Reviewer's report

Title: Tutoring in problem-based learning medical curricula: the influence of tutor background and style on effectiveness

Version: 3 Date: 31 March 2005

Reviewer: Anthony Staines

Reviewer's report:

Overall assessment

Nice, interesting piece of work. Should be published subject to minor amendments. Basically needs a clearer report of the analysis, and (probably) a minor re-analysis of parts of the report.

Title Page

Abstract

Could give a little more detail. Not sure that the conclusion is a fair summary of the paper.

Page 3

Add references


Page 4

Discuss the findings in references (7 â€“ 9), on staff vs. student tutors, probably not enough to say that they are inconclusive. 'MBBS Program' might be better described as medical program, as not everywhere uses these degrees.

Page 5

It's hard to see exactly how many groups and tutors took part in the program. It might be worth presenting response rates by student, by tutor and by group, perhaps in a table.

Page 7

I assume the quotations after each scale are items from the questionnaire?

Page 8

Analysis is not well described. There are many different types of factor analysis, and these are based on different assumptions, and give different answers. The data come from a highly structured design, and it is unclear how this has been accommodated in the analysis. SPSS supports a range of methods for analysing clustered studies, or multi-level studies, and these should arguably have been used.

Page 9

General linear modelling is a term covering may different types of model, including linear regression, logistic regression, Poisson regression and others. Which type of model was used here? Backward elimination is known to be biased, and the p-values produced defy simple interpretation (See for example Hosmer and Lemeshow 'Applied Logistic Regression 2nd edition pages 120 and 121). Simply using statistical significance as a decision criterion won't work. Correlation coefficients don't measure the strength of an association, but it's closeness to a straight line, regression coefficients are more useful here, perhaps expressed as standard deviation units.
I'm not clear exactly where the overall score came from â€” is this a global assessment of effectiveness by students, or is it a composite of the individual scores? This should be made a little more explicit in the methods section.

There should be some discussion of the practical (as opposed to statistical) significance of the results. Table 2 could be interpreted as saying that there are no major differences between the various tutor groups.

See the comments about practical and statistical significance above.

The comment about 'consistently score higher on each of these measures' may be a little strong.

Correlation coefficients are not suitable here.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests