Reviewer’s report

Title: The development of a brief screener for autism using item response theory

Version: 1 Date: 30 Sep 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions? (Brief or other article types: is there a clear objective?)

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with sufficient technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author’s interpretation is reasonable
OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?

Yes - current version is technically sound

PEER REVIEWER COMMENTS:

GENERAL COMMENTS:

The current version of the manuscript has corrected the main suggestions and comments proposed by the initial reviewers.

The manuscript presents the process of validation of a screening tool to detect ASD.

The methodology of the paper is correct.

The main concern about the paper is that this tool has been developed with a sample of 9 year-old children. This is not the best age to develop a screening tool.

In any case, authors have correctly justified this issue.

ADDITIONAL REQUESTS/SUGGESTIONS:

Line 135. An end point is missing.

Line 242 and 301. The word "was" should change to "were".

Line 247. It's suggested to change the word "capture" to "identify".

Line 344. It's suggested to change "IRT: Item and response theory" to "IRT: Item response theory".

Additional file 2. Should the table be "table 2"?

Additional file 3. Should the tables be numbered?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Yes

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

Yes

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:

Acceptable

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