Reviewer's report

Title: When empathy is higher in senior than in first year medical students: A cross-sectional study

Version: 2 Date: 4 May 2011

Reviewer: Barbara Griffin

Reviewer's report:

The authors have improved their manuscript and adequately addressed most of the issues raised in the original reviews.

1. My ongoing concern is the psychometric properties and construct validity of the instrument used to assess empathy. The authors really need to present more critical analysis of their results. For example, explaining only 37.4% of the variance is very poor and the ambiguous loadings of items 3 and 12 and poor loadings of items 16 and 19 are enough to call into question the results.

Although the authors have added some text regarding the construct validity of the instrument (Major Revision No. 1) early in the paper, they continue to draw conclusions about the empathy of their students, when it is really the understanding about empathy not actual empathy that was measured. Knowing what one “should do” is very different to actually doing it, and it is really no surprise that senior students have greater knowledge of what one should do.

2. A minor point, but the interactions between gender/specialty and stage of training have not been discussed prior to the Results section. I understand the authors’ argument (Major Revision No. 2) that Hypothesis 2 and 3 need less focus – but if these hypotheses are “not original,” “a repetition of what others have said,” and “would not add significant value”, one wonders why they are included at all.

3. typos on pg 5 line 3 "others" and on p.6 line 7 "to fill" could be replaced with "to complete"

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