**Reviewer’s report**

**Title:** Is perfect good? - Dimensions of perfectionism in newly admitted medical students

**Version:** 0  **Date:** 22 Aug 2017

**Reviewer:** Anthony Jerant

**Reviewer’s report:**

I appreciated the opportunity to review this paper. It addresses the issue of whether medical students admitted via differing selection criteria to a single medical school in Germany differ in the occurrence of perfectionism. The rationale for the analyses is that there are strong societal/cultural expectations of perfection in the medical field, yet high levels of perfectionism have also been associated with symptoms of distress in medical students. As authors put it in the end of the first paragraph of their Introduction, "Working as perfectly as possible without becoming seriously distressed seems to be the path medical students need to find. For medical educators, the challenge seems to be in selecting the type of students who will be able to keep this balance in order to become good doctors." Thus, the authors sought to explore differences in perfectionism and its associations with depression and anxiety among different "pathways" to admission.

Overall I felt the paper was interesting and clearly written and could make an incrementally small but still valuable contribution to the literature. I did have suggestions for strengthening the manuscript, some substantive, others more minor.

**Major comments:**

1. Given the importance of the measures in this type of study I do think the choice of BFI-10 for personality factor measurement was unfortunate. My understanding is that it is much less reliable than the longer BFI and this casts a lot of doubt, for me, on the findings here for the personality factors. I might suggest, in fact, that the BFI-10 analyses be omitted from the paper entirely. I'm not sure they add much, particularly given the limits of the measure, and that the focus of the paper is really on perfectionism and its psychological effects. This would of course require rethinking the "variance in anxiety/depression" explained analyses, removing the currently included personality factor predictors.

2. Omitting the BFI-10 would also help to address another issue which is that there are a lot of measures to keep straight - making for a rather complex presentation where it feels like many of the measures/constructs get short shrift - and I suspect many of the scales are highly correlated/partially overlapping. Further, in the context of this analysis - where the implied undercurrent is that apart from optimally selecting good candidates for medical school, perhaps something can be done to intervene to reduce distress - it might be better to focus on ostensibly more changeable psychological factors such as General Self-Efficacy - rather than more static factors like personality characteristics.
3. The authors also need to better justify why 2 different multi-dimensional measures of perfectionism are employed. I see large potential for overlap here - for example, isn't concern over mistakes a specific type of self-oriented perfectionism? And isn't parental criticism somewhat subsumed in socially-prescribed perfectionism (especially for young people just exiting high school)?

4. Related to Comments 2 and 3, I think the authors should provide a correlation matrix for the study measures (at least for the Editors/Reviewers, and possibly to include in the paper), to help gauge whether the various different measures are actually tapping different constructs or sub-facets of constructs in this sample. If, in fact, the two perfectionism scales are highly correlated (and/or certain of their dimensions are so), I think that might underscore the need to pare back/simplify and consider cutting one of the scales or at least some of the items. Or, for the items that make up the two perfectionism scales, perhaps conducting a factor analysis would be even better - to see in this sample if a more parsimonious factor solution might exist.

Minor comments

1. More could be said in the Discussion about what might be done to address the increased risk of depression and anxiety symptoms among accepted students who have high Maladaptive Perfectionism (since I doubt the authors are suggesting that such students should be excluded from medical training). This doesn't have to be a long or definitive treatment but just some comment about what might be done (it isn't immediately clear to me what could be done - which has been a general critique of using things like personality measures in admission screening).

2. The authors appropriately identify as a limitation the fact that this was a single school study. But I think something also needs to be said about the fact that the paper's findings may have relatively less applicability to other countries beyond Germany. In the U.S. for example, we don't accept students into medical school right out of high school, and the majority of those accepted have gone through both GPA and MCAT scoring-based screening as well as some kind of interview process.

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

Yes

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.

Yes
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