality had a significant relationship with the marital instability of nurses. Neuroticism had a positive relationship but other aspects (extraversion, openness, compatibility, conscientiousness) had a negative relationship on marital instability. To explain these findings, it can be said that stable couples possess higher self-esteem. They have more consistent social relationships and satisfying relationships. However, neurotic couples have negative emotions and they do not have emotional stability, which usually affects the consistency level of couples. Thus, they are more prone to impulsiveness, aggression, and vulnerability. Experiencing positive extraversion emotions is associated with the positive assessment of the general health, better bodily functions, and higher life satisfaction. In addition, pleasantness is a strong predictor variable of marital satisfaction and it has an important effect on the quality of interpersonal relationships as
an inner character process (Ahadi, 2008). Deontology shows the stability and sustainability of marriages among couples who can predict marital compatibility (Jarvis, 2006). Agreement can well control the aggression in interpersonal and marital conflicts and they are ready to forgive and forget mistakes. It seems that these people experience a higher marital satisfaction (Fazel et al., 2011). This finding is consistent with results of Dimkpa (2011), Lazaryds et al. (2010), Zare et al. (2013), Javanmard and Mohammadi Garegozlou (2013), Sadeghi et al. (2012). In addition, a positive and significant relationship was observed between neuroticism and occupational stress. Neurotic nurses do not have a good control over their behavior because of shyness, strong tendency to experience anxiety, irrational thoughts, and being depressed. On the other hand some factors can annoyingly increase mistakes and lack of proper servicing thus, increasing occupational stress. Mostaghni and Sarvghand (2012), Jafari et al. (2012), Ghanei et al. (2013) have achieved results in line with these results. Extrovert individuals show more compatibility in the face of occupational stress due to being community-oriented, loving people, preferring large groups, being assertive and active (Costa et al., 1984). People who have open attitudes to experiences have a life full of rich experience due to being flexible and curious about the inner and outer world (Costa & McCrae, 1992). This flexibility is a factor that reduces their chances of experiencing occupational pressure. Responsible and conscientious people prioritize work assignments by thinking before acting and delaying satisfaction and compliance with laws, which reduce stress (Costa & McCrae, 1986). Compatible employees show a higher level of interpersonal communication capabilities in the workplace. When a collective action is required, they show more effective
cooperation (Mount, Barrick, Stewart, 1998). This result is consistent with research results of Ghasemzadeh Alishahi and Kazemzadeh (2013), Hassani et al. (2013).

All aspects of perceived social support (family, friends, and special people) had a significant and negative relationship with occupational stress and marital instability. Those who have a higher level of social support assess the problem in a less stressful and constructive way, thus their occupational performance and positive attitude towards their profession increases and result in them overcoming the problems of marital life (Riahi, Varadinia, and Purhossein, 2010). This result is consistent with the results of Ning et al. (2016), Hosseini et al. (2015), Chen et al. (2009), Abualrub et al. (2009), Kasprzak (2010), Hosseini, Panahandeh Vansofla & Mirzaeyan (2015), and Yazdani et al. (2016). A significant positive relationship was observed between occupational stress and marital instability. This result was also adapted with the results of Chi et al. (2011), Rajabi, Sarvestani, Aslani, & Khojasteh Mehr (2013). Work and family are so closely related to each other that the problems and tensions in each of these areas are transmissible to other areas. The complications of occupational stress for stressful jobs such as nursing are, reducing the compatibility power, physical fatigue, emotional and affective resource exhaustion. This issue follows negative, censorious, or highly personalized reactions to other individuals in daily interactions and in the workplace (Arefi, Ghahramani, and Taheri, 2010). In case of continuation of this situation and the persistence of negative emotions in individuals, these can also be transferred to the sphere of family life and relationships of spouse and children, which may have consequences such as marital discord
and conflict, maladaptive parent-child interactions, and increased violence in the home (Storey, Repti, 2006).

Finally, occupational stress plays a mediating role in relationship between personality aspects and perceived social support with marital instability. Hypothetical test results also showed that occupational stress reduced the effect of personality aspects on marital instability. Hence, personality aspects affect the marital instability both directly and indirectly through occupational stress. In addition, occupational stress reduced the effect of perceived social support on marital instability. Thus, the perceived social support affect marital instability both directly and indirectly through occupational stress. Therefore, the overall recommendation of this study is reducing the occupational stress of nurses by increasing the levels of perceived social support and selecting individuals who are not neurotic. The selection and identification of the best people that seem to have the ability to cope with nursing occupational stress is the people who have good social support. Nurses’ participation in workshops, recommendations for more support from nurses especially women, running personality test before marriage can be done to determine the couples' personality traits.

Some of the limitations of this study are the time-consuming process of gathering research data, the administrative problems for obtaining permissions, the poor cooperation of some nurses to answer the questionnaire, the lack of statistics and detailed available information about the hospital staff.

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