The mediating role of relationship obsessive-compulsive disorder in relation to attachment styles and marital quality in women
Mitra Kabiri¹, Hamid Taher Neshat-Doost¹, Hossein Ali Mehrabi¹

Abstract
Based on attachment theory, researches concluded that attachment styles influence marital quality. Although researches support this correlation, some psychological factors are involved, mediating between them. The aim of the present study was to examine the mediating role of relationship obsessive-compulsive disorder (ROCD) in relation to marital quality and attachment styles in women. In this descriptive-correlational study, statistical population included all married women in Isfahan between winter and spring 2015. A sample of 195 women was examined who were selected through convenience sampling. Golombok-Rust Inventory of Marital State, Adult Attachment Questionnaire, and Relationship Obsessive-Compulsive Inventory were used as the research instruments. The results showed that the triple dimensions of attachment styles were significantly correlated with marital quality and ROCD. The results of hierarchical regression analysis showed that triple dimensions of ROCD played the role of mediation variable in the association between attachment styles and marital quality. Therefore, based on the obtained results, the association between attachment styles and marital quality is not as simple as a linear correlation and could be affected by ROCD.

Keywords: Attachment, Marital, Obsessive Compulsive Disorder, Women

Introduction
One of the areas of life quality is marital quality. Many concepts such as adjustment, satisfaction, happiness, integration, and commitment have been used to determine marital quality [1]. Spanier [2] has defined marital quality as the success in the function of a marriage. Larson and Holman [3] have considered marital quality as a dynamic concept recognized by a changing nature and quality over time. The researchers pay much attention to the marital quality because it has a great influence in many aspects of mental health of couples and children [4] and also, marital difficulties has been recently the most prevalent problem for which people refer to the psychologist [5-7]. Marital quality is an important aspect of family life as well. High quality of marital life is correlated with less depression [8], high self-measurement health [9], less physical illnesses [10], and other positive consequences [11]. There are many influential factors in marital quality, such as couples’ attachment styles...
The adult attachment theory has been developed by elaboration of attachment theory for specifying personal differences in cognitions, feelings, and behaviors which occur in the adulthood intimate relationship framework. Based on this theory, personal differences in attachment styles are originated from experiences related to the former intimate relationships formed by the infant-mother attachment relationship. Hazen and Shaver categorized intimate relationships of adults according to three main styles of attachment, i.e. secure, avoidant, and ambivalent, and presented the differences of these three styles. They believed that the type of childhood attachment influences the romantic relationship in adulthood. It has been demonstrated in many researches that secure attachment is positively and insecure attachments are negatively correlated with relationship satisfaction.

Relationship obsessive-compulsive disorder (ROCD) refers to an increasingly researched obsessional theme in romantic relationships. ROCD often involves preoccupation, doubts, and neutralizing behaviors which are centered in one’s feelings towards the relationship partner, the partner’s feelings towards oneself, and the “rightness” of the relationship experience. ROCD may also include disabling preoccupation with the perceived flaws of one’s relationship partner. Relationship obsessive-compulsive symptoms may occur in various types of relationships including people’s relationship with their parents, children, mentors or even God. However, it should be noted that these symptoms are much noticeable in romantic relationships, and may influence function, quality, and maintenance of the relationship as well as temperament. Repetitive doubts about relationship or partner may seriously weaken the core and central processes of the relationship and completely make it unstable.

Individuals with ROCD are likely to find it difficult to maintain idealized or even positive relationships and partner perceptions in the face of repeated intrusions, and are hence more likely to experience poor relationship satisfaction. Doron, Talmor, Szepsenwol, and colleagues concluded that relationship obsessive-compulsive symptoms predict depression and distress in relationships. Doron, Derby, Szepsenwol, and colleagues developed the former studies and concluded that there is a correlation between obsessive-compulsive disorder symptoms and cognitions, negative affection, and function of the relationship.

On the other hand, attachment styles mainly influence ROCD in adulthood. Insecure attachment styles may hinder adaptive coping with self-related challenges by activating dysfunctional distress-regulating strategies, further exacerbating anxiety, and ineffective responses. Individuals with anxious attachment style tend to react to self-relevant failures by amplifying the negative consequences of the aversive experience, rumination, and mental activation of attachment-relevant fears such as fear of being abandoned because of being abandoned. Thus, in addition to disrupting functional coping with experiences that challenge sensitive self-domains, anxiously attached people’s coping strategies may render them particularly vulnerable to relationship-centered obsessions. Recent findings clearly indicate that self-sensitivity in the relational domain and anxious attachment jointly contributes to the development and maintenance of ROCD symptoms. Anxious attachment is linked with more severe ROCD symptoms mainly among individuals whose self-worth is strongly dependent on their relationships. Subtle hints of incompetence in the relational self-domain (i.e., mildly negative feedback regarding the capacity to maintain long-term intimate-relationships) may lead to increasing ROCD.
tendencies mainly among individuals high in both anxious attachment and relationship-contingent self-worth. Thus, jointly with sensitivity in the relational self-domain, anxious attachment may result in the increased susceptibility to relationship-related obsessive doubts and worries. Doron, Szepsenwol, Karp, and colleagues [26] in one study concluded that simultaneous occurrence of anxious attachment and reliance on the relationship for self-worth (i.e., double-relationship vulnerability) was correlated with relationship-centered obsessional tendencies. Therefore, it seems that ROCD can play a significant mediation role in the relationship between attachment styles and marital quality [27].

This study, in accordance with literature, examines the mediating role of ROCD in relation to attachment styles and marital quality. The attempts to become aware of the mediating factors related to marital quality will assist the researchers to progress their goal in maximizing marital quality. On the other hand, it is probable that in different cultures, attachment styles would be variously presented. Therefore, the mediating role of ROCD in the relationship between attachment styles and marital quality would be worth noting to be studied in the Iranian culture. Due to the advent of ROCD concept to the psychology literature in 2012 and lack of researches in this area in Iran, this study could approximately fulfill the research gap and practically leading to next researches and psychotherapies. Based on literature, the conceptual model of marital quality according to attachment styles and ROCD is illustrated in diagram 1.

Method
The present study used a descriptive-correlational method. Statistical population included all married women in Isfahan between winter and spring 2015. According to Gall, Borg, and Gall [28], 140 women was determined. With regard to the attrition rate, 200 women were selected through convenience sampling. The inclusion criteria consisted of signing informed consent, having 18-45 years old, being married up to 10 years, having at least the junior high school education, and no asking for divorce at the moment. After explaining the purposes of the study, and emphasizing on confidentiality of information, participants were asked to complete the questionnaires. They were permitted to finish their cooperation in any step of the study. Finally, five participants were excluded from statistical analysis because of incomplete responses to the scales. Thus, the final sample reduced to 195 participants (mean age: 28 years old; age range: 19-43 years; SD: 4.97; mean length of marriage: 4.2 years; SD: 4.97). The Pearson correlation coefficient and hierarchical regression analysis in SPSS-21, were used for data analysis.

Golombok-Rust Inventory of Marital State (GRIMS): The GRIMS was formulated by NFER-Nelson in 1988, and revised by Golombok and Rust in 2007 [29]. The GRIMS assesses the quality of the relationship between a married or cohabiting couple. The GRIMS is a 28-item questionnaire, scored between 0-3 for each item. Each item is scored on a 4-point scale (completely disagree, disagree,
agree, completely agree), thus the total score is fluctuating between 0-84. In this inventory, high score indicates the poor marital quality; hence the more the score, the less the marital quality. The Cronbach’s alpha coefficient for the questionnaire was reported as 0.85 for men and 0.89 for women by Golombok and Rust [29]. Milne [30] reported its Cronbach’s alpha coefficient in range of 0.81 to 0.94 and high content validity and construct validity as well. In Persian version of this questionnaire, Cronbach’s alpha coefficient has been calculated as 0.89 for men and 0.91 for women [31].

**Adult Attachment Questionnaire (AAQ):** The AAQ is a 15-item questionnaire, derived from attachment theory of Bowlby. It was formulated by Hazan and Shaver in 1987. The AAQ consists of three subscales including Secure Attachment Style, Avoidant Attachment Style, and Ambivalent Attachment Style. Each of these subscales has 5 items. Each item is scored on a five-point Likert scale ranging from 1 (never) to 5 (always). The Cronbach’s alpha coefficient for the AAQ was reported as 0.70 by Feeney and Noller [32]. In its Persian version, Cronbach’s alpha coefficient was evaluated by Behzadipour, Pakdaman, and Besharat [33] in the 30 participants. The Cronbach’s alpha coefficients were calculated as 0.92, 0.93, and 0.89 for secure, avoidant, and ambivalent attachment styles, respectively.

**Relationship Obsessive-Compulsive Inventory (ROCI):** The ROCI is a self-report measure of obsessions and compulsions centered in one’s romantic relationship, which was formulated by Doron and colleagues in 2012. The scale includes 14 items loading on three relational dimensions: feelings towards one’s partner, one’s perception of partner’s feelings, and one’s appraisal of the “rightness” of the relationship. Participants determine the extent to which such thoughts and behaviors describe their experiences in intimate relationships on a 5-point scale ranging from 0 (not at all) to 4 (very much). Thus, the total score of ROCI is fluctuating between 0 and 56. The internal consistency (in Cronbach’s alphas alpha method) was reported from 0.84 to 0.89 for the subscales and 0.95 for the whole scale by Doron and colleagues [20] and its test-retest (9 week interval) reliability was obtained as 0.77. In the present study, Cronbach’s alphas coefficient in the 40 participants were 0.81, 0.93, and 0.76 for feelings towards partner, rightness of the relationship, and perception of partner’s feelings, respectively, and 0.83 for the whole scale.

**Results**

Descriptive statistics of the measured variables in this study is presented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant attachment</td>
<td>13.12</td>
<td>3.94</td>
</tr>
<tr>
<td>Secure attachment</td>
<td>16.39</td>
<td>3.31</td>
</tr>
<tr>
<td>anxious/ambivalent attachment</td>
<td>10.96</td>
<td>3.61</td>
</tr>
<tr>
<td>Love for partner</td>
<td>3.18</td>
<td>3.28</td>
</tr>
<tr>
<td>Rightness of relationship</td>
<td>4.64</td>
<td>3.35</td>
</tr>
<tr>
<td>Being loved</td>
<td>4.29</td>
<td>3.36</td>
</tr>
<tr>
<td>Marital quality</td>
<td>25.98</td>
<td>12.24</td>
</tr>
</tbody>
</table>

A summary of the results of covariance matrix of the research variables is demonstrated in Table 2. Based on the data of Table 2 and regarding that in GRIMS questionnaire high score is the sign of poor marital quality, the triple dimensions of attachment styles is significantly correlated with marital quality. Furthermore, the triple dimensions of ROCD have positive significant correlation with marital quality. In addition, the triple dimensions of attachment styles are significantly correlated with triple dimensions of ROCD.
Effective factors on marital quality in women

Table 2 Correlation coefficients of dimensions of attachment styles, ROCD, and marital quality

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant attachment</td>
<td>0.363**</td>
<td>-0.091</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure attachment</td>
<td>-0.356**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxious/ambivalent attachment</td>
<td>0.317**</td>
<td>0.602**</td>
<td>0.685**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love for partner</td>
<td>0.311**</td>
<td>-0.135*</td>
<td>0.363**</td>
<td>0.311**</td>
<td>0.540**</td>
<td>0.418**</td>
<td>1</td>
</tr>
<tr>
<td>Rightness of relationship</td>
<td>0.307**</td>
<td>-0.137*</td>
<td>0.373**</td>
<td>0.602**</td>
<td>0.685**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Being loved</td>
<td>0.327**</td>
<td>-0.264**</td>
<td>0.313**</td>
<td>0.523**</td>
<td>0.540**</td>
<td>0.418**</td>
<td>1</td>
</tr>
</tbody>
</table>

** p<0.01
* p<0.05

The results of hierarchical regression analysis are illustrated in Table 3 in order to examine the mediating role of ROCD dimensions in relation to attachment styles and marital quality.

Table 3 The results of hierarchical regression analysis

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>β</th>
<th>t</th>
<th>Sig</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avoidant attachment</td>
<td>0.190</td>
<td>3.011</td>
<td>0.002</td>
<td>0.422</td>
<td>0.178</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>Secure attachment</td>
<td>-0.183</td>
<td>-2.988</td>
<td>0.004</td>
<td>0.319</td>
<td>0.178</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>Anxious/ambivalent attachment</td>
<td>0.231</td>
<td>4.014</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Avoidant attachment</td>
<td>0.161</td>
<td>2.103</td>
<td>0.04</td>
<td>0.613</td>
<td>0.376</td>
<td>0.198</td>
</tr>
<tr>
<td></td>
<td>Secure attachment</td>
<td>-0.151</td>
<td>-2.988</td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anxious/ambivalent attachment</td>
<td>0.135</td>
<td>2.263</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Love for partner</td>
<td>0.217</td>
<td>3.070</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rightness of relationship</td>
<td>0.318</td>
<td>4.182</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Being loved</td>
<td>0.212</td>
<td>2.991</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 3, the results of hierarchical regression analysis demonstrate that the dimensions of attachment styles solely explain 18% of marital quality variance in the first step. In the second step, attachment styles and ROCD dimensions totally explain 38% of marital quality variance. The entrance of ROCD in regression equation increases the regression coefficient by about 20%.

The following conditions should be met if a variable plays a mediating role:
1) There is a significant correlation between the mediating factor and the independent variable.
2) There is a significant correlation between the mediating factor and the dependent variable.
3) The correlation between the dependent and independent variables is weakened in case the mediating factor is applied [34].

In the present study, ROCD (mediating variable) is significantly correlated with attachment styles (independent variable) and marital quality (dependent variable), (p<0.05). In the first step, Beta coefficient is positive and significant for attachment styles (β=0.350, p<0.01). After the entrance of ROCD in the second step, Beta coefficient in the former step has decreased (β=0.180, p<0.01). These results indicate that ROCD could strongly influence the relationship between attachment styles and marital quality as a mediating variable.

The standard direct and indirect effects (regression weights) of the attachment styles on marital quality with regard to the mediating role of ROCD are listed in Table 4.

Table 4 Standard direct and indirect effects (regression weights) of the attachment styles on marital quality with regard to the mediating role of ROCD

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidant attachment</td>
<td>Marital quality</td>
<td>0.02</td>
<td>0.12</td>
<td>0.14</td>
<td>0.001</td>
</tr>
<tr>
<td>Secure attachment</td>
<td>Marital quality</td>
<td>-0.16</td>
<td>-0.27</td>
<td>-0.43</td>
<td>0.000</td>
</tr>
<tr>
<td>Anxious/ambivalent attachment</td>
<td>Marital quality</td>
<td>0.15</td>
<td>0.13</td>
<td>0.15</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Based on data of Table 4, indirect effect coefficient of avoidant attachment on marital quality regarding the mediating role of ROCD is 0.12. Also, indirect effect coefficient of secure attachment on marital quality regarding the mediating role of ROCD is -0.27. Moreover, indirect effect coefficient of ambivalent attachment on marital quality is 0.13 regarding the mediating role of ROCD. These effect coefficients are all statistically significant (p<0.01). Therefore, there is a significant correlation between attachment styles and marital quality regarding the mediating role of ROCD.

Based on the findings of Table 4, this diagram is presented to explain the paths influencing marital quality.

Based on the above findings, it can be concluded that ROCD plays a mediating role in the relationship between attachment styles and marital quality.

**Discussion**

The present study was carried out aiming at determining the mediating role of ROCD in relation to attachment styles and marital quality in married women in Isfahan. The results of the study showed that secure attachment was positively correlated with marital quality, and avoidant and ambivalent attachment styles were negatively correlated with marital quality. These findings are compatible with those of the studies accomplished by Saavedra, Chapman, and Rogge [35] and Tina and Kelley [36]. These results are explained by several arguments. According to Bartholomew and Horowitz [37], main distresses in marital life are originated from negative affection and attachment pathologies. The couples with avoidant attachment style feel discomfort and annoyance in intimate and close relationships, even in marital relationship, and they are unable to share their thoughts and feelings with others. The couples with ambivalent attachment style have also a little ability to make intimate, efficient relationships. These participants really require making intimate relationships, but because of the fear of being abandoned from spouse or important relevant others, they have a little ability to make efficient communications, while one of the most important components of the marital quality is the efficient interaction among the couples. Therefore, these participants have poor marital quality. The people with secure attachment have a kind of stability, resistance, and resiliency in the most life areas [38]. This stability and resiliency can have a striking influence in raising marital quality. The results demonstrated that ROCD plays a mediating role in the relationship between attachment styles and marital quality, and attachment styles predict the changes of marital quality through ROCD. Participants with insecure attachment styles (avoidant and ambivalent) do not have the feeling of security due to their childhood experiences. In other words, they assume that the important relevant others may leave them and are not available in time of need so they cannot trust the others for meeting their needs. These negative relational patterns continue in adulthood and appear in the relationship with spouse in a way that the person worries and has doubts about the received love and availability from his/her spouse [21]. Considering that early
attachment experiences form the individual’s perception of self and environment, and regarding the role of damaged representations of self and universe due to insecure attachments, it is understood that early experiences of attachment could be one of the predisposing factors of dysfunctional beliefs in ROCD [26]. Therefore, insecure attachment gives rise to manifestation of the symptoms and intensifying them [20]. On the other hand, the findings showed that ROCD was negatively correlated with marital quality. This outcome is in accordance with the former studies’ findings [20,21].

Individuals with signs and symptoms of ROCD permanently are in reassurance seeking in relationship with spouse. This matter puts persistent and unbearable pressure on the spouse and eventually leads to negative reactions, repetitive conflicts, and tension between couples and hurts marital quality. Negative emotions such as stress and sadness, as well as destructive behaviors like repetitive criticism and avoidance which appear following ROCD, decrease marital satisfaction. The signs and symptoms of ROCD can influence the structure of marital relationship; repetitive preoccupations with love may give rise to increase dependent behavior and stick to spouse, which both may lead to hierarchical structure in marital relationship. In other words, these signs in the person suffering from ROCD may increase the fear of abandonment, and consequently negative self-evaluation, guilt, shame, and embarrassment. Moreover, it reinforces the feeling of anger, power, privation, and disregarding behaviors and detachment in his/her spouse. Finally, this defect cycle noticeably reduces marital quality. So, it could be discussed that attachment styles influence marital quality through ROCD. It should be noted that the present study restricted to married women and hence, precautions should be taken to generalize its results to men and other community members. Therefore, similar researches on the other populations in the society are required for a general conclusion.

**Conclusion**
The aim of this paper was to explore an area in OCD research that is yet to be systematically examined despite its potentially debilitating effects-obsessive-compulsive phenomenon centering on romantic relationships. Preliminary research suggests that obsessive preoccupation and compulsive behaviors may center on three relational dimensions one’s feelings toward his or her partner, the partner’s feelings toward the individual, and the rightness of the relationship. Based on theoretical considerations and initial findings, we proposed a model, as well as additional factors that are believed to play a unique role in this form of OCD, such as attachment insecurity. Based on the research findings, the relationship between attachment styles and marital quality is not as simple as a linear relationship, and it could be influenced by ROCD. These results highlight the determining role of various cognitive factors in decreasing or increasing marital quality.

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Study design: MK, HM, HN
Data collection and analysis: MK, HM
Manuscript preparation: MK, HN, HM

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

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**References**
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