Reviewer’s report

Title: Examining the association of career stage and medical specialty with personality preferences - a cross-sectional survey of junior doctors and attending physicians from various specialties

Version: 0 Date: 16 Jul 2019

Reviewer: Chengxiang Tang

Reviewer's report:

General comments:

The research topic of this manuscript is of potential interest and importance in medical education. However, the whole paper still needs to be improved to ensure its correctness before final publication. I provided a number of specific comments below that I hope they are helpful.

1. To restructure some parts in the manuscript, for example,
   -- You don't need to re-state aim of the study in the Methods; you have already illustrated it in the second paragraph of Background section.
   -- Please replace the sub-section "Characteristics of participants" with a paragraph that focused on how you conducted this convenient sampling, because this is in the "Methods" part instead of the "Results". In addition, a sentence "The sample size was predetermined according to previous MBTI studies (12, 23)" in the sub-section "Statistical analysis" should be combined with this sampling sub-section.

2. You stated in the "Limitation" sub-section that "the sample size for each of the specialties was relatively small," while I do care about the sample representativeness of physicians in this study. As the Reviewer 1 commented that it might be selection bias in such a quantitative study if the representative sample is not a subset of a population (physicians) that accurately reflect the characteristics of the larger group. With respect to this problem, it is difficult to infer the polarization of personality preferences between junior doctors and attending physicians, or to discuss the associations between professional development and personality preference. Therefore the true limitation this manuscript needs to defense is the samples' representative. The authors do need to carefully think about it and give us more evidences and reasons about this study sample.

3. The language issues are still very common in revised manuscript. A number of fragmented sentences confused me with its meaning, for example, "This study was a cross-sectional survey study..." or "Junior doctors, which included postgraduate year (PGY) 1-3, and attending
physicians, who were qualified specialists from various specialties, were invited to participate."
I strongly suggest that the native speakers could make efforts to thoroughly revise manuscript.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Unable to assess

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal