Reviewer’s report

Title: Medical Students' Interpersonal Behaviors and Socio-Emotional Interaction in a Virtual Clinical Encounter

Version: 1 Date: 5 December 2013

Reviewer: Margaret Bearman

Reviewer’s report:

1. Is the question posed by the authors well defined?
I think the questions could be tightened, particularly the question:
“The primary aim of this study was to evaluate if the virtual clinical encounter has the potential to foster interpersonal communication skills in medical students.”
I don’t feel this is really the aim of the study; I note in the conclusion the authors state that:
“Our observations indicated that the VP environment did promote socio-emotional interpersonal interaction with the virtual patient, and this, in an appropriate and respectful manner. …. In this study, we identified and measured the impact of a number of variables in the patient simulation that seem to be important to activate students’ learning as well as to motivate and engage them. We also investigated medical students’ affective reactions in the virtual encounter, as well as how they perceive the patient’s “mediated presence”.”
This strikes me as the real conclusions but this does not answer this first question well. The secondary question strikes me as being more answerable by the data ie
“A secondary aim was to investigate to what extend [sic] this learning experience was socially and emotionally engaging and which interaction design characteristics contributed most to it.”
I think the core focus of the paper is interesting, and relevant, but just needs to be tightened.

2. Are the methods appropriate and well described?
2.1 The data collection methods are a strength – the diversity of the methods are fantastic, especially the video recording and the rigour of the analysis appears very high. Minor points – the adapted RIAS – why adapted should be commented upon, and if this is the scale provided in the appendix, it should be referenced there too.
2.2 I would prefer reporting of the virtual patient and context at the start, followed by a separate description of the methods but this is not critical.
2.3 Analysis methodology for the interviews should be reported in further depth

3. Are the data sound?
3.1 The data mostly appears sound but the statistical analysis strikes me as being very overblown for the small cohort. In particular the comparison of gender mixes with n of 4, 5, and 6 groups is really bothersome to me. The significant differences between these groups might have nothing to do with gender but to do with some other variable.

3.2 Video data:

3.2.1 *I would like to have seen the n of males and n of females listed with the observational data.

3.2.2 a little bit of interpretation within the results, which should be removed to discussion eg: Patient encounter appears to have engaged the students affectively, with resulting increased motivation.

3.2.3 I would have liked descriptive reporting of this video data and less statistical analysis. Again, I'm concerned about the meaning with respect to the sample size.

3.2.4 the students were working in pairs – a golden opportunity to comment on the social nature of learning with a VP (under reported and under discussed), not sure if the authors have considered this area at all

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Appears to.

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Yes, I thought they were appropriate. Some interesting points raised. My preference is to see some of these go a little further in exploration but I don't think the need to for publication.

6. Are limitations of the work clearly stated?

Yes

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes.

8. Do the title and abstract accurately convey what has been found?

8.1 Title fine, but abstract needs rewriting in alignment with other suggestions

9. Is the writing acceptable?

8.2 Acceptable but needs a thorough proof.

Major compulsory revisions
1, 2.1, 2.3, 3.1, 3.2.1, 3.2.2, 3.2.3

Minor essential revisions
8.1, 8.2
Level of interest: An article whose findings are important to those with closely related research interests.

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests.