Author’s response to reviews

Title: Differences in outcomes of scientific writing among researchers using standard and online instruction - A randomized controlled trial.

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Version: 3 Date: 19 February 2009

Author’s response to reviews: see over
Author's response to reviewers

Title: A randomized evaluation of the quality of scientific writing using Web-based versus traditional workshops (MS ID : 2009275192113625 )

New Title: Differences in outcomes of scientific writing among researchers using standard and online instruction - A randomized controlled trial

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Version: 3 Date: 18 February 2009

Author's response to reviewers: see over
February 18, 2009

To: Natalie Pafitis

Senior Assistant Editor BMC-series Journals

BioMed Central

Dear Natalie,

We thank you for doing a thorough review of the manuscript “A randomized evaluation of the quality of scientific writing using Web-based versus traditional workshops” MS ID: 2009275192113625 and providing your esteemed comments. We have tried our best and revised the manuscript as per the reviewers’ comments.

Accompanying this letter, please find a revised version of our manuscript. Detailed responses to the reviewers are included following this page with the relevant modifications implemented in the text of the manuscript.

Best regards,

Ricardo Pietrobon, MD, PhD, MBA,

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Reviewer 2

General Comments: All components of the manuscript had been greatly improved in the revision. As this skill is often learned on an individual basis with or without a mentor, where is the experience with a group intervention on the impact of scientific writing? Have there ever been any studies of the impact of group interventions on teaching scientific writing? This would seem to me to be an important part of the background. As this is a manuscript on improving scientific writing, I think it is particularly important that the authors "practice what they preach" and offer the best presentation of this research.

Response: The relevant literature is now added as suggested.

Abstract Section

Comment: The background section of the abstract is too long.

Response: We have revised the background section and made it shorter as suggested.

Comment: In the methods section, omit the sentence on the STATA statistical software.

Response: The sentence is now omitted.
Comment: The interventions should be stated in the methods section, not in the background section.

Response: The background section has been revised wholly and the required changes implemented in the methods section.

Comment: In the results section, omit one instance of the numbers that are stated twice in the same sentence (4.3+0.73).

Response: Yes, this was noted and we have deleted one instance of the number.

Introduction Section

Comment: Why is online always capitalized? There are several grammatical errors scattered throughout the introduction. Careful rereading or internal peer-review would help improve the grammar and even make more concise.

Response: Due attention has been paid to the grammatical errors as well as an effort was made to improve the presentation of the text.

Methods Section

Comment: Were there any exclusion criteria. This should be stated, one way or the other
Response: We had added a new section with reference to this comment.

Comment: The first sentence in the section entitled “Online writing workshop group“ is potentially confusing to the reader as to what the intervention is in this study versus what is possible in a virtual environment. Omit the first sentence, as the second sentence suffices.

Response: The whole paragraph has been rewritten to avoid confusion and to make it more precise.

Comment: The simple checklist for the SSQS should be attached as an appendix.

Response: We have done this now.

Comment: Were the participants in the qualitative study drawn from the pool of participants in the quantitative study?

Response: Yes.

Comment: If the results of the qualitative study are not presented here, it should not be presented in the methods section.
Response: The relevant text about the qualitative study is now eliminated from the Methods section.

Comment: The sections on sample size and randomization should come earlier in the methods section, perhaps after the recruitment inclusion criteria sections.

Response: Changes made now according to reviewers instructions.

Comment: Consider combining “interventions” and “implementations” sections for the two groups (arms) of the study, as the methods section is getting a little too long to sustain the reader’s interest.

Response: We have taken care of length of our methods section as advised and the two sections are now combined.

Comment: The section on blinding should come near or be included in the section on outcomes and assessment strategies, especially since it is a single sentence.

Response: Yes, we have shifted it to the end of Outcomes and Assessment strategies.
Comment: The two arms of the study in Figure 1 are still named with a different terminology than in the manuscript.

Response: The figure has been corrected.

Comment: How does the “quality rating guidelines” included as an appendix/additional file relate to the manuscript?

Response: This scale was used to generate SSQS scores thus making the evaluation of quality of manuscript as objective as possible.

Results Section

Comment: The timeline suggesting that recruitment as early as 2005 and ending in 2007 could mean that twice a week communications between mentor and student could have lasted for greater than a year. Is that correct? The timeline is important as many online tasks get pushed back. If completion of this timeline took more than six months, I would be concerned, if it were not by design, that this may be a drawback of online learning.

Response: As all the participants did not start at the same time, the duration or the length of follow up for individual subjects varied and therefore even the duration of the completion of whole study which extended beyond one year.
Comment: Table 3 is unreadable in my version. Authors should make sure that it comes across as understandable in the final version.

Response: Due care was taken this time.

Discussion Section

Comment: As the author knows, statistical significance is not the same as clinical significance. Does the difference in SSQS truly mean a clinical difference as well? Especially in light of the need for better tools for measuring writing quality, as you have stated, some interpretation of the multicomponent SSQS could be helpful.

Response: There is no agreement in the literature about what clinically important difference is. Even assuming that there was a single standard, there are no studies evaluating such a concept for SSQS. Therefore we can only report with our statistical results. Here are a few related references:

Comment: The mention of “vital thinking” simulation and its relationship to user satisfaction may raise more questions than is beneficial.

Response: The sentence is eliminated from this study now as we agree with the reviewer.

Comment: With paragraph 3 of the discussion, an important distinction is that, the lack of significant differences between outcomes in these studies actually argues for the online strategy, if the outcomes are the same. The other advantages of online
learning (easy scalability, scheduling/timing) become more important, if the new
approach is at least as good as traditional teaching.

Response: Keeping in mind reviewer's comment, additional text has been added.

Comment: In the paragraph on blackboards, blackboard is a proprietary name and should be treated as such (trademark, etc). The generic term blackboards means something else. Nevertheless, the comparison with Google docs is useful.

Response: We have taken note of this and also provided link in the manuscript

Comment: In the paragraph on limitations (line 7), a “not” is missing that totally reverses the meaning of the sentence.

Response: This is taken note of and rectified.

Comment: In the paragraph entitled future studies, “future studies should address this issue” should reference specifically which issue you are talking about. The suggestion that better tools should be developed to objectively measure writing
quality suggests uncertainty that the SSQS is a good tool for this purpose. If that
indeed is the case, perhaps it should be a limitation, or at least mentioned in the
discussion.

**Response:** The "Future direction" has been completely revised as per the reviewer's comments. Also the limitation with reference to SSQS scale is added in the limitation.

**Comment:** Capitalization of words such as online, post hoc and misspellings such as self-reported are distracting and are inconsistently used throughout the manuscript. The title itself poses a grammatical problems and should be reworded.

**Response:** The errors are taken care of. The grammatical problems in the title have been resolved.

**Comment:** The references are still not in the format required by the journal.

**Response:** The reference list has been completely modified to meet journal requirements.
Reviewer 3

Comment: On page 11, 1st paragraph: “Focus group discussions were transcribed using Conventional Qualitative Analysis techniques and the results of this study have been reported elsewhere (37).” I think this is a mistake. It reads as if they reported the detailed description of the qualitative methodology from their study in an article published in 1998! They must clarify to mean that for a more detailed description of qualitative methods please refer to (37). It is possible that the authors made a mistake in the reference number.

Response: Yes, we agree it was a mistake from our side, the reference number was a typo, we had to add 39 instead of 37. Corrections have been made.

Comment: On page 20, conclusion is overstated: “Our study suggests that online courses are generally superior to traditional scientific writing classes” I think they cannot make that assertion based on the results of their study. They can only conclude that their online module was superior to their traditional approach.
Response: The text has been revised as suggested.

Reviewer 4

Introduction section

Comment: A detailed description of the authors definitions of distance learning and e-learning are provided, but without a reference. To describe e-learning as an offshoot of distance learning is somewhat disparaging of e-learning. e-Learning is described by JISC (Joint Information Systems Committee) as 'learning facilitated and supported through the use of information and communications technology',

http://www.elearning.ac.uk/effprac/html/start_defin.htm

This means that the classroom–based group had support that could be considered to have an e-learning component, so it is important to reference the definitions.

Response: The references have been added and the text modified as suggested
Methods Section

Comment: It has now emerged that some participants came from Brazil and USA, it is good to see this stated, although the numbers, primary language and whether the online course and mentor support was in English or Portuguese is not stated.

Clearly some student manuscripts were written in Portuguese and translated, as this is was stated as being checked by one observer. As stratification on the basis of origin was not carried out, this should be alluded to in the limitations of the study.

Response: Relevant changes have been implemented in the manuscript. Additionally the suggested point has been added in limitations section.

Comment: It is good to see the definitions of abbreviations, statistical measures clarified and an explanation that the qualitative analysis is published elsewhere. However, the reference number for the 'qualitative analysis elsewhere' needs to be corrected.
as 37 refers to a paper from 1999. 39 appears to be the correct reference.

**Response:** Yes, this was a mistake and we have corrected it.

**Comment:** A clear comment needs to be made in the methods that students completed differing sections in the manuscripts. The results section (Table 2) shows that there is no difference between two sections of the manuscript completed by the students.

**Response:** We have added this comment now.

**Comment:** An experienced researcher from ‘our’ group provided guidance to participants who wished to formulate their own research question. What is ‘our’ group?

**Response:** We have replaced “our” by “Research on Research group” now.

**Comment:** The clarification that the communications events were a post-hoc analysis and
that the qualitative analysis was reported elsewhere are a good improvement.

However, a short summary of the relevance of qualitative findings relating to this study (but reported elsewhere) would be helpful.

**Response:** Following the contradicting advices of the reviewers and since the qualitative study has been published elsewhere (Shah et al, 2009) the mention of qualitative study has been removed from the methods and results sections. This has been done to avoid confusion for the reader.

**Comment:** The manuscript is now well set out and clear, having been extensively rewritten.

However, the references need attention.

References 29 and 32 were noted to have been last accessed on the web in 2002. Reference numbers do need checking.

**Response:** The references are added and the text is modified as suggested

**Comment:** The limitations section is important. However, the first sentence is not helpful

“We could not address all potential confounders listed earlier” Where were they listed, what are they? A comment concerning no stratification and issues concerning potential
differences between students from Brazil and USA should be made here.

**Response:** We certainly agree with the reviewer's point about the dearth of information in the limitations section. We have now revised this section considering the lack pointed by the reviewer.

**Comment:** Such work is discussed in the introduction and revisited in the discussion, however, the Future work section is very brief and needs a little expansion.

**Response:** The references have been added and the text modified as suggested.

**Comment:** This paper has been extensively revised and is now much more clearly written, with care in answering and/or addressing all the comments. However, there are still mixtures of first and third person descriptions in differing parts of the manuscript and some lack of attention to detail is still evident.

**Response:** We tried our level best to take care of these mistakes and hope we have successfully covered all the errors.