Reviewer's report

Title: Validation of the modified Fresno Test: assessing physical therapists' evidence based practice knowledge and skills

Version: 1 Date: 22 February 2010

Reviewer: Mark Graham

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All comments submitted are under the category of Major Compulsory Revisions

The introduction reads very well and the logic flows smoothly. The methods are appropriate for taking an existing instrument (the Fresno) and adapting it for a new specialty (physical therapy). The only critique I have is that the author appears to be basing their work on a conceptual framework that is somehow presented in Appendix A. This seems to also be advocated for (later in the manuscript) as a model to use for other such adaptations. There also seems to be an implicit statement that this can be done in lieu of other, I suppose more classic, psychometric development. It would be useful if the author would make clear distinctions between: a) classic psychometrics, b) the conceptual framework used in this manuscript, and c) where overlaps exist and where this manuscript offers something new. This needs to be stated clearly and succinctly upfront just prior to the Methods section. The paragraph that is there is good, it just needs to explain a bit more.

The data, as reported, appear sound. I have no major commentary on the data, except it seems like too much of it appears in the Discussion section. As described, there appears to be a fair amount of numbers and extended explanation of the data that likely – if needed – belongs in the Results section. Specifically, it was confusing to me to sort out what needed to be in the discussion and what text really needed to be in the results section. My belief is that the discussion section is where the data results are interpreted and it should be largely free of data. The discussion section is also quite long, and no clear map is given to the reader that delineates exactly what will be discussed. When the discussion section is streamlined, the limitations of the study should become more clear and obvious. For example, in the discussion I’m not quite sure what the sentence on the bottom of page 11 means where it says “…the likelihood of preserving the instruments’ validity and reliability”. This should be more precise, though may not be possible until some of the other methodological issues are sorted out.

Also, I was unclear where Appendix A materials were coming from – some one else’s conceptual framework? The author’s own? The reason why I emphasize this is because this Appendix is described as having the crux of what this modified Fresno adaptation is about. I wonder if it should it play a more central role in the logic of the author’s methodological choices?
By and large the title and abstract accurately convey what has been found, although in both the abstract as well as the conclusion I am uncertain whether – based upon the author’s modified psychometric approach (as emphasized as being in Appendix A) – the strong sentence of “The modified FT is a valid, reliable assessment of EBP knowledge and skills.” However the author decides to handle the re-framing of the manuscript’s conceptual framework may influence the extent to which this statement is true. Regarding the question of whether the writing acceptable, it is – though there is a long and confusing discussion section that should be streamlined.

**Level of interest:** An article of importance in its field

**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.