Author’s response to reviews

Title: Item response analysis of the Geriatric Anxiety Inventory among the elderly in China: Dimensionality and differential item functioning test

Authors:

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RESPONSES TO COMMENTS
We greatly appreciate the editors and reviewers for your help on the potential of improving the quality of the manuscript (BGTC-D-19-00037-R1). The comments are very valuable. In accordance with the nice and constructive advice, we further revised the manuscript. The major revisions made in the revised manuscript were listed as follows:
1. Clarified and rephrased the dimensionality debates of the Geriatric Anxiety Inventory (GAI) in the Abstract, the Introduction, and the Discussion.
2. Acknowledged the nature of the Mokken sum score as ordinal
3. Checked the manuscript and corrected some mistakes in language
For detailed information about revision, please refer to the section of
RESPONSES TO REVIEWER

RESPONSES TO REVIEWER #1
We wish to express our appreciation to you for your insightful comments on our paper. The comments have helped us significantly improve the paper.
Comment 1:
Major:
In the abstract the authors states the following: «However, reports regarding its dimensionality are mixed,........" I would suggest some rewriting of this argument, as the 10 cross-nation analysis of the dimensionality of the Geriatric Anxiety Inventory (GAI) by Molde et al (2019) suggest otherwise. Molde et al (2019) report primary uni-dimensionality of the GAI across nations. Hence, this study support earlier research, more than being novel in itself.
Response:
Thank you very much for your valuable comments. We have changed the statement as you suggested.

Comment 2:
Introduction:
In the introduction, I urge the authors to rewrite the story, as there is less support to two-, three and four factor solutions in comparison with a unidimensional structure of the GAI, because of the findings by Molde et al. (2019). The arguments the authors uses are not new, but the same as provided by Molde et al (2017; 2019). Hence, this study does not solve the issue, it compliments earlier research. I think this has to be acknowledged.
Response:
Thank you very much for the helpful suggestion. We have rewritten the statement as you suggested.

Comment 3:
Method and Discussion:
Mokken is an ordinal IRT model, thus it is more flexible, but one may only draw conclusions using sumscores of the scale on an ordinal scale level. This should be stated in the method section and in the conclusion.
Response:
Thanks a lot for your reminder. We have added this point in both the Introduction and the Discussion sections.

Comment 4:
In the conclusion the authors write: "Previous studies have indicated confliction findings regarding the factor structure of the GAI……..To address the contradictions about the dimensionality of the GAI, we introduced Mokken scale analysis,….."
Again, as stated above, I urge the authors to rewrite the story, as there is less support to two-, three and four factor solutions in comparison with a unidimensional structure of the GAI, because of the findings by Molde et al. (2019). The arguments the authors uses are not new, but the same as provided by Molde et al (2017; 2019). Hence, this study does not solve the issue, it compliments earlier research. I think this has to be acknowledged.
Response:
Many thanks for the insightful comments. We have reframed the statements as you suggested.

Comment 5:
Language:
The grammar and language still needs to be sharpened and closely scrutinized. For example; In the introduction:
1."Besides confusion with other disorders[4], cognitive deficits and somatic symptoms account together for the unsatisfactory validity of most measuring strategies".
Do the authors mean measuring instruments?
2."Different populations express differently in anxiety and depression, such as highly concerned gender gap."
Comment: I think this is poor language, it needs to be rewritten
3.As such, I believe the manuscript still is in need to be checked for bad writing, grammar and tenses, all over.
Response:
Thank you very much for the detailed guide. We have checked the revised manuscript carefully from the begin to the end, and corrected the errors in language. Besides, we invited a professor of English to improve the quality of the manuscript.
We wish to thank you again for all the insightful comments. We now feel the manuscript is sharper and much improved as a result. We trust that the revised manuscript is suitable for publication.