Author's response to reviews

Title: Psychometric evaluation of the Bahasa Malay Version of the Montgomery-Asberg Depression Rating Scale (MADRS-BM)

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Author's response to reviews: see over
Dear Editor,

We sincerely thank you for the reviewers’ reports pertaining to our manuscript entitled “Validation of the Bahasa Malay Version of the Montgomery-Åsberg Depression Rating Scale (MADRS-BM)”. The comments forwarded from the reviewers are highly appreciated and contain useful suggestions. Please find attached the revised version of our manuscript and a detailed report addressing each of the individual remarks. We agreed with editor’s suggestion so the manuscript title is revised to “Psychometric evaluation of the Bahasa Malay Version of the Montgomery-Åsberg Depression Rating Scale (MADRS-BM)”.

We feel that the adaptations we made following the critical suggestions of the reviewers further improved the quality of our manuscript. We hope that this revised version will be acceptable for publication in BMC Psychiatry.

Editor:

1/ We ask that you also include a statement in the methods section of your revised manuscript that a copy of the permissions obtained was made available to the editor of the journal.

We have added this statement “We obtained permission from the original author of the MADRS, Dr. Stuart M. Montgomery, for conducting this study.” In the methods section, page 6, line 1.

Reviewer #1:

1/ Have the authors checked if the number of individuals (150) has been sufficient for a reliable validation? Please, answer this question in the methodology or discussion part.

Reply: We have added this statement: “We estimated the sample size to be 135 (45 depressed subjects and 90 non-depressed subjects, i.e., a 1:2 ratio), based on the calculation of five cases per item in the MADRS-BM (which has a total of nine items) [15]., hence, total of 150 subjects is enough for this validation study.” In the methods section, page 7, line 11.

2/ Table 2 and Table 4 - please, translate into English!

Reply: We have translated Table 2 and Table 4 into English.

3/ Table 3 - Spearmans correlation - instead of Pearsons correlation - would be more suitable for ordinal data (however, probably without impact on the results).

Reply: We have re-analysed the data by using spearmans correlation (Table 3). No impact was found on the results.

Reviewer 2:

1/ The authors should have to explain how did they diagnosed depression and who did the diagnoses.
Reply: All the depressed patients were diagnosed by the first author who is the trained psychiatrist. We have added this statement: “The criteria on the basis of which the depressed subjects were selected were as follows: the subjects needed to have been diagnosed with major depressive disorder (the diagnosis needed to have been confirmed by the first author (AY), who is a trained clinical psychiatrist) based on the Diagnostic and Statistical Manual of Mental Disorders, revised fourth edition (DSM-IV-TR) [14]” in the methods section, page 7, line 1.

Editor:

1/ I strongly recommend cooperation with a psychometrician as the revision of the psychometric methods and analyses will be essential.

Reply: The article is revised as recommended, so it will be “psychometric evaluation of Malay Version of MADRS” instead of a “validation study”.

2/ This is not a diagnostic validation study (not following STARD criteria), but a psychometric evaluation of internal consistency, parallel-test and test-retest reliability, and factor structure. This should be made clear in the title and the manuscript.

Reply: The title is revised to “Psychometric evaluation of the Bahasa Malay Version of the Montgomery-Åsberg Depression Rating Scale (MADRS-BM)”

3/ Much more details on the “multi-factorial ANOVA“ are needed with regard to the detailed analysis method and the results presentation: Why was the ANOVA done two-sided, although you had a directional hypothesis (higher scores in the depression group)? Which post-hoc tests were performed? What do you mean by “adjust variable”? Which were the covariates and which were the factors (with which categories)? Why was the ANOVA not additionally adjusted for religion?

Reply: “A multi-factorial ANOVA was used to calculate adjusted mean differences by including age, gender, ethnicity, and educational level (significantly associated demographic characteristic with the MADRS-BM) as covariates and depressed case VS control as factor. The significance level was set at 0.025 (one-sided tests). Post-hoc tests were not necessary to perform. In the data analyses section, page 9, line 20

In Malaysia, all Malays are Muslims (by law). As such, we only included ethnic into the analysis but not religion. They are more like “duplicate” adjusted variables.

4/ You mentioned a “screen plot” (I guess you mean “scree plot”).

Reply: It is corrected.

5/ You calculated predictive values. This makes no sense, as they strongly depend on prevalence which is abnormally high in your sample. Please omit.

Reply: It is omitted.
6/ You write “Findings from the study indicate that the MADRS-BM is a reliable and valid instrument for screening depression amongst the Malay speaking population.“ and “it is applicable to all depressed patients in Malaysia for the assessment of depression.“ This cannot be concluded from your study and goes much too far! Please reduce your discussion on the psychometric properties of the scale! (Again: This is not a study on diagnostic accuracy!) Before you can recommend the clinical use of your instrument, at least you have to examine validity in a random sample with a prevalence rate that resembles the real prevalence and demographic structure in the targeted population and setting (e.g. whole population, general practice, gerontopsychiatry etc.). A thorough diagnostic study following STARD criteria would be needed.

Reply: The statements are omitted and the suggestion of “In order to further establish the validity of the instrument, a diagnostic study based on the standards for reporting of diagnostic accuracy (STARD) criteria should be conducted on a larger sample of the general population” is added into the conclusion section, page 13, line 13.

7/ Please discuss the limitations of your recruitment strategy and especially the drawbacks of the healthy control group being very different from your patient group. What impact on the results can be expected?

Reply: The difference in the prevalence of depression between the depressed and control subjects which influence the psychometric results of the study is included in the limitation section, page 13, line 4.

8/ Post review editing. We recommend that you copyedit the paper to improve the style of written English.

Reply: We have sent the manuscript for professional English editing (by Editage.com).