Author’s response to reviews

Title: The predominant learning approaches of medical students

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Author’s response to reviews:

Dear Professor Clare Partridge,

We are once again extremely grateful for the valuable constructive comments given by the reviewer Iain Keenan. We would like to thank you for giving us the opportunity to incorporate the suggestions and re-submit the manuscript. Please find below our response to the reviewers’ comments as well as a clean and edited version of revisions to the manuscript.

Yours sincerely,

Prof Tan
Reviewer reports and response point by point:

1. Abstract

Please remove the heading 'aims' from the abstract. Please revise this to be a sentence within the background section of the abstract e.g. the aim of this study was...

Response: Thank you for highlighting this, we have edited it as instructed. Changes are in blue below.

(Refer manuscript line 5-7, page 2)

“Background

By identifying medical students’ learning approaches and the factors that influence students’ learning approaches, medical schools and health care institutions are better equipped to intervene and optimize their learning experience. The aims of our study is to determine the predominant learning approach amongst medical students on a clinical posting in a hospital in Singapore and to examine the demographic factors that affect their learning approach.”

2. Copyediting

Please ensure sentence case is used throughout the manuscript.

For instance, the manuscript title, and the headings in the abstract are all in capitals. Please revise.

Response: Thank you for letting us know, we have changed all titles and headings in the manuscript to sentence case, i.e. first letter is a capital letter for the beginning of a sentence and the rest of the words are in lower case. Changes are marked in blue throughout the manuscript. We have also amended the ‘References’ section by removing reference number 14: 14. Duke-NUS. (n.d.). Class Profile | Duke-NUS Medical School. Retrieved May 26, 2016, from https://www.duke-nus.edu.sg/admissions/student-information/class-profile/ since we have already obtained IRB approval to access the students’ profiles. We also added two new references as suggested by reviewer Iain Keenan i.e. number 23 and 24.

3. Ethical approval and consent to participate declaration
Please ensure a statement regarding consent to participate is included within this declaration section.

Response: We have further clarified the ethical considerations in the methods section under the existing subtitle 'Ethical considerations" to further clarify that consent to participate was included in the ethical approval. Changes are in blue below.

(Refer manuscript line 204-207, page 12)

"Ethical Considerations

The study was ethically approved and given the exempt status by our institution’s Centralised Institutional Review Board of SingHealth (CIRB) committee. All students participated voluntarily and a declaration of informed consent was obtained before participating in the study. The CIRB reference number for our study is 2013/232/D."

4. Supplementary files

Any document attached as a supplementary file will be published alongside the manuscript. We therefore ask that you remove the supplementary file which currently contains your responses to the reviewer. Please ensure any new responses are uploaded on the submission system in the 'response to reviewers' box only.

Response: We have removed the supplementary files, which contain our responses to the reviewer and uploaded the new responses in the 'response to reviewers' box only.

5. Reviewer 1): Many thanks to the authors for making changes based on the previous reviewer comments. A critical approach in the context of the literature was advised. Many thanks to the authors for critically considering the nature of learning approaches with respect to the student population. However, it is also important to consider the possibility that, similar to the concept of learning styles, that while appealing, learning approaches could be an artificial construct that may depend entirely on the context, environment and topic being learned and could therefore be flexible and always changing, rather than being innate and fixed traits that students possess. The authors state that learning approaches may change over the course of a medical degree. Is it not likely that they actually change over the course of a day or even change moment to moment between different learning activities? This could mean that labelling students with one particular strategy is not helpful. I would therefore suggest that this possibility is considered by the authors, they refer to the following papers on learning styles as a guide:


Many thanks to the authors for updating the methods section. The procedure used to calculate scores is now clearer. It is also very helpful and effective to have calculated significant differences between approaches as outlined in the limitations section and I thank the authors for taking the time to do this. The other issues raised in the limitations section were also important to consider including the statement that this was a pilot study.

Response: Thank you to the reviewers for these references and highlighting an important fact that learning styles may indeed change over a shorter period of time than over the course of a medical degree. We have edited the discussion section to reflect the changing nature of learning styles and included the references given by the reviewer. Please see our changes in blue below:

(Refer manuscript line 344-355, page 18)

“Previous findings reported by Emilia et al [12] in an Indonesian medical school and Wickramasinghe et al [5] found that gender was not significantly associated with the predominant learning approach. In the Nepalese study conducted by Shankar et al, there was also no significant difference in scores by gender [10]. While our results were similar, it was interesting to find that the male students in our study are deemed to be less likely than female students to exhibit strategic learning, with p value = 0.06 almost reaching statistical significance of 0.05.

An important fact to also note is that learning styles may change over a shorter time frame than over the course of a medical degree. Learning styles indeed may change based on the context, environment and topic being learned and is likely a flexible changing trait rather than a fixed innate trait a student possess [23-24]. Our study is a pilot study and serves as a starting point for student awareness of different learning styles and to start reflecting on adopting more appropriate learning styles in different situations.