Reviewer’s report

Title: How to set the bar in Competency-Based Medical Education: Standard setting after an Objective Structured Clinical Examination (OSCE)

Version: 0 Date: 30 Aug 2015

Reviewer: James Kilgour

Reviewer's report:

This is a well written and interesting paper. Although the investigation of the validity of the modified Angoff method is not particularly original (and the authors have not strongly established that the validity is likely to significantly differ in the setting of postgraduate training) this paper does take it further and analyses whether or not the modified Angoff method can credibly be used to establish two pass marks for a single OSCE assessing two cohorts of different experience levels, as part of a competency-based medical programme. It provides some indication that indeed, the modified Angoff method is valid for such use.

However, what the study fails to elucidate is whether or not the modified Angoff method is truly credible/valid for junior students. Whilst the authors have shown that using the modified Angoff method for senior students is valid (through comparison to the established BLR/BG methods), they have not shown the same for junior students. The results of this study reveal that for these junior students, there is a significant decrease in the pass mark, resulting in a significant reduction in the number of fails. Whether or not this new pass mark is veritably valid/credible has not been established, which is an important omission in the study design.

In addition, whilst on the whole this is a well written and readable manuscript, there are several occasions where the authors have made statements which have not been adequately cited (see minor revisions below). The authors should review the whole manuscript for such errors.

MAJOR REVISIONS:
Results: exact p-values and confidence intervals have not been provided.

Discussion: there is very little awareness/discussion of the limitations of this study.

MINOR REVISIONS:

Page 5, Line 9: "judges review the each question"

Page 6, Lines 24-29: "the lead author discussed the modified Angoff method individually with each judge..." it would be useful to give more detail about the exact nature of the training that each judge received. Did the judges have previous experience of standard setting?

Page 7, Lines 4-12: This section requires citations.

Page 7, Line 48: 'validity' would perhaps be a better term than 'credibility'

Page 9, Lines 38+: This entire paragraph is lacking citations.

Page 10, Line 14-21: "However, there had been some concern that..." this sentence requires a citation.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English  
Please indicate the quality of language in the manuscript:

Acceptable

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