Reviewer’s report

Title: Empathy in Chinese medical students: Psychometric characteristics and differences by gender and year of medical education

Version: 1 Date: 24 July 2013

Reviewer: Bruce Newton

Reviewer’s report:

This reviewer finds the manuscript “Empathy in Chinese medical students: Psychometric characteristics and differences by gender and year of medical education”, by Wen, et al. to be generally well written. The results are novel and worthy of publication after some minor revisions. It further validates the use of the JSPE-S. The data were collected and analyzed appropriately. Below you will find some suggestions.

Minor Essential Revisions:

Background, 2nd paragraph, 2nd sentence: Insert the word “cognitive” before the word “empathy”, so that the sentence reads, “… recognized definition of cognitive empathy…”

Background, 2nd paragraph, last sentence: delete “carry out appropriate education.” and replace with “… implement curricular changes to either slow the decrease in empathy or increase empathy during undergraduate medical education.”

Background, 3rd paragraph, last sentence: change end of sentence to read, “… system is somewhat different than in western countries.”

Methods, participants, last paragraph: change the ending to read, “… September 2011. A total of 820 volunteers…”

Methods, instrument, last sentence: change to read “…all items (scores can range from…”

Methods, Data analysis: How many times was the missing data replaced? I know some researchers do this, but it makes me feel uncomfortable. With the large “n” that you have, why not just delete these surveys from being scored vs. putting in artificial data points?

Results, reliability: change to read, “… of the scale had a Cronbach’s alpha…”

Results, group comparisons: it is difficult for this reviewer to determine when the statistical differences in the empathy scores changed. Was the difference the authors talk about comparing year 1 to year 4; or is year 1 different from year 2, and year 2 different from year 3, etc. Please clarify.
Discussion, 2nd paragraph, first sentence: change to read, “…(r=0.83) was similar to those reported…”

Discussion, 2nd paragraph, 3rd & 4th sentence: change to read, “… medical students [18, 223, 24]. This also provided support…”

Discussion: the 5th paragraph is too long. Start a new paragraph after your reference [19, 23]. Once that is done, then this new paragraph needs some work. The reviewer is confused as to why seeing more patients would lead to a potential increase in empathy? This needs to be clarified and more adequately explained.

In this new paragraph, there is a phrase “on top of”, replace that phrase with “in addition to”.

The last sentence in this new paragraph needs to be rewritten, I suggest the following. “More sessions concerning professional competencies were added, with the intent that the concepts of empathy and respect for patients will be strengthened during this process.”

Discussion: In the paragraph concerning limitations: change the last sentence to read, “Therefore, a study design … of the cohorts is warranted.”

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare I have no competing interests.