Reviewer’s report

Title: The CogBIAS longitudinal study of adolescence: Cohort profile and stability and change in measures across three waves

Version: 0 Date: 09 Jun 2019

Reviewer: Luiza Nobre-Lima

Reviewer's report:

Goals and data presented in this paper are part of a bigger study, namely the CogBIAS Longitudinal Study (CogBIAS-L-S). I compliment the authors for this research, its goals and design and for the important contributions it brings to the understanding of adolescent development.

About this specific paper I emphasize its relevance, clarity and thorough and consistent presentation of both the instruments used in the CogBIAS-L-S and the analyses made. Globally, the objectives are met. Nevertheless, I invite the authors to consider more specific comments:

1 - the abstract would benefit of more information. In the background it should be stated more clearly that the CogBIAS-L-S is a broader research that includes the present study. In this sense, the specific goals of this study presented in the method section should be moved into the background section. It would also be helpful to add to the method section, information about time between waves and type of measures used in this study.

2 - Why were only included in this longitudinal study early and middle adolescents? Was there any particular reason to exclude late adolescents? In the background section of the paper it would be relevant to make more explicit the reasons behind this decision.

3 - The objectives of the study should be mentioned in the same order that results are presented. Afterwards, discussion of results should follow this same order. The importance of the consistency of this order is stated in the page 25, line 4, "Reliability was assessed by the internal consistency of the measures, as lack of differential stability across waves could simply reflect poor measurement reliability".

4 - In the procedures (page 18, line 8 and 9), there is a reference to the collection of saliva samples. As far as I understood, this is not a relevant information for this particular paper, so it may be removed from the text.
5 - In the discussion section, some results motivate a deeper reflection. For example, in page 25, line 2 and 3 it is stated that "In sum, we observed substantial differential stability in the self-report measures and less stability in the behavioral measures". What other reasons than poor measurement reliability might explain less stability in the behavioral measures and what can explain a substantial differential stability in the self-report measures? Generally, the discussion might benefit if the results are also analyzed considering what happens during adolescence.

6 - In the page 26, line 3 and 4, it is stated "… this shows that mood outcomes decreased over time". Please verify if this statement does not contradict what is referred before in this same paragraph about increases in self-report mood measures.

7 - As referred on the "Strengths and limitations" section, many of the behavioral measures showed poor reliability. Considering these results, authors should justify why they kept using these instruments in the study.

**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 recommend additional statistical review

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