Reviewer's report

Title: The Modified Essay Question: does it still have an effective role in assessment? Research Paper

Version: 1 Date: 27 May 2007

Reviewer: David Swanson

Reviewer's report:

General
This is a well-written manuscript that compares the characteristics of MCQs and MEQs for the assessment of medical problem-solving skills. Though the scale of the study is fairly small, involving only three exams from a single institution, it appears to be well done and the analysis of the problem and discussion of study results are very well done.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. As the authors note in the manuscript, both MCQs and MEQs can be written well or poorly, and results probably relate more to the construction of the specific items included in the study than the MCQ and MEQ formats. This is actually the major weakness of the paper: it is difficult to judge the generalizability of the results, since the results could be quite different for the next sets of items they reviewed. It seems possible that the authors could usefully conduct additional analyses to look at the generality of the results. For example, if the authors of the MEQs and MCQs are known, analyses could be performed of the extent to which the results are consistent across authors, viewing items as nested within authors.

2. In the discussion, the authors mention the use of stepwise inclusion of patient findings in MEQs to measure sequential problem-solving skills, though it appears the test material used in the study did not do this. They may wish to elaborate on this, both in the context of MEQs and MCQs. With the use of computer-based test administration, it is quite possible for cases to “unfold,” with examinee responses in either format collected at one point in a case before additional information is presented. This is a fairly promising idea, particularly for looking at examinees' skills in care of patients with chronic problems. In this regard, the authors may wish to look at Berner, Bligh and Guerin (1977, Medical Education, 11:324-328) for a discussion of “sequential management problems,” a similar format that appeared to alleviate the content specificity encountered with written clinical simulations.

3. The results depend crucially on the coding of the MCQs and MEQs as testing knowledge, comprehension and problem solving. To aid in study interpretation, the authors should include sample test material with the associated codes. For MCQs, it would be useful to have one item coded at each level. For MEQs, the same would be useful – if possible, perhaps the authors could provide a single multi-stage MEQ in which two or all three levels are represented.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

NONE

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Discretionary Revisions (which the author can choose to ignore)

NONE

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.