Reviewer's report

Title: Factors important in the choice of a medical career: a national study

Version: 4 Date: 25 May 2015

Reviewer: Kate Mandeville

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Overall

The authors have undertaken thorough revisions. Tables and figures are much clearer now.

Major compulsory revisions

1. The authors have done a good job with the revisions to the introduction, however I still don't see a clear rationale set out for the importance of future dissatisfaction to selection procedures. Why is it important that Finnish medical schools select those who will be the most satisfied with medicine over other applicants who may provide better outcomes for patients? My suggestion would be: medical education is publicly subsidised -> more satisfied clinicians are less likely to burnout and leave medicine -> selecting students who are more likely to be satisfied with medicine as a career and provide more years of service is a better use of public resources. Even better would be if the authors can cite strong evidence to support the argument that more satisfied clinicians give higher quality care.

2. Page 13, line 1: given that 7 out of 11 motives were significantly different between surveys, the results here indicate that there have been major changes in motives over time. Indeed, the six reasons with the largest proportions vary considerably in their position over the three surveys. Only interest in people has been stable over time, as noted. Please revise this paragraph and the abstract to reflect these nuances.

Minor Essential Revisions

1. Specify that this study is from Finland, both in the title and abstract, in order to improve its identification in indexing.

2. Please justify use of Nagelkerke’s pseudo R-squared measure rather than a goodness of fit measure, e.g. Hosmer-Lemeshow test, in Methods.

3. Page 4, line 8-12: relevance of influence of social background and parent's profession to the research question here is not clear. I would suggest removing these sentences.

4. Page 10, line 16 - 22: please revise these two sentences for clarity as difficult to distinguish the difference between them at present.
5. Page 12, line 6 and 9: again, success needs to be defined here. The references are for medical training standards. Therefore, this is success in medicine as defined by medical educationalists. Is this the same as success as defined by patients or policymakers?

6. Page 12, line 16: change "probably" to "may".

7. Page 14, line 9: sentence beginning "Nowadays..." needs to be more specific (e.g. which kind of studies, in which type of countries) and supported by references.

8. Page 14, line 10: sentence beginning "From our perspective" needs to be replaced with comparison to other large national surveys and their response rates.

9. Figure 1: indicate in legend that statistical significance refers differences in proportions between surveys and that the "interest in research" question was not asked in 1988 survey.

10. Table 4: change to "statistically" and lower case for odds ratios

**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 set up and volunteer for a charity that supports health workers in training in Malawi and Uganda. I have no other competing interests.