Reviewer’s report

Title: Just fun or a prejudice? - Physician stereotypes in common jokes and their attribution to medical specialties by undergraduate medical students

Version: 0 Date: 28 Mar 2017

Reviewer: Kelly Mulvey

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Review of MEED-D-16-00818

This research study examines medical students' assignment of different traits to different medical specialties. While it is generally clearly written, I am not sure exactly what the current study adds to our understanding of stereotype endorsement by medical students. The findings are largely descriptive in nature and without measures that also assess the medical students' intended specialty, the findings seem rather underwhelming. Additionally, while the sample size is large, the response rate is quite low, introducing the possibility that the results will not generalize well.

I am a bit perplexed by the research questions. It appears that you are asking students to stereotype the different specialties by assigning these often negative characteristics to the specialties. So, is your first research question assessing whether students hold the same stereotypes as portrayed in the jokes? You describe the survey as asking if they felt the statement could be assigned to one of the specialties. It seem as though this question could tap just their awareness of the stereotype (as in people say or people think that X), but not necessarily their endorsement of that stereotype (general surgeons are X). This is an important distinction. Both awareness and endorsement may related to later career choices, but they may also work very differently. It would be helpful to get further clarification on what exactly was asked and what type of response you believe you obtained.

Is there evidence for interrater reliability or any external checks on validity of the personality characteristics that were derived?

Why was the choice made to only allow participants to tick one box per statement?

How many participants did not have complete datasets? I thought they had to answer every item.

Can you provide more information about the demographics of your participants (gender, age, ethnicity, SES)? Some of this is buried in the results section, but it should be moved up to the participants section.

Can you clarify what you mean by the "congruent assignment of a characteristic to the specialist it was extract from originally"? The quality of some of the figures is quite poor and I cannot read the text to know what the bars represent, so it is very hard to evaluate these findings.
The discussion of the results should frame the importance of the findings of the current project more prominently from the start. Currently, it quickly jumps to more of a review of prior findings, without contextualizing why the current results are important or how they contribute to this prior literature. I also, at times, felt as though the discussion strayed from the direct findings a bit. For instance, the increase over the years in congruence of stereotypes about orthopedics is framed as suggesting an in-group bias, however you don't have report any data that suggests that these students actually had begun to think of orthopedics or general surgeons as their ingroup. Overall, the discussion does not draw together the findings and provide insight into how these might inform policy, or practice.

**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.

No

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

Unable to assess

**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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