Reviewer's report

Title: Elective anatomy by whole body dissection course: what motivates students?

Version: 2
Date: 2 November 2014

Reviewer: Wendy McMillan

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GUIDELINE QUESTIONS

1. Is the question posed by the authors well defined?
A research question is not explicitly named. However, a purpose is given in the introduction. The lack of research question signals a weakness in the article which has resulted in a tension between various statements of the purpose of the study. I have annotated the places where this has happened on the actual article. A clear research question would have allowed the authors to use the research question to define the purpose of the study and so would have resulted in a better, tightened and more focused article.

2. Are the methods appropriate and well described?
The methods are appropriate, but are not discussed in adequate detail. It appears that the study design may have come after the data collection – in other words, an evaluation of the course was conducted, and interrogation of this feedback revealed patterns which were then subjected to rigorous scrutiny through the lens of self-determination theory. If this is the case, this methodological dilemma should be made clear and the rationale explained. If it is not the case, then more detail is required to describe the actual process of the study.

3. Are the data sound?
The data is sound. It substantiates both internal analytical claims, and claims for the usefulness of self-determination theory as a lens for understanding students' motivation.

4. Do the figures appear to be genuine (ie, without evidence of manipulation)?
There are no figures in the article. However, the quotations are plausible. Does the manuscript adhere to the relevant standards of reporting and data deposition? Yes, the manuscript adheres to the relevant standards for reporting.

6. Are the discussion and conclusion well balanced and adequately supported by the data?
The discussion and conclusion speak directly to both the theoretical framework and the data. No claims are made which are not substantiated with convincing
data. This reviewer does, however, have some reservations about the nature of what is included in the conclusion. An annotation on the article indicates this concern which relates specifically to the relevance of the findings from the article. The authors need to consider the relevance of their findings to a broad audience of health professions educators. The relevance of the study for the improvement of their own course is not an adequate motivation for relevance at this level of dissemination.

7. Are the limitations of the work clearly stated?
The article contains a limitations section, but does not address limitations such as the voluntary nature of this course. The limitation which is noted relates to the authors# understanding of the nature of qualitative research and need to be made clearer. I have made an annotation in this regard on the actual article.

8. Do the authors clearly acknowledge any work upon which they are building both published and unpublished?
Yes, the authors reference adequately.

9. Do the title and abstract convey what has been found?
I have made an annotation on the article in this regard. The lack of clarity of purpose means that different parts of the article are not completely aligned with regard to purpose. Once the purpose has been clarified, the authors should check whether the title speaks to their purpose.

10. Is the writing acceptable?
There are some minor errors which I have indicated on the annotated article.

REVISIONS

Major compulsory revisions
These revisions will not require significant reworking of the structure of the paper, but will require substantial engagement with claims made within the paper.

1. The purpose of the study needs to be clearer and more explicit. The same purpose needs to be highlighted and „spoken to# across the whole article. Annotated comments on the article will give guidance regarding the places where the article purpose is not aligned. Starting from a clear research question – and including that question in the article –will help focus the aspect of purpose.

2. The significance of this study and its findings needs to be considered. I have made annotated comments on the article. I would argue that repositioning the significance of the study will result in an article which has wider audience relevance.

As it stands, the article makes claims for the findings to support curriculum review of the course. This claim has little relevance for an outside audience.
However, claims related to the significance of using a theoretical framework (or for this particular framework) would give the findings greater applicability. The authors might consider making claims about what this particular theoretical framework might allow medical education researchers to do and find out. Or, they might make claims about how using a theoretical framework per se (rather than merely describing the literature) allows medical education researchers to understand particular aspects of their teaching and learning. McMillan (2010) may be helpful in this regard.

McMillan, W. J. (2010)
Moving beyond description: Research that helps improve teaching and learning.

3. The authors make claims regarding the successful nature of the course which need to be reconsidered or repositioned. High marks from students in a foundational course, like anatomy, may not mean that the course is successful. In teaching and learning, something is successful when students can do something with it – such as apply what they have learnt at the bedside or in an ambulatory context. Also, the authors need to acknowledge that students who volunteer for something are more likely to put effort into it (and so do well academically)

4. As the article stands, there is inadequate background information provided to contextualise the course being discussed in the article. I would suggest a brief context section – either as a paragraph within the introduction or as a small separate section near the beginning of the article. Such background detail should include the nature of the programme, where the course fits into the programme, and who the students were who registered for the course. I have highlighted these aspects in the annotations on the article. This information is necessary so that the reader can make judgements about the feasibility of analytical claims and claims for significance.

5. The methodology section needs more detailed discussion. I have made annotated comments in this regard on the article. It was not clear whether this study was conducted using student course evaluations and a grounded theory approach, or whether the study was designed with the theoretical approach of self-determination theory and data was collected systematically with this analytical framework in mind.

Minor essential revisions
There are no minor essential revisions.

Discretionary revisions
There are no discretionary revisions.

Minor issues not for publication
There are a number of spelling, typographical, grammatical and stylistic errors and suggestions which I have annotated on the article.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests: None