Reviewer's report

Title: Predictors of students' adoption of a smartphone application for medical education in general practice

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Reviewer: Hans Martin Bosse

Reviewer's report:

The authors present the students' perspective on a web-based prototype of a general practice textbook. The tool offers web-based (mobile accessible) texts, algorithms and lecture notes as well as self-assessment options. The assessment was conducted in the setting of a general practice course in undergraduate medical education.

The study intends to identify predictors of students' adoption of a smartphone application for medical education. This is highly relevant and generally of broad interest for the medical education community.

Major Compulsory Revisions

Background

1. I suggest an additional literature research to include some more, relevant articles including Davies 2012.

Methods

2. The applied methods generally seem sound. A statistician should be consulted since I assume that for a logistic regression the independent variables are required to be independent from each other, which the authors don't assume.

3. In fact, the variables 1 and 3-6 in table 1 are of similar effect. The question arises whether there are strong confounders as mobile device ownership (72% vs. 84% in non-frequent and frequent users). The potential influence of such confounders should be addressed.

Discussion

The general structure is logical; the available data indeed are scarce.

4. This section needs to be reedited, though, as several subsections are worded in an unnecessarily complex, convoluted style (lines 194ff., 214ff., 219ff.). The authors may consider editing by a native speaker.

5. In lines 209 the authors should insert a new paragraph, as a potential connection of both sentences is confusing.

Limitations
The fact that an application is evaluated in the setting of general medicine isn’t necessarily a limitation; I think the results are generalizable.

6. The screenshot of the tool provided shows the responsive design, but it makes me wonder whether the tool makes full advantage of the potential apps provide or whether the former content of a textbook is merely made web accessible.

7. A major limitation is that there was no assessment of actual use of the application with a mobile device or with a standard computer. Thus the title (adoption of a smartphone application) triggers high expectation regarding the assessment of the actual mobile use of the app – which the authors are unable to determine with the applied questionnaire. The title needs to be modified accordingly.

In conclusion: The paper addresses a highly relevant issue and is of broad interest. If the title is reworded and the discussion revised the paper should be suitable for publication.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.