Reviewer’s report

Title: Correlates of screen time among 8-19 years old Chinese students

Version: 0 Date: 07 May 2017

Reviewer: Ai Shibata

Reviewer's report:

Review of PUBH-D-17-000462

Title: Test-retest reliability and screen time correlates among school-aged Chinese children

Authors: Synyue Ye, Lijian Chen, Qineng Wang, Qinggong Li

This manuscript developed the Chinese version of screen-time questionnaire based on the Adolescent Sedentary Activity Questionnaire and reported its test-retest reliability. Also, this study provided the evidence about the home-based environmental and social correlates of screen time in Chinese children with relatively large sample size. This study is important and informative because of data from non-western countries and dealing with rapid expanding screen-time behavior. However, this manuscript has some serious issues that need to be addressed and improved. These issues are described below. Therefore, the manuscript needs major revisions before it can be considered for publication. Also, there are some awkward sentences and grammatical errors. It is suggested a proof read for future drafts of this manuscript.

Major

1. Page 4, pp3: The authors described that "Prolonged time spent in SBB" was "screen time >=2hour/day". However, "prolonged" originally means that "continued" or "sustained". I believe that the usage of "prolonged" in this manuscript is wrong. Please correct this appropriately.

2. Page 4, Second paragraph: Review of literature is poorly organized and unfocused. Thus, it is not clear if the rationales of this manuscript would be reasonable and valuable. The main focus of this manuscript seems to identify factors associated with screen time on environmental aspect. If so, the authors should have deeply reviewed the relevant previous studies.

3. Page 4, Second paragraph: It may not be appropriate that testing test-retest reliability is one of aims in this manuscript because these purposes are totally different and not related. At least, please describe more about need to report test-retest reliability as one of main purpose
in this study, which should also include the review of previous literature. Otherwise, it is not reasonable for the main aim of this manuscript and should simply report this information in the measurement of method section.

4. Page 5, pp3: Is it appropriate that those aged 20 years were categorized as children? Please verify this point.

5. Page 5, Participants: Please address why >=60hour/wk of ST was defined as outliers and list relevant references.

6. Page 5, Participant: Please address information about a research ethics committee. If you did not obtain any approval from the research ethics committee, please elaborate about ethical considerations more.

7. Page 5, questionnaire and measurements: whole description is confusing. Please change paragraph from SSB questionnaire to possible environmental correlates. Also, the validity on ASAQ should be listed. In addition, please add the citation of environmental correlates.

8. Page 6, Statistical analysis: I did not get why zero-mean normalization needed to be performed. Please add it. Also, the purposes of both "a mixed regression model" and "logistic regression" were really not clear. Please describe these more precisely.

9. Page 7, Results, individual characteristics in boys and girls: Did "total ST" come from? The authors did not explain how to calculate it. Please added it in the method section.

10. Page 7, Results, individual characteristics in boys and girls: In the statistical analysis subsection, it said that gender differences in variable were examined. However, grade differences were also reported. Please ensure consistency.

11. Page 7, Results, Environmental correlates of leisure ST: at first, what is leisure ST? Please operationally define it in the method section. Also, the need to examine the interaction should be explained in the statistical analysis of the method section.

12. Page 8, Environmental correlates of leisure ST: How did the authors calculate "Prolonged ST"? Is this equal to leisure time ST? Please clarify these. Also, is the expression of "prolonged ST" 2hr/day or "14hr/wk? Please keep consistency.

13. Page 8, Discussion: in general, the discussion were poorly supported by the objective data and citations and basically consisted of personal view, especially, about the differences in results between Chinese and other western countries.
14. Page 8, Discussion, second paragraph: The possible reason for the result that 25% of the items did not reach an acceptance is not reason, totally unclear. Why it was uniquely happened on the study-based computer use for only boys and leisure-based computer use for only girls? Are there gender-specific external factors?

15. Page 11, pp3: Is third limitation related to this study?

Minor

1. Page 1, pp19: correlates and determinants were different. The authors might be confused to use. Please use these appropriately.

2. Page 7, pp4: "see table 1" is not appropriate to describe in text. Please correct it.

3. Page 8, pp3: (CP) owner (R=1.051)⇒OR?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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:

Needs some language corrections before being published
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