Author's response to reviews

Title: What makes a great radiology review course lecture? The Ottawa Radiology Resident Review Course experience

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Author's response to reviews: see over
Dear BMC Medical Education Editorial team,

Please find the following point by point summary of revisions to our manuscript.

Reviewer 1 comments:
I. Major Compulsory Revisions
The single-rater video reviews are problematic. Tallying the number of times a thing happened seems objective to me and therefore “safe” for a single person to perform without replication. However, the subjective parameters of speaker spontaneity, tone, and image quality do not yield valid results for a single rater, especially with a 5-point Likert scale whose anchors are not defined. These questions should be added to the post-presentation attendee evaluation and analyzed after further rounds of data collection.

Unfortunately, some of the significant results came from two of these subjective parameters (speaker tone and image quality), so I am sure the authors will be reluctant to discard the data. A compromise to reduce the subjectivity may be possible. If those three parameters could be strictly defined and then rated as part of the presence/absence data, this method might restore objectivity. For example, the speaker would be rated as “dynamic” in tone if a certain number of pitch changes were noted by the rater (that’s just an example - the authors would define the parameters, of course). This will require a little bit of re-analysis on the part of the authors, but potentially eliminate the most problematic aspect of the study.

However, if the editor does not believe that my suggestion solves the issue, then those results will have to be removed from the manuscript.

Author Response: We agree that the subjective elements that were included were troublesome and we have removed the speaker tone and spontaneity components. The requested revision of re-wording the pos-presentation attendee evaluation would require us to wait until the next course (March 2014) and is not feasible. We have not eliminated image quality since we feel that it is not strictly a subjective assessment, but a hybrid subjective/objective one. In order to mitigate this, we have elaborated on the requirements for image quality rating that were used in the methods as follows: “Image quality was assessed by reviewing recorded lectures and scored on a subjective 1-5 scale with 5 being best. Higher scores were awarded to talks with images that were properly cropped and possessed suitable contrast and clearly demonstrated the relevant findings. Presentations with these traits for all of the images were scored as 5, for only half were scored as 3 and for none were scored as 1.”. We hope that this compromise is acceptable to the editorial team.

II. Minor Essential Revisions
The following must be addressed before publication.
Introduction:
• The introduction cites four references for factors that may go into making a great radiology lecture. These refs are underutilized in the manuscript. What do
they say? What is common practice or common belief in the field of radiology presentations? Do your parameters draw from these references? That first intro paragraph should be fleshed out a bit. This is the set-up for your experimental design and your discussion.

**Author Response:** Introduction was revised to include current dogma in the field of radiology presentations with references to the literature.

Methods:

- The methods section is mostly acceptable, but the last sentence before Data Extraction is very unclear. I am not sure that the equation would actually make a percentage, and what was the percentage calculated for? What purpose did it serve and where was it reported? Please clarify this.

**Author Response:** The last sentence before Data Extraction was revised. The audience scores in our database have been standardized out of 100.

- Please report the year and version of Microsoft Excel that you used to calculate the statistics. It may seem like a pedantic point, but older versions of Excel have well-published bugs even for simple statistics.

**Author Response:** Done.

Results:

- The results reference only those parameters that had statistically significant p values, but all of the parameters are listed in the tables. Perhaps the parameters could be organized by p value, starting with the most significant. The text should introduce these in the same order. This may require some alteration of tables and text, but would save the reader a lot of trouble.

**Author Response:** Parameters are now organized by p value, starting with the most significant and introduced in the same order.

- Tables 1 and 2 were referenced correctly, but Table 3A was never referenced at all and 3C was not included in the document I received. Tables must appear and be numbered in the order in which they are referenced in the text. I see the necessity of splitting up 3A, B, and C, but they must be in order.

**Author Response:** Correction made.

- When reporting p values in Table 3, the text skips around between 3B and 3C, which is acceptable, but referencing the specific table after each p value (at the end of the sentence) would help the readers greatly.

**Author Response:** Correction made.

- Table 4B is also never referenced in the text.

**Author Response:** Table 4B is referenced.

- In the text results of Table 3A cases-per-minute, the p value is reported incorrectly (missing a zero that takes it from significant to insignificant!).

**Author Response:** Correction made.

Discussion:
The factors or characteristics in references 1-4 should be compared to your results in the Discussion section. Your results are quite interesting and would be more powerful if compared to what is currently known or accepted in the realm of Radiology lecture presentation. Do your quantitative results support or not support any long-held but previously untested beliefs in the field? As you mention, your finding that more images do not make a better presentation is very interesting in that light. Direct comparison of your results to your references may bring more of these interesting points to light.

**Author Response:** Factors or characteristics in references have been compared to our results in the Discussion section.

Your results in Table 1 are also underutilized. The attendee comments are reported, but not integrated into the quantitative results at all in the discussion. Please explore this and bring any notable patterns to the discussion.

**Author Response:** Point added to discussion: “The comments from attendees point to some possible areas for further research such as organization, pace of talk, volume of speaker and accuracy of slides.”

References to tables have been given for P values quoted in the text.

At some point, you should discuss the parameters that were not found to have a significant p value, especially those that had a low p value that may not have reached statistical “significance,” such as number of times the audience laughed. Comparison to references 1-4 will be helpful here, as well.

**Author Response:** Parameters that were not found to have a significant p value, especially those that had a low p value that may not have reached statistical “significance” have been elaborated upon.

III. Discretionary Revisions:

The methods say that there were 57 presentations given by 39 speakers. For speakers who presented more than once, did they perform consistently? Did they have consistent strong or weak points in the same parameters each time? It’s not essential, but there could be something to be learned if there were any multi-session speakers who were consistently good.

**Author Response:** Point added in the discussion: “An interesting additional finding is that for presenters who gave more than one lecture, the scores were consistently within a narrow range of less than one standard deviation from each other.”

Reviewer 2 Comments:

Major Compulsory Revision

1. The discussion section can perhaps be elaborated on. Perhaps, more evidence and business literature can be cited. What makes a good presentation in general, keeping the audience engaged, asking them questions, knowing the
material well etc.

*Author Response*: Discussion elaborated on.

2. Collection of subjective data does limit the study. Perhaps, the subjective variables could also be reviewed by other individuals.

*Author Response*: Tone and spontaneity removed as discussed above in first response to reviewer 1.

3. What is defined as speak spontaneity?

*Author Response*: Spontaneity removed from analysis.

4. How is the tone being graded?

*Author Response*: Tone removed from analysis.