Title: The Relationship between Personality Characteristics and Marital Satisfaction: Mediating Positive and Negative Affects

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To appear in: Avicenna Journal of Neuropsychophysiology

Received date: 2019/06/22
Revised date: 2019/07/10
Accepted date: 2019/07/10

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Abstract

Various protective mechanisms have been proposed to explain how marital satisfaction is increased through positive and negative emotions. Therefore, the purpose of this study was to determine the relationship between personality characteristics and marital satisfaction; the mediating role of positive and negative affect. The research method was descriptive and correlational. In this research, 300 married women living in eastern Tehran were selected by available sampling method and five factors (NEO; Costa & McCrae, 1989), Marital Satisfaction Scale (Fowers, & Olson1993) and Positive and Negative Affective Questionnaire PANASS) was performed on subjects. Data were analyzed using the Pearson correlation coefficient and path analysis. The results of the test using Imus software showed that the indirect effect of personality traits on marital satisfaction was significant through the positive and negative affect mediators at the level of p <0.05. The results of this study support interventions and training to remove and decreases negative emotions.

Keywords: personality traits, marital satisfaction, positive and negative emotions
Introduction

Marriage is one of the most important events that man faces in life, with different physical and psychological consequences for both men and women. In line with popular belief, research has shown that marriage is associated with positive psychological outcomes such as higher psychological well-being (1). For adults, having a happy, lucky, and stable marriage is the best protector against disease and premature death (2).

The scientific study of marital satisfaction since 1990 has attracted a lot of attention, and during this period, many marital satisfaction definitions have been made. Spanier and Cole (3) argue that marital satisfaction is an indicator of a couple's interactions in common life that embraces satisfaction, solidarity, agreement, and affection of that couple. In fact, marital satisfaction is one of the broadest concepts that show an amount of happiness and stability of a relationship (4). Griff states in the definition of marital satisfaction and compatibility that couples are compatible with husbands who agree with each other, satisfied with the type and quality of spending time, and have good management of their time and financial issues (5).

Researchers have worked for decades to identify important factors in relationships, conflicts, and marital problems. Various studies have focused on the effects of various personal, personal and economic-cultural factors on marital satisfaction. One of the personal factors influencing marital satisfaction is the personality characteristics of couples. In accordance with Nakash-Eisikovits, Dutra & Westen’s definition of character refers to the long-standing pattern of thought, excitement, motivation, and behavior expressed in different environments (6). The character is also defined as the set of differences influenced by the growth of values, attitudes, personal memories, social relationships, habits, and competencies (7).

There has been an ever-increasing consensus on the higher order of personality structure over the past two decades, as most scholars now believe that the character can be divided into five general attributes known as the Big Five Persons. The model provided by McCrae and Costa (8) is known as the five-factor model of the character or the five great. These factors include flexibility, accountability, pleasure, psychoanalysis, and extraversion (9). Flexibility reflects the interest of people in recent years and the acquisition of new experiences. Responsiveness is associated with controlling impulses, restraint, power of will and success. This attribute signifies self-adaptation, action, and success. A neuroticism, which is a stable emotional state, indicates a negative emotional experience such as anger, anxiety, and depression (10).

An extroverted person enjoys being with people, is full of energy and often experiences positive emotions. Agreeableness implies, in fact, the difference between humans in interpersonal cooperation and social harmony. Peoples are cautious, friendly, gracious, helpless, and willing to compromise with others (11).

One of the objectives of this study is to identify the relationship between personality characteristics and marital satisfaction, but the question arises whether this relationship is linear or whether other psychological variables can play a role in this respect. In this study, positive and negative affect are seen as an intermediate variable. Positive emotions include pleasure, interest, trust, and awareness, which are part of the behavioral system of livelihoods, and direct the organism to enjoyable stimuli (12). If people have a positive effect, they usually feel enthusiastic, energetic, alert and optimistic; while people's Positive affect is low, they usually feel humor, indifference, and fatigue (7). Negative emotions include
fear/anxiety, sadness/depression, and anger/hostility. These emotions are part of a deterrent behavior system whose main purpose is to inhibit behaviors that lead to unpleasant outcomes (12).

Heller et al (13) found that the relationship between the five factors of personality and marital satisfaction was related to marital satisfaction positively, negative relationship, and extraversion, responsiveness, pleasure, and flexibility with marital satisfaction. In line with these results, Karney & Bradbury's longitudinal study (14) also showed that low-level psychosis is one of the most important predictors of marital satisfaction. The relationship between psychosis and low marital satisfaction was also found in subsequent studies (15).

A great deal of research has been done on the relationship between personality and emotional dimensions, and most research has investigated the relationship between extraversion and levels of positive affect, and between neuroticism and negative emotional levels. For example, according to Ising's theory, neuroticism is associated with negative mood and extraversion with positive mood (16). David et al (17) in a study showed that positive and negative affect significantly predict extroversion and neuroticism respectively. The researchers concluded that introversion tends to make people feel positive, while neuroticism makes people vulnerable to negative emotions. In addition, Costa and McCrae (18) showed that neuroticism is correlated with negative affect strongly. The relationship between positive and negative affect and marital satisfaction also indicated that depressed emotion is related to lower marital satisfaction (19) and positive affect improve marital satisfaction because it causes couples to behave kindly towards each other and People with positive emotions form an ideal image of their spouse because they interpreted their spouse’s behavior with an optimistic view (20).

Based on the findings of the research, in this study, on the one hand, we consider the relationship between personality traits, positive and negative affect, and marital satisfaction, and, on the other hand, determine the role of mediating positive and negative affect in the relationship between personality traits and marital satisfaction. Now the question arises whether positive and negative affect have a mediator role in the relationship between personality characteristics and marital satisfaction? This mediator role is tested based on the hypothesized model of research (Fig. 1).

![Figure 1- The hypothesized model of the role of the positive and negative emotions in the relationship between personality traits and marital satisfaction](image)

**Materials and Methods**

In view of its purpose, this research is a developmental research type and in terms of data collection and analysis in a non-experimental and correlational manner. The proposed
A theoretical model is presented with regard to the purpose of the present research; research involves the study of structural equations. In the present study, the statistical population was married women residing in the east of Tehran province (districts 4, 8, 13, 14, 15) in 2018. A sample of 300 married women has been selected as an accessible sample. Taking into account the estimation of the sample size in structural equations modeling studies, according to Kelin (21), divided it into three simples, complex and complex patterns, and according to the number of variables examined, and this study is a complex model with a sample size of at least 300 people.

It is proposed for this purpose. A copy of the research questionnaires has been submitted to each of them after obtaining consent. The criteria for entry were 20-45 years of age, had no specific physical or mental health and had at least a degree in reading and writing. The exclusion criteria also include separate living on grounds such as the death of a husband, divorce, marital conflicts, long-term career travel, marriage contracts, and less than 6 months from the time of marriage until the completion of the questionnaire.

Five-factor personality questionnaire (NEO-FFI): A 60-point scale, which measures the five main factors of the personality, including flexibility, accountability, pleasure, psychoanalysis and extraversion. On this scale, each subject has 12 questions. The questions are answered as five completely disagreeable to completely opposing, and the minimum and maximum score is zero and 240 respectively. The results of McCrae and Costa's (10) study showed that the correlation of the five subsamples of the short form with a long form is from 0.77 to 0.92. In addition, the internal consistency of the subscales of this questionnaire was estimated to be 0.86 to 0.86 (22). In Iran, Haghshenas (23) translated this scale and verbal validity was verified. In the standardization of this test, which was carried out by Garousi farshi (24) on a 2000-person sample, the correlation coefficient of the five main factors was reported between 0.56 and 0.87, and an acceptable reliability was reported for it. The cronbach's alpha coefficient has been reported to be 0.76, 0.81, 0.73, 0.76 and 0.89, respectively.

Positive and Negative Affect List (PANAS): This scale is a measure of self-reporting impact. Questions 1, 3, 5, 9, 10, 12, 14, 16, 17 and 19 Negative effects: Questions 2, 4, 6, 7, 8, 11, 13, 15, 18 and 20. For the PANAS, Watson, Clark, & Tellengen (25) demonstrated internal consistency between positive effects.86 -.90 and negative effects.84 -.87. PANAS test reliability (1 week) was reported to be.79 for positive affect and.81 for negative affect. PANAS correlation with HSCL=.74 for negative and -.19 for positive affect (25). PANAS correlation to BDI=.65 for adverse effect and -.29 for positive affect. Very slightly or not at all A bit moderate Quite a bit Extremely All questions 1 2 3 4 5 The total score is calculated by the sum of the 10 positive items and the 10 negative items. Scores for both sets of items range from 10 to 50. A higher score indicates a more positive effect on the overall positive score. For the total negative score, a lower score indicates less of a negative affect (25). Cronbach's alpha coefficients in this research were 0.70 for positive affect and 0.71 for negative affect.

Marital Satisfaction Scale: The Enrique Marital Satisfaction Scale has 47 questions and has marital satisfaction in 12 components including contractual response, marital satisfaction, personality issues, marital relationship, conflict resolution, financial management, leisure activities, sexual relations, marriage and children, Family and friends, measures the role of gender equality and religious orientation. This scale is graded in a Likert range of options; from totally agree to completely opposite. Fowers, B. J., & Olson (26) conducted a study on 7261 couples in a national study between 1983 and 1985 to determine the validity and reliability of this questionnaire. The reliability of the test was determined by the method of calculating the reliability of the test, in the 4 weeks’ interval from
0.97 for the sub-scale of religious orientation up to 0.65 for the subscale of marital satisfaction. In internal studies, Pearson correlation coefficient was 0.93 for the test group and 0.04 for women group (27). Cronbach's alpha coefficient of marital satisfaction was 0.91 reported in this study.

To analyzing data, First, correlations between Personality Characteristics, Marital Satisfaction, and Positive and Negative Affects were calculated with a Pearson correlation coefficient in SPSS 21. Then path analysis was performed with latent variables using AMOS 18.

**Findings**
In Table 1, demographic data analysis showed that most of the sample population is between 30 and 40 years of age. Regarding the degree of education, the most frequent is for women with a diploma.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20 to 30</td>
<td>55</td>
<td>18.3</td>
</tr>
<tr>
<td></td>
<td>31 to 40</td>
<td>172</td>
<td>57.3</td>
</tr>
<tr>
<td></td>
<td>40 to 45</td>
<td>73</td>
<td>24.3</td>
</tr>
<tr>
<td>Education</td>
<td>Under the diploma</td>
<td>31</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>99</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Associate Degree</td>
<td>25</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>81</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>37</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>27</td>
<td>9</td>
</tr>
</tbody>
</table>

**Table 2: Descriptive findings of research scales**

<table>
<thead>
<tr>
<th>variable</th>
<th>Mean &amp; SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>neurotic</td>
<td>20.67±7.86</td>
</tr>
<tr>
<td>Extroversion</td>
<td>29.17±6.10</td>
</tr>
<tr>
<td>flexibility</td>
<td>26.49±4.68</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>33.26±5.73</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>35.80±6.53</td>
</tr>
<tr>
<td>Positive affection</td>
<td>30.50±4.44</td>
</tr>
<tr>
<td>Negative affection</td>
<td>32.69±4.98</td>
</tr>
<tr>
<td>Marital Satisfaction</td>
<td>163.67±30.69</td>
</tr>
</tbody>
</table>

One of the assumptions for structural equation modeling is the normalization of multivariate distribution. For this purpose, in the AMOS software the multi-variable multiplier Mardia is used. Values larger than five for the Mardia coefficient represent the distribution of abnormal data. The value of the Mardia coefficient for the research data is 3.55, which shows that the multivariate normalization assumption exists.
As shown in Table 3, according to goodness of indicators, the results of the implementation of the final research model after the required reforms, along with some of the most important indicators of fitting the original model presented.

**Table 3: The goodness of fit proposed pattern based on goodness of indicators**

<table>
<thead>
<tr>
<th>Goodness of Fit Index</th>
<th>Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 /dfχ</td>
<td>2.11</td>
<td>&gt;3</td>
</tr>
<tr>
<td>MSEA</td>
<td>0.07</td>
<td>&gt;0.1</td>
</tr>
<tr>
<td>CFI</td>
<td>0.95</td>
<td>&lt;0.9</td>
</tr>
<tr>
<td>NFI</td>
<td>0.94</td>
<td>&lt;0.9</td>
</tr>
<tr>
<td>Goodness of Fit Index</td>
<td>0.96</td>
<td>&lt;0.9</td>
</tr>
</tbody>
</table>

**Table 4. The coefficients and significance of direct/indirect effect of personality traits and positive and negative affect on marital satisfaction**

<table>
<thead>
<tr>
<th>Type of effect</th>
<th>Predictive variable</th>
<th>Criterion variable</th>
<th>standardized β</th>
<th>Not standardized β</th>
<th>f</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>direct</td>
<td>Personality</td>
<td>Marital Satisfaction</td>
<td>0.32</td>
<td>0.66</td>
<td>3.89</td>
<td>0.001</td>
</tr>
<tr>
<td>direct</td>
<td>neurotic</td>
<td>Marital Satisfaction</td>
<td>-0.32</td>
<td>-0.39</td>
<td>-3.44</td>
<td>0.001</td>
</tr>
<tr>
<td>indirect</td>
<td>Personality</td>
<td>Marital Satisfaction</td>
<td>0.11</td>
<td>0.10</td>
<td>2.22</td>
<td>0.01</td>
</tr>
<tr>
<td>direct</td>
<td>Positive and negative emotions</td>
<td>Marital Satisfaction</td>
<td>0.52</td>
<td>0.67</td>
<td>5.84</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The Sobel test was used to investigate the effect of mediating positive and negative effects on the relationship between personality traits and marital satisfaction. Sobel argues that this asymptotic ratio has a normal distribution, and when this ratio is greater than ± 1.96, for larger specimens, the zero assumption is rejected at the 0.05 level. What follows from the results of the table above is that the hypothesis in relation to the indirect effect of positive and negative affection on marital satisfaction has been confirmed by positive and negative affection with 95% confidence. Also direct effect of personality traits on marital satisfaction was significant.

**Discussion**

The results of path analysis showed that the personality traits had a significant effect on marital satisfaction indirectly. In addition to the present research, in confirmation of this finding, studies show that individuals with higher grades in the four factors of extroversion, Conscientiousness, Agreeableness, and flexibility, report higher marital satisfaction. Regarding the results of the indirect effect of positive and negative affect on marital satisfaction by mediating role of positive and negative
affect has been confirmed. In addition, the direct effect of personality traits on marital satisfaction was significant. Neurotic, characterized by negative emotions and mood changes, is associated with lower levels of proximity (28), greater sensitivity to negative events and fewer positive social interactions (29), increased emotional sensitivity over time in marital relationships (30). Extroversion, which is the main characteristic of being social and overcoming positive emotions, can lead to positive social exchanges in which couples behave more socially and, in line with this finding, outsourcing to widespread social networks (31), spending more time with people on these networks (32), higher levels of self-esteem and intimacy (30). On the other hand, there are few levels of extroversion associated with social avoidance and the lack of positive emotions (33).

In the study of Esfandiari et al. (34), positive and negative affect were associated with high and low marital satisfaction, respectively. Besharat et al. (35) also showed that there is a negative relationship between positive emotions and marital problems. Positive and negative emotions were also able to predict conflicts and marital dissatisfaction differently. In line with this finding, Florian et al. (36) in a study, was shown that couples with higher levels of positive reaction experience a higher level of intimacy. Marital researchers believe that positive emotions are negatively related to loneliness, self-harm, and harmful behaviors such as behaviors such as drug and alcohol abuse, high-risk sexual behaviors, and lack of social communication (37). Interestingly, the above is from the reciprocal predictions of marital satisfaction (38). Therefore, it is predictable that marital satisfaction will increase with increasing of positive emotions. The topic that was also reflected in the results of this study.

A lot of research has been done on the relationship between personality and emotional dimensions, and most studies have investigated the relationship between extraversion and positive emotional levels, and between neuroticism and negative emotional levels. For example, David et al. (19) in a study showed that positive and negative affect significantly predict extraversion and neuroticism respectively. The researchers concluded that extroversion tends to make people feel positive, while neuroticism makes people susceptible to negative emotions. In addition, Costa and McCrae (39) showed that neuroticism is strongly correlated with negative emotions. In terms of positive and negative emotions, evidence suggests that turbulent marital relationships are associated with negative emotions, maladaptive communication practices, and poor listening skills (40). In the study, Gerber et al. (41) concluded that the negative emotions (humiliation) and the positive (interest) created in the positive interactive context (love) and the negative (conflict) predict the quality and the durability of the relationship is both for the man and for the woman.

One of the limitations of this research is the fact that the participants in this study were married women living in the eastern part of Tehran so that others should be cautious in generalizing the results of the research. Based on this, it is suggested that research on marital satisfaction and its advances in societies such as men and couples referring to counseling centers should be made in order to make it possible to compare the degree of marital satisfaction of personality traits in different groups.

Conclusion

The purpose of this study was to explain and predict the marital satisfaction among married women in the form of a structural equation model. The variable of personality traits on the role of exogenous variables and positive and negative affect on the role of exogenous had a direct and indirect effect as mediating variables on marital satisfaction. These effects were also statistically significant. As explained in this section, the current research structural model was effective in explaining and predicting the marital satisfaction of married women. The present study showed that positive and negative emotions play a mediating role in the prediction of married women's marital satisfaction. This variable, on the one hand, is affected by personality traits and communication patterns and, on the other hand, can have an important effect on the marital satisfaction of married women.
Also, considering the descriptiveness of the present research method, the researcher may not have been able to provide a complete picture of how the patterns of communication, personality traits, and positive and negative affect on marital satisfaction. Other factors affecting marital satisfaction, including their physical condition and spouse, socioeconomic status, official and informal social support, and family status are variables that the researcher could not fully control. On this basis, it is suggested that the relationship between the social and economic basis and marital satisfaction should be explored in future research, as these provide grounds for dissatisfaction with marital life in married women and can be linked to problems of marital satisfaction.

Acknowledgment
We are also deeply grateful to the subjects who took part in this study.

Contribution
Study design: PMZ, SAB
Data collection and analysis: PMZ, SAB
Manuscript preparation: PMZ, SAB

Conflict of Interest
The authors declare that they have no competing interests.

Funding
The author(s) received no financial support for this article's research, authoring and/or publication.

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