Author’s response to reviews

Title: The Relationship between Personality Traits and Marital Satisfaction: A Systematic Review and Meta-Analysis

Authors:

Kourosh Sayehmiri (sayehmiri@razi.tums.ac.ir)
Karez Ibrahim Kareem (Karez.shera@bnu.edu.iq)
Kamel Abdi (Kamel.abdi@komar.edu.iq)
Sahar Dalvand (S_dalvand90@yahoo.com)
Reza Ghanei Gheshlagh (rezaghanei30@yahoo.com)

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Author’s response to reviews:

We sincerely thank the reviewers for dedicating their time to review our meta-analysis. According to your useful and constructive comments, the following modifications were made by the research team:

Gianluca Serafini (Reviewer 1): This is, in summary, a systematic review aimed to examine Iranian studies on the correlation between personality traits and marital satisfaction. The authors reported a total of 18 correlational studies, without any time limitation, with a total sample of 4049 that were reviewed. The following correlation coefficients were reported between marital satisfaction and personality traits: r=0.439 with neuroticism, r=0.833 with extraversion, r=0.777 with openness, r=0.855 with agreeableness, and r=0.90 with conscientiousness. The authors concluded that couples high in Neuroticism experience lower levels of marital satisfaction, and couples high in Conscientiousness are more satisfied with their marital life.

The authors may find as follows my main comments/suggestions.

1- First, why the authors decided to conduct their systematic review only in the Iranian population including only studies that used the NEO Five Factor Inventory (NEO-FFI) to assess personality traits and the ENRICH Marital Satisfaction Inventory to measure marital satisfaction is a matter of debate and needs to be better explained for the general readership.

Answer: We chose this issue due to the high number of divorce and personality problems in Iran. The prevalence of divorce and moral problems (even clashes and street fights) in Iran has increased tremendously. Internal statistics in 2014 shows that there are 381 divorces in Iran daily, often due to betrayal, sexual problems and unemployment. In 2016, 20 divorces were recorded every hour in Iran. There were also 318 divorces in each marriage case. Since the variables studied are influenced by the culture and context of the community and are different in different contexts and cultures, we conducted this study exclusively in Iran. Most of the studies that were collected were done with these two questionnaires, so we focused on the studies that were done with these two tools.

2- Moreover, why the authors decided to use for their search only Google Scholar, PubMed, Web of Science, Scopus, and national databases, including Scientific Information Database is a matter of debate. They should explain why they did not include in their search other relevant databases such as ScienceDirect, and PsychInfo.
Answer: Most of the studies were published in journals indexed in domestic databases. It was also important for us to have access to the sites. We had access to these three sites, used them and reported them honestly.

3- Furthermore, the potential mechanisms by which neuroticism may reduce marital satisfaction need to be, at least partially, hypothesized. Here, the authors could provide, based on their expertise, some relevant hypotheses about this topic.

Answer: Thanks. Based on your excellent suggestion we have discussed the mechanism for reducing marital satisfaction by neuroticism in the article discussion: The negative effects of neuroticism on marital satisfaction may be through creating anxiety, tension, pity-seeking, hostility, impulsivity, depression, and low self-esteem (Ahadi et al., 2007). Personality traits like emotional instability and neuroticism may keep couples in a persistent state of vulnerability and influence the way they adapt to life stressors (Bradbury et al., 2000). A 13-year longitudinal study among couples indicated that negative marital interaction resulted from high neuroticism. In other words, it was found that people high in neuroticism tend to display negative behavior towards their partners that in turn reduces marital satisfaction in both partners (Caughlin et al., 2000).

4- Moreover, the most relevant limitations/shortcomings of the present paper should be appropriately described as the main caveats of this study have been not adequately reported within the main text.

Answer: At the end of the discussion we highlight the main limitations of the study: In this study we sought to investigate the relationship between marital satisfaction and personality traits in Iranian society. The main limitation of this study was that unfortunately most studies did not report much information or results or that only the relationship between marital satisfactions with neuroticism (one of the five dimensions of personality) was addressed and the rest were neglected. Another limitation was the lack of access to the PsychInfo database in Iran. Of course, reading other articles and reviewing the references of the selected articles helped us ensure that studies in Iran were collected and included in the analysis as much as possible.

5- Finally, the study needs to be reviewed by a native English speaker for the quality of language as it presents, in its actual form, some typos/grammatical errors.

Answer: We have received help from Darakhshan Ali Abdulqadir to complete the article in terms of content and writing problems. So his name was added to the authors.

Rebekka Weidmann (Reviewer 2): I had the opportunity to review the article "The Relationship between Personality Traits and Marital Satisfaction: A Systematic Review and Meta-Analysis". It's an important endeavor to summarize the link between Big Five traits and marital satisfaction in a circumscribed culturally homogeneous sample. I do have, however, some minor and major comments that are hopefully helpful for the authors when revising their manuscript.

Abstract
I was surprised to see a positive correlation with marital satisfaction and neuroticism. Given that the authors conclude that neuroticism is linked to lower marital satisfaction, I think a negative sign is missing: r = 0.439 should be -0.439. The same applies for the confidence interval. This point applies throughout the paper. Since in the total sample, the z-score of neuroticism was below 0, it should also be negative for the R and the confidence interval for all effects listed for neuroticism.

Answer: I'm so sorry for this negligence, and thank you very much for your attention. We Corrected.
Introduction
- I appreciate that the authors see marriage as sacred. I do, however, think that not all see marriage this way, especially in more secular countries. Maybe a reformulation could help with this issue: "Marriage can be seen as a sacred agreement through which the family unit is created."?
Answer: You are right, it needs rewriting. We changed it as follows: Marriage is the sacred covenant through which the family is formed.

- The definition of marital satisfaction can be shortened. The authors use multiple references to define what marital satisfaction is. After reading the text, however, I am not yet sure, which definition they used. Is marital satisfaction a composite of emotional and sexual satisfaction or is it commitment and adjustment? I think it would be useful if the authors made use of one current definition that also matched the ENRICH measure of marital satisfaction.
Answer: Thank you for your great comment. We have tried to shorten the definition of marital satisfaction and use a more practical definition rather than multiple references that are easier for readers to understand.

- Could the authors provide a reference that today researchers agree on the five-factor model of personality? (page 1, line 51 and following).
Answer: The articles we studied only wrote that most scholars agree about this. This post is almost vague, and we certainly didn't find this in the sources.

- Could the authors provide a reference for the statement that "People with different personality traits can have different attitudes toward different aspects of marital satisfaction?" In addition, could the authors explain what these differing attitudes mean for marital satisfaction? Maybe provide an example?
Answer: Chehreh et al. (2018) points out in their review study that attitudes affect marital satisfaction. Given that attitudes are also derived from personality, it can be concluded that individuals with different personality traits have different attitudes toward marriage that can affect their marital satisfaction. We added these details to text and highlighted in yellow.
Attitude affects marital satisfaction. Due to the fact that attitude depends on personality, it can be concluded that people with different personality traits have different attitudes towards marriage and this can influence their marital satisfaction. In the present study, we aimed to examine the association between marital satisfaction and personality traits in Iranian older adults. People high in neuroticism tend to cope with life stressors less adaptively and are more likely to interpret normal situations as threatening or small frustrations as severe despair. Life satisfaction has many ups and downs that require patience and forgiveness from both partners, but people high in neuroticism tend to get stressed out and moody in the face of these problems, therefore jeopardizing not only their marital relationship but also their social and professional life.

- Why is it important to review the evidence on Iranian samples only? Do the authors expect that Iranian couples are different from other couples studied in the social sciences? And how were the
results inconsistent in the past? Null effects or opposite effects?
Answer: The first reviewer asked us the same question. We chose this issue due to the high number of divorce and personality problems in Iran. The prevalence of divorce and moral problems (even clashes and street fights) in Iran has increased tremendously. Internal statistics in 2014 show that there are 381 divorces in Iran daily, often due to betrayal, sexual problems and unemployment. In 2016, 20 divorces were recorded every hour in Iran. There were also 318 divorces in each marriage case. Since the variables studied are influenced by the culture and context of the community and are different in different contexts and cultures, we conducted this study exclusively in Iran. Most of the studies that were collected were done with these two questionnaires, so we focused on the studies that were done with these two tools. Life in the community has shown me as an Iranian that the status of these two variables is getting worse day by day.

- The authors also mention that there also studies with Iranian samples that have focused on one specific trait, why where these studies not included in the current meta-analysis?
Answer: Because the findings focused only on one dimension of the personality of the sample and data on other personality dimensions were insufficient. Even the title of some articles clearly referred to the neuroticism dimension.

Methods
- The availability of the full-text version of the paper depends on the access that the university has. Did the authors also contact the unavailable paper's authors to receive the full-text version? Because if these six studies could be included into the present meta-analysis, it would be a great addition.
Answer: I think you mean Flow diagram 1. Those six studies were excluded because of insufficient information, not that we don't have access to the full text of their articles. Those articles were intended for another purpose and did not have the information we needed.

- Can the authors provide more information about the rating of the quality of the studies? When does a paper receive the rating of 0, when of 3? I also am not sure what the authors mean with comparison group, did the study have to have a comparison group and if yes, what kind of comparison group?
Answer: The tool consisted of 5 items of study design, comparison group, describing the characteristics of participants, sample size, and detailed description of the instruments used to gather data. Further details are provided in the table below.

<table>
<thead>
<tr>
<th>Study Parameter</th>
<th>Rating</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study design</td>
<td>3</td>
<td>Longitudinal prospective design</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Retrospective or mixed design</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Cross-sectional design</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Survey of did not report</td>
</tr>
<tr>
<td>Participants and recruitment</td>
<td>3</td>
<td>Description of the population (1),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and eligibility criteria for participants (2),</td>
</tr>
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<td></td>
<td></td>
<td>precise details of the recruitment process (3),</td>
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<td></td>
<td>accounted for the numbers recruited (4)</td>
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<td>-----------------</td>
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<tr>
<td>2</td>
<td>Minimal description of at least Three criteria</td>
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<tr>
<td>1</td>
<td>Two criteria missing</td>
<td></td>
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<tr>
<td>0</td>
<td>More than two criteria missing</td>
<td></td>
</tr>
</tbody>
</table>

**Comparison group**

<table>
<thead>
<tr>
<th></th>
<th>Healthy, age-appropriate comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Reference sample</td>
</tr>
<tr>
<td>2</td>
<td>Other comparison group</td>
</tr>
<tr>
<td>1</td>
<td>No comparison group</td>
</tr>
</tbody>
</table>

**Number of participants**

<table>
<thead>
<tr>
<th></th>
<th>N &gt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>N=50-100</td>
</tr>
<tr>
<td>1</td>
<td>N&lt;50</td>
</tr>
<tr>
<td>0</td>
<td>Did not report</td>
</tr>
</tbody>
</table>

**Instruments**

<table>
<thead>
<tr>
<th></th>
<th>Psychometrically sound report of generic or specific resilience measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Psychometrically sound report of generic and specific resilience measures.</td>
</tr>
<tr>
<td>1</td>
<td>Self-report generic or specific resilience measures with some psychometric data</td>
</tr>
<tr>
<td>0</td>
<td>Investigator constructed clinical rating of resilience or resilience domains with no psychometric properties</td>
</tr>
</tbody>
</table>

- Since SEM can also stand for structural equation modeling and the authors do not reuse the abbreviation, I think they can omit it.
  Answer: I'm sorry for this negligence. You are right. We removed it.

- Can the authors provide references regarding their cut-off criteria? (chi-square of .01, I squared value of 25\%, etc?)
  Answer: We provided reference to this section. 0.01 was incorrect, 0.1 is correct. We corrected.

Results
- How were the regions classified?
- Maybe this information is somewhere and I have not seen it, but I would recommend to list this
information in the tables and see whether the correlations are lower in longitudinal studies compared to cross-sectional studies.
Answer: We conducted analyzes based on country zoning in Table 2. In 1993 this division was introduced in Iran. One of the main goals of this segmentation is for the government to develop the regions rather than the provinces.

Discussion
- Page 10, line 48 and 49: To describe people with high levels of neuroticism, I would recommend formulations like: "Because these people tend to be moody and irritable,..." or "Because these people are more likely to be moody and irritable,..." Not every neurotic person is always moody or irritable, but they tend to experience these feelings more often. I think a more cautious language would improve the discussion greatly.
- Page 10, line 50: what is meant with "proper levels of marital satisfaction"? Do the authors mean higher levels of marital satisfaction?
Answer: I edited this term based on your valuable comments. Thanks.

- When referring to the effects reported in the meta-analysis of Malouff et al. (2010) it needs to be mentioned that these effects only refer to partner or interpersonal effects between partners. These correlations are usually smaller because they do not share method variance with the outcome variable (also see Orth, 2013).
Answer: You are right. This section of the text was removed to better understand the readers.

- I think there are various reasons why people with higher levels of neuroticism tend to experience lower levels in relationship satisfaction. The interpretation of Taraghijah is one of them. Others include negative interactions (Donnellan, Assad, Robins, & Conger, 2007), negative interpretation of ambiguous situations (Finn, Mitte, & Neyer, 2013), higher levels of aggressive externalization and more negative interpersonal behavior during conflict (Vater & Schröder-Abé. 2015), lower sexual satisfaction (Fisher & McNulty, 2008), and so forth. Maybe the authors can either indicate that the argument of Taraghijah is one of many reasons or the authors could add more possible interpretations.
Answer: Thank you so much. You have summarized this section very well. We used this same conclusion in our discussion to complete the article.

- Generally, when the authors state which correlation is higher than another, I wonder whether they tested this for significance or whether they are just a ocularly different? I think a clear statement would be helpful. I would prefer to test statistically whether the correlation coefficients differ.
Answer: Thank you for your great comment. You are right. We edited the text. We used the words medium or strong correlation instead of the words "higher" and "smaller".

- How would health care officials take appropriate measures to strengthen the marital relationship of Iranian couples? Given that there are bidirectional links between personality and relationships (Neyer, Mund, Zimmermann, & Wrzus, 2014) I would be cautious in stating that personality would be the place to improve couple well-being. I think targeting relationship processes would be beneficial to improve couple well-being and maybe even enable personality development (see for instance Finkel et al., 2013; Finn et al., 2015).
Answer: Thank you. Based on your valuable advice and the suggestions you have provided, I have added this section to the article. Your valuable advice was very helpful in completing this article.

References
- The references only display the first 33 of the total 40 references.

Answer: We are so sorry about this negligence. We corrected.

Smaller issues
- Page 1, line 16: Two-third should say two-thirds
- Page 1, line 22: Marital satisfaction (2, 4). ◊is this a title or is the sentence not finished?
- Page 1, line 29: martial should be marital
- Page 1, line 31: a couple experiences. The s is missing after experience.
- Unfortunately, I find many smaller mistakes like the ones mentioned above and I would recommend that the paper is thoroughly proofread upon resubmission.

Answer: Thank you for your accuracy. We corrected the recommendations. The article was again reviewed by the editor in English and the necessary corrections were made.

- Generally, I would omit the word "believe" in scientific language. In the instances where it is used, it could be clarified whether it's a hypothesis of the cited authors or whether it is a claim based on evidence.

Answer: The sentences in which "believe" was used were rewritten and the word changed.

***A colleague with sufficient knowledge of English was used to edit the manuscript in terms of writing and contents, that their names were added to the authors' names.