Author’s response to reviews

Title: Considering patient safety in autonomous e-mental health systems - Detecting risk situations and referring patients back to human care

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Author’s response to reviews:

Dear,

Thank you for your reviews on our work. Below, we outline how we have incorporated your comments in our revised manuscript.

Reviewer reports:
Hyo Soung Cha (Reviewer 1): This paper proposes a way of considering patient safety in autonomous e-mental health systems. In general, the approach makes sense. However, the paper needs more details and evidence. Below are suggestions for addressing these issues.

1) In the background, the authors state "AEMH's are interesting, as they provide a way of breaking down these social barriers, helping people at home or on their mobile phone, for comparatively low cost". This argument is lacking evidence and very broad statement. The authors should modulate and qualify the very broad statements they make.

   - We have specified this better, and added a reference supporting the statements we make (P2 L20-23)

2) In the Discussion, "In the design of the protocols, care was taken to ensure they would be generalizable
to a broad range of different AEMH systems." In the previous sentence, we need more evidence of 'generalizable'.

- We have added a sentence evidencing in which way we have ensured generalizability. (P24 L 7-8)

3) And "Several other directions for future research can be established. Application of the detection model in different types of AEMH systems could reveal whether it fully covers the important decisions in detecting risk in AEMH." This sentence is not clear why future research is relevant. Please explain.

- We have rewritten the second sentence for clarity and added one for extra explanation. (P25 L5-6-7))

4) Figure 1,4 is no readable.

- We have increased figures 1 to 4 in size to increase readability.

5) I think it would be appropriate to replace Table 1 with a figure. Because, color and shading may not be used

- We have turned this table into a figure

6) The height of the first row of the entire table should be the same

- We have ensured this is the case

Marlien Varnfield (Reviewer 2): This paper describes patient safety in autonomous e-mental health systems in terms of detecting risk situations and referring patients back to human care.

The study set out with two objectives.

Firstly, to develop guidelines for risk detection and auto-referral systems.

Secondly, through crowd-sourcing, to investigate how persuasive techniques, mediated by a virtual agent, can facilitate self-referral.

The authors should be congratulated for undertaking such relevant and noteworthy work. Mental health is indeed an area in which staff shortages have been particularly acute in many countries and as mentioned by the authors, advances in technology create opportunities for computer systems to deliver health care interventions.
The research is important and the paper very well written. In my opinion the objectives set were met.

I have identified only minor grammatical errors:
P 20 ln 31 patients and providers may need to reach a mutual decisions about health interventions, including the choice: should read 'to reach a mutual decision' or 'to reach mutual decisions'

- This error has been fixed (P 24 L21)

P 21 ln 12 "However, from the results we see that this suggestion was still effective in some cases, indicated that it did not fall into the latitude of rejection after all". Should this read "However, from the results we see that this suggestion was still effective in some cases, indicating that it did not fall into the latitude of rejection after all".

- We have corrected this (P23 L1)

P 23 Reference 15. Spence J, Titov N, Johnston L, Jones MP, Dear BF. Internet-based trauma-focused cognitive behavioural therapy for PTSD with and without exposure components:

- This should have been ‘with and without’, and has been corrected.

Limitations to the study are well described and covered and future research identified.