Reviewer’s report

Title: Frequency of ubiquitous connectivity and associated factors among Mexican adolescents.

Version: 0 Date: 15 Jul 2018

Reviewer: Ian Bennett

Reviewer's report:

General:
The authors are to be commended for investigating the important issue of mobile device use and "ubiquitous connectivity" among adolescents as a starting point for framing mHealth interventions potentially making use of this technology. While the concept of a national survey of youth is an excellent one there are a number of issues that detract from the value of the research reported. I will start with general comments and then provide specifics in the areas below dealing with specific sections of the manuscript. Most importantly there is insufficient information related to the methods and administration of the survey to understand major aspects of the work including survey development (item development and validation), sampling frame, response rates, and other key issues that are needed to interpret the results; this is a key issues since the stated object of the study is to "determine the proportion of adolescents connected ubiquitously..." requiring robust methods for population sampling to achieve. There was some mention of concepts such as Health 2.0 and "ubiquitous connectivity" which could have been framed as a conceptual model to guide the study but was not concretely shown how that happened - if it did. I needed to see such a model visually if possible to understand how these different pieces fit together and see what interventions could come from it. The lack of a clear conceptual model for the study makes the utility for this work less - how where the items for the survey picked, how do the results fit into a larger plan for interventions, etc. While a smaller issue there was also some awkward wording that made the authors points unclear and could use some editing.

Abstract:
- It is unlikely that there is "no information" regarding the topic of the current manuscript - I would suggest that the authors use terms like "limited,"
- The first sentence of the abstract is awkward and I cannot understand what the point is that the authors are making,
- The response rate to the survey is needed,
- The conclusion goes well beyond what would be supported by the apparent parameters of the study by, for example, mentioning gamification and participatory when no mention of analyses of these strategies for mHealth engagement was addressed in the study;

Intro:
- The authors primary/only references for some of the background information on device use include sources that appear to be in Spanish language and potentially limited access - increasing the references to include other sources even if it is not limited to Mexico would be helpful to frame the
work more broadly,
- Starting in the second paragraph the authors make claims for the ability to deliver health interventions though mHealth strategies that are not supported currently by research findings - changing the language to reflect this by stating that there is potential for this approach, etc., is needed - Health 2.0 has promise but has not been proven to improve outcomes;

Methods:
- The details of methods for item development are needed including what if any conceptual model was used to identify potential domains for investigation, the creation of draft items, revisions based on testing, validation, etc.,
- There is mention of "12 selected sites" without providing any information on where they were or why they were selected - more information is needed (nature of the sites, location, population, etc.),

Results:
- The first paragraph states that results came from 11 of 12 cities - where these the "sites" mentioned in the methods section? We need much more information on sampling frame and response rate - how many adolescents could have responded and how many did - without a denominator that is clearly described it is impossible to interpret the results,

Discussion:
- In the first paragraph of this section the authors state that "more than half of young people are behind in technological development primarily because of access problems"
  o It is critical that the authors not generalize the results to all "young people" but rather just say "more than half of survey respondents,"
  o I do not know what is meant by "behind in technological development" and recommend clarifying this,

Conclusions:
- The authors conclude that gamification should be included in mHealth intervention despite not being a reported part of this study - this should be removed or framed differently - such as "strategies with potential to increase adolescent engagement should be explored."
  - Same comment that "strategies must be participatory" are not directly addressed by the current research presented and so cannot be presented as a conclusion of the study.

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.

No

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

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any
attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal