Author’s response to reviews


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Author’s response to reviews:

O: Observation
R: Response

Response letter to the reviewers

Dear reviewers,

I’m grateful for the observations you have made to this manuscript. Please find below a response letter with my respectful replies to your suggestions.

I have also turned on the Track Changes options so you can see the changes that have been made.

Best Regards,

Reviewer 1. Prof Gian Marco Marzocchi.

O: This extract of manuscript describes the Psychometric analysis of the SDQ self report in a group of 1740 children and adolescents, including many immigrants.

R: There are not immigrant children because all of them were currently living in Biblián. Some of them have parents who are migrants and the data comes from a project that studies migration. This is explained in the participants section (Page 4 and 5)

O: The section of the manuscript is very short and it is not easy to understand if the authors included other methodological issues to make the interpretation of the results clear and
intelligible. The Authors included only some analysis (Factorial and probably an ANOVA gender by age)

R: The statistical analysis performed in this paper could be detailed as follows:

1. Descriptive analysis of the items
2. Exploratory factor analysis
3. Confirmatory factor analysis with polychoric matrixes and reliability analysis (Cronbach’s alpha, McDonald’s Omega, inter-item and item-total correlations for 5 internal factor structures of the SDQ
4. Measurement Invariance that includes configural invariance, metric invariance, scalar invariance, latent’s means invariance

I have to emphasize point 4 because few studies report whether the SDQ is invariant and it is a different analysis than ANOVA

O: There is no information about the Socio Economical Status of the sample.

R: I have not included more details in this part because two reasons:

1) it’s been remarked several times that this is a free-results version
2) I do not use SES in the analysis because it is focused on psychometric properties.

O: Moreover, a high quality study on psychometric properties of a questionnaire has to include results concerning: concurrent, inter-rater and test-retest reliability. According to the information reported in the section of the manuscript this data are not available.

R: Unfortunately, there was no other instrument available to assess concurrent validity when the data was collected.

I accept the suggestion of lack of inter-rater reliability assessment by including the intra-class correlations along with GLB (greatest lower bound) calculations.

Reviewer 2. Eduardo Fonseca-Pedrero

The manuscript "Psychometric Properties of the Self-Report Version of The Strengths and Difficulties Questionnaire in the Ecuadorian Context: An Evaluation of Three Models" is an up to date and interesting paper within the field of child assessment. In general, the paper is very
interesting; it contains new scientific knowledge and provides comprehensive information for further development of this productive line of research; however, I have a few comments to make that should be addressed before I recommend this manuscript for publication to BMC psychology:

O: 1.- Add hypothesis of the present study at the end of introduction…

R: I have included another sentence at the end of the introduction. “I argue that another factor structure might be more suitable for the Ecuadorian context, considering that the SDQ is rooted in Western psychological assessment.”

O:… and delete the specific models tested (move to data analyses)

R: Done


R: The suggested references have been included.

O: 3.- Do you have any information about non-response? Describe inclusion/exclusion criteria if part of the data was excluded from the analysis. Were these criteria pre-established? Were outliers removed from the data? Which method did you use to deal with missing data in the analyses? What variables are related to missing data?

R: I have included this additional explanation in the Participants section:

The original subset included 2129 observations, but 389 were deleted due to missing values in the questions of the SDQ. As for inclusion criteria, respondents had to be enrolled in school, and be older than 4 and younger than 17 years old, following the instruction manual of the SDQ. The final set included students with ages ranging from 7 to 17 years old (M=12.77, SD=2.42) from nine schools and high schools who completed all the questions of the SDQ (n=1470).

There was not any sort of imputation data performed nor outliers. Only the students who completed the 25 questions were considered.
Please, add information about IRB and ethics committees. Was informed consent obtained from all subjects?

R: I have included the following explanation in the manuscript:

Children of adolescents voluntarily answered the survey after obtaining written permission from their parents or relatives and the authorities of the nine schools located in Biblián, Ecuador. The questionnaires and results guarantee confidentiality and anonymity of the participants.

Also, in the section Ethics approval and consent to participate of the manuscript, I explain in more detail that:

The data collection complies with national guidelines. A cooperation agreement was signed between the Ministry of Education and the University of Cuenca. The agreement (in Spanish) is available in this link:

https://drive.google.com/file/d/1Z1g8c2Jhxjf9BTMdY8yz0J9bksNsDG0d/view?usp=sharing

Parents/legal guardians of children agreed to participate by signing a letter prior to the data collection. A copy of the letter (in Spanish) is provided in the following link:

https://drive.google.com/file/d/1YYRtTCB0xTvc3fF94Gt0a0Rn35aZOuSE/view?usp=sharing

In this case, the project was studied by the legal departments of both the University and the Education Coordination of the Ecuadorian Government prior to signing the agreement to collect the data. I have informed that no other authorization from a committee was requested because the project complies with the national guidelines. In Section 6 of the agreement, it is stated that the Research Project has to keep anonymity of all the information regarding the people involved.


R: I have included two additional factor structures to test as suggested in Goodman et al., 2010

I noted that the Ortuño et al. 2018 paper (Mental Health Difficulties in Children and Adolescents: The Study of the SDQ in the Spanish National Health Survey 2011–2012) was answered by the parents. For these reason I hesitate to compare those findings with the ones of this article.

I also noted that the slight modifications of the original version of the SDQ reported in Boe, T., Hysing, M., Skogen, J.C., Breivik, K., 2016 were made in the questions.
After including the suggested paper, I will assess the validity and reliability of five models, which will also lead to a change in the title of the manuscript.

Reviewer 3. Prof Paula Kersten

O: This will be an interested paper. The authors could enhance the paper by providing more information on the validity of the language translation.

R: I have included more details in the section “Procedure”

O: I wondered why they have only chosen to use factor analysis, rather than for example a Rasch analysis. The latter has advantages over factor analyses.

R: Since I also intended to explore the number of constructs of the instrument, exploratory factor analysis seemed to be the proper strategy (knowing that the SDQ has had different factor structures in different countries). I used confirmatory factor analysis as the “next step” after exploratory factor analysis because I am not quite familiar with Rasch analysis and that most of the reviewed papers for this work used factor analyses.

I´m grateful for the observation that would improve the methodology of the papers I´m currently working on.

O: Grammar needs checking, for example in places the authors switch between present and past tense in the methods section. At time full stops are missing at the end of sentences

R: Checked.