Reviewer’s report

Title: A proof-of-concept framework for the preference elicitation and evaluation of health informatics technologies: the online PRESENT patient experience dashboard as a case example

Version: 0 Date: 08 Oct 2018

Reviewer: Arianna Dagliati

Reviewer's report:

The manuscript deal with a very important issue in decision system, i.e. user evaluation of dashboard in healthcare settings on the basis of specific needs. This underline the importance of delivering "desirable" tools in this context. However, I have some doubtful concerns about the paper.

First of all, while the experiment is applied in the context of informatics and decision making, the applied approach and methods are more related to the health economics context. While the two fields are related, authors should better emphasise the aspect of their research that fits the scope of the journal. I recommend the author to rewrite the work carefully in order to clarify specific research questions and outcome through each manuscript section.

1. In the background section 1. I would recommend to show literature evidence of: dashboard-based system in clinical context, DCEs application in healthcare

2. Please check reference [6] to PRESENT dashboard description [6], while is not clear is possible to get an exhaustive description of the project from the provided reference.

3. In section 2.1 I would describe the research team for the dashboard design more thoroughly, have you used focus group? In that case please describe the participants in term of relevant attributes (like type of profession, level of expertise etc.)

4. Page 5 line 24/25: "healthcare professional who fitted the profile" this sentence is vague, please define the profile characteristics.

5. I've found section 2.2 very difficult to understand. Some bit are very generic (e.g. "statistical theory" per se is a very vague definition), I think the entire paragraph would greatly benefit and improve its clarity through a graphical illustration of the design setting.

6. JMP is a visualization SW for data analysis, how did you employ it in this context? Can you provide some examples?

7. Section 2.4 has to be improved in term of clarity. First of all I think you should very clearly define the analysis outcomes (multiple outcomes). In this context I would expected the use of logit to estimate participants as function of observations, and the use the predicted value to compute (for example) propensity scores, but while you're basically explaining logit and nested models, so I would suggest to reformulate this section, highlighting only the innovative contribution of your research in term of methods and providing relevant references for DCE and RUT.
8. I think you should discuss the fact that your model don't deal with confounding effects and how this might impact the analysis results.

9. Paragraph 2.4.2, Figure 1 is more a list than a figure.

10. Results in section 3 are presented in a confused way, but I think this is mainly related to the lack of clarity of the design study. I would suggest to rethink the structure of the manuscript in order to efficiently link the first sections to results, clearly explain how different methods are applied to address different research questions.

11. Please introduce all the acronyms (e.g. WTP)

12. Table 6 is actually the only point where you clearly illustrate the design experiment, but this explanation came too late in the manuscript.

13. If you discussed the dashboard design from the UX point of view, this should be included in the discussion.

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.

No

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

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