Author’s response to reviews

Title: Peer-Assisted Learning (PAL): Skills Lab Tutors’ Experiences and Motivation - Results of a Qualitative Interview Study

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Version: 2 Date: 23 May 2019

Author’s response to reviews:

BMC Medical Education
BioMed Central
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BMC Medical Education
Initial submission date: 03.04.2018
Dear Liam Messin,

Dear Ana Donnelly,

Dear Ladies and Gentlemen from BMC Medical Education,

Thank you very much for your e-mail dated 24th April 2019. We greatly appreciate the critical and helpful comments of your Editorial Board Member concerning our manuscript “Peer-Assisted Learning (PAL): Skills Lab Tutors' Experiences and Motivation - Results of a Qualitative Interview Study” (MEED-D-18-00296R1). These comments and ideas have been extremely valuable for us and we have carefully revised the manuscript a second time according to your recommendations thus tackling all remaining gaps adequately (resulting in a major revision which has clearly improved the manuscript). Below you will find our detailed responses to all points that have been raised (respective page and line numbers included). The manuscript is attached in two versions (with and without track changes). We would like to thank you for giving us the opportunity to submit another revised version of the manuscript.

With best regards,

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Editorial Board Member's comments with our point-by-point response

Cave: All page and line numbers refer to the manuscript version with track changes only!

Technical Comments:

(1) Please ensure that the abstract contains only the following headings:

*Background
*Methods
*Results
*Conclusions

Thank you very much for your comment. We have changed the abstract accordingly (see abstract on p. 2).

(2) Please change the heading 'Introduction' to 'Background'.

Thank you very much - we have re-named the heading (see heading of p. 3)

(3) Please provide a list of all the abbreviations used in the manuscript. This list should be placed after the Conclusions section. All abbreviations should still be defined in the text at first use.

Thank you very much for pointing out that we need to provide a list of abbreviations. This list can be found after the Conclusions section on page 46.

(4) Please move the 'Declarations' section. It should follow the List of Abbreviations section, and be before the References.

We have removed the 'Declarations' section, which now follows the List of Abbreviations section (see pp. 47 – 48).
Editor Comments:

My observations are indicated below:

1. Reviewer 1 (R1) has indicated that most of the themes in most of the findings are not unique and have been reported in a range of literature relating to PAL. I strongly agree with this comment. In line, I believe that the authors need to present their observations in light of other findings, which is currently missing in the present version of the manuscript.

To facilitate the process, I am highlighting the key observations which have been discussed under the seven categories delineated during the analysis. These observations should be discussed in light of other studies, highlighting the unique finding pertaining to the present research. Also, I believe the result and discussion sections should be presented together, because in the present version of the manuscript the discussion section is weak as a stand-alone section and mostly focuses on the aspect of social congruence, where as other key aspects have been left out.

Thank you so much for this constructive feedback. We greatly appreciate the enormous effort which you have invested in thoroughly reviewing our manuscript. Thanks to your advice we were able to improve the manuscript substantially. The key observations of the study are now clearly highlighted and discussed in light of other studies (see pp. 12 – 44).

The “Results” and “Discussion” sections are now presented together – thanks for this good advice. This guarantees that not only our findings about social congruence, but also other key aspects are elaborated on and being discussed in light of other studies.

After all our research project is – as far as we know – still the first to explore student tutors’ experiences and motivation concerning their jobs in a skills lab in 1:1 interviews.

a. Personal motive for working as a student tutor in a skills lab:

i. Improvement of Professional skills and career opportunities

ii. Social networking
The authors need to identify the “professional skills” referred by the tutors. These can include Leadership, Communication etc. In fact, a study by Burgess et al showed that peer-tutoring augmented leadership and pedagogical skills in the tutors. (Burgess, A., Dornan, T., Clarke, A. J., Menezes, A., & Mellis, C. (2016). Peer tutoring in a medical school: perceptions of tutors and tutees. BMC Medical Education, 16(1), 85.). The authors need to highlight, if these and other revelations are similar to other studies. Further, does PAL augment networking skills? Is there evidence for such in the literature? The authors need to highlight these as networking is an important aspect in medical education because learning and practice become inseparable when professionals work in communities of practice that create interpersonal bonds and promote collective learning. (Refer to J Contin Educ Health Prof. 2002 Fall;22(4):230-6.)

Thank you very much for your helpful comments – they are very much appreciated. Following your input, we hope that you will find that the section on “Personal motive for working as a student tutor in a skills lab” has been substantially improved. We have also acknowledged the suggested literature on peer-tutoring and collective learning (see pp. 12 – 15)

b. Defining aspects of the relationship between student tutors and student learner.

i. Better understanding of students’ learning needs.

ii. Relaxed atmosphere of learning

iii. Role model (empathy)

In this category the authors need to explore, if PAL can reduce learning stress, whereby they can refer to the article by Carr et al (BMC Med Educ. 2016 Feb 4;16:48. doi: 10.1186/s12909-016-0566-8.); for empathy the article by Diana Cundell. (Culturing the Empathic Health Professional: Challenges and Opportunities, Healthcare Transformation, 2, 2, (71), (2017)). Also, for the atmosphere of learning, the author can compare the observations with studies that have looked at Students’ perception of teachers (especially using the DREEM questionnaire) and then comment on the aspect how PAL alleviates the identified shortcomings. The aspect of social congruence can be indicated under this heading.

Thanks to all your valuable suggestions and the most helpful input. We re-wrote the whole passage following your suggestions. However, we refrained from naming the third subcategory “iii. Role model (empathy)”, as we found it to be more about student tutors being role models than about the construct of empathy. However, we did elaborate on DREEM and students’ perception of teachers (see pp. 15 – 19).
c. Practical aspects and experiences of working as a student tutor

i. Use of activities to elaborate on concepts

ii. Employ open type of communication

The authors here need to specify the various activities that the peer-tutors employed during the various sessions. Have similar activities been used previously in other studies? When the authors indicate Open type of communication approach was availed, they need to cite an example that was employed by the tutors. Can they relate it to the fact that this may be beneficial for the development of communication skills? In fact, PAL has been shown to improve communication skills (Belsi A, Murtagh G; MedEdPublish

https://doi.org/10.15694/mep.2018.0000135.1)

Thank you very much for your helpful suggestions on how to restructure this section. We have changed the manuscript accordingly and have acknowledged the suggested literature on communication skills (see pp. 19 – 24).

d. Specific methodological and didactic approaches

i. The authors need to highlight the different pedagogical methodologies and didactic approaches that were availed by the tutors. Were these pedagogical strategies curated/vetted prior to peer-tutoring sessions began? Mostly, such lessons are designed along the lines of Gagne’s instructional model to have a standardized delivery protocol. For sessions focusing on the delivery of practical skills, often Gagne’s instructional model is blended with Peyton’s approach.

ii. The authors have indicated several times in the manuscript about Peyton’s Approach consisting of Demonstration, Deconstruction, Comprehension and Execution. They need to elaborate this aspect with the examples from pedagogical strategies availed by the tutors.

Thank you for pointing out that we need to be clearer here. As a consequence we re-wrote the whole passage. The different pedagogical strategies used by the student tutors are not curated or vetted officially (e.g. in terms of an exam that has to be passed), as this would contradict the principles of our skills labs. Instead the student tutors are continuously trained and supported, as outlined in the revised manuscript. Thanks for bringing up Gagne’s instructional model, which we were happy to elaborate on, as we do indeed blend some of Gagne’s steps with the steps of Peyton’s approach (see pp. 24 – 28).
e. Perceived expertise and dealing with classroom challenges

i. Increase in self-confidence

ii. Emotional progression

I will request the authors to refer to the excellent article by Karen Arand (https://www.beds.ac.uk/jpd/volume-4-issue-1/peer-tutoring) to elaborate on these aspects.

Thank you very much for your helpful input. We have also acknowledged the suggested literature by Karen Arand (see pp. 28 – 34).

f. Self-expectation and self-reflection

i. The authors have indicated that the study revealed that in order to be good tutors one should possess professional competence, didactic and pedagogical skills, organizational talent and personal motivation. Each of these terms need to be defined for the reader. When the authors mention didactics are, they referring to elenctic method?

ii. Also, when the authors indicate self-reflection are, they referring to “Reflection in practice or Reflection on practice”, as both of these connotations need to be dealt differently. Further, the authors need to indicate if peer-tutoring increased capacity to reflect for the peer-tutors.

Thank you once more for pointing out that we need to be clearer here. We re-wrote the whole section on “Self-expectation and self-reflection”. Each of the terms (including didactics which we used as a broader term, not referring to the elenctic method) used is defined now, which makes the text much more comprehensible. We also made it very clear now that the interviewed students were talking about reflection on practice (see pp. 34 – 38).

g. Development and the influence on how the student learners progress

i. Development of technical and didactic skills.

Again, the specific technical skills which are referred to here, should be elaborated upon.

We now give some examples for the skills referred to (see pp. 38 – 39).
2. Reviewer 2 (R2) recommended that the abstract be rewritten, as the gap addressed by the authors in the present study isn’t clear. The authors have identified the gap in the BACKGROUND section of the abstract. However, the sentence “This makes it hard… in the skills lab”, is redundant, and adds little to identify the gap addressed in this study. This sentence should be removed.

We have removed the sentence accordingly (see p. 2, line 5).

3. The Method section can be elaborated through (this was highlighted by R2):
   a. Description of the questionnaire
   b. Participants’ expertise and stage in medical training.
   c. Number of participants in the current study (inclusion, exclusion criteria and recruitment) (better to add number of participants both in Methods and results)

All missing information was elaborated on. However, there was no “questionnaire” apart from the short questionnaire on sociodemographic data used in our study. Since we were not sure whether we understood your objection correctly, we described both the sociodemographic questionnaire and the interview guideline in the revised “Methods”-section. Exclusion criteria are rather untypical for qualitative studies on a small sample, where you deliberately want to collect all kinds of information (see pp. 5 – 10).

4. One of R2’s comments enquires why semi-structured interview (SSI) and the framework underlying SSI. This comment needs to be addressed, as it hasn’t been in the present version of the manuscript. Yes, the authors have indicated that SSI is one of the best interview techniques in qualitative research, but it doesn’t address R2’s comment. I believe the authors should indicate in the manuscript that SSI establish subjective responses from participants regarding a specific situation or phenomenon they have experienced. SSI involves a detailed interview guide or schedule and is most often used when there is sufficient objective knowledge about an experience or phenomenon, but the subjective knowledge is deficient. Evaluation of the objective knowledge constitutes the framework for the development of this guide and foci for the development of the interview question stems. Because all participants are asked the same questions in the same order, data collected are comparable and helps the investigators to capture perceptions with regards to a specific situation or phenomenon. By adding the above, the rationale for the use of SSI in the present study as well as the benefit of SSIs will be highlighted to the reader.
Thank you very much for your comment. We have added your brilliant thoughts on this point (justification of the use of SSI) to the revised version of our manuscript (see pp. 6 – 7).

5. The word abbreviation for the word COREQ should be provided, which is COnsolidated criteria for REporting Qualitative research (Page 8 Line 4).

We provided the word abbreviation as well as the requested list of abbreviations (see p. 9, line 15 – 16 & p. 46).

6. R2’s comment that the study lacks epistemological grounding is correct. I do not understand why the authors tried to bypass this comment in their rebuttal. Epistemological beliefs are essential postulations about the nature of knowledge and learning. Researchers have established and validated epistemological beliefs can change when students work collaboratively and when they are given opportunities to reflect on their thinking and evaluate their beliefs. The authors can refer to the following references if they want to elaborate:


Research by Schraw (Schraw, G. (2001). Current themes and future directions in epistemological research: A commentary. Educational Psychology Review, 13(4), 451-464.) presented the ideas that schools should endeavour to change epistemological beliefs through discussion and modelling. Cumulatively, these studies showed specific educational environments could encourage the students’ epistemological beliefs. The authors now need to present hypothesis that they have addressed in the present study in line with the epistemological principles. This section can be included in the Context section.

Thank you very much for your comment on the epistemological grounding. We had understood the R2’s comment differently, which might explain, why you were not satisfied with our rebuttal. However, you made this point much clearer now. Please find our remarks on the skills lab’s “educational environment” or epistemological grounding in the revised “Context”-section of the manuscript (see pp. 5 – 6).
7. The limitation section lacks (A) Comment on the power of the study; (B) Questionnaire design and validity; (C) Lack of Feedback from the students on peer-tutors. These need to be touched upon.

We touched upon all these topics in the revised “Limitations”-section, although some of them are more typical for quantitative studies (see pp. 44 – 45).

I believe the other comments of the reviewers’ have been suitably addressed. However, specific gaps still remain in light of specific comments (indicated in my letter), which still need to be tackled adequately, prior to the acceptance of the manuscript for publication in the journal.

Thank you so much for this positive feedback. We greatly appreciate the effort which you have invested in reviewing our manuscript and hope that you like the revised version of our study.