Reviewer's report

Title: Revisiting the dimensional validity of the Edinburgh Postnatal Depression Scale (EPDS): an empirical evidence for a possible higher-order factor

Version: 1 Date: 11 February 2011

Reviewer: Andrea Meyer

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Minor Essential Revisions

1. Methods, Sample and procedures: What can be said about the 41 non-participants? Do they differ from participants in any respect?

2. Methods, Data analysis, first paragraph: Regarding the WRMR fit index, I haven't found any reference in the MPlus user's guide, version 5 to this index, as indicated by the authors. Also, in the Finney et al. paper, I've found the threshold value <1 for this index rather than <0.9. Authors are asked to comment on this.

3. Methods, Data analysis, first paragraph: I haven't found a reference in the MPlus user's guide, version 5, to the RMSEA. The authors might refer to the dissertation by Yu (2002) regarding rules of thumb for fit indices in MPlus.

4. Methods, Data analysis, paragraphs 4 and 5: the two equations regarding CR and AVE appear to contain errors or then they have not been printed out correctly. Authors are asked to check the formulas again for correctness.

5. Methods, Data analysis, paragraphs 5 and 6: In paragraph 5 the authors state that in order for discriminant validity to hold the sqrt of AVE should be above any correlation among factors including confidence intervals. They then indicate how to compute confidence intervals for the sqrt of AVE, but also for the AVE itself and the CR. They should explain why they have calculated these two additional confidence intervals as well or if not necessary to remove them entirely from the manuscript.

6. Results, first paragraph: For continuously distributed values the SD rather than CIs should be used to describe the sample. For percentages it is not necessary to indicate the CIs as they could easily be calculated based on the sample size and the percentages shown.

7. Results, third paragraph: The fit indices obtained when running the different CFA models in the course of the E/CFA should be shown in tabular form. This allows the reader to judge himself which model might be preferable.

8. Results, paragraph five and Figure 1: Figure 1, though being illustrative, should be omitted. It contains no additional information beyond what is presented in table 2 and some of the information is shown twice (factor correlations).
9. Results, paragraph six: What do the authors exactly mean by the phrase "This projection failed to materialize on freely estimating this cross-loading..."? Do they mean that the expected parameter change was trivial? Authors should be more explicit here.

10. Discussion, paragraph 3: The authors rightly point out that in the case of a three factor CFA a second-order factor model will lead to identical fit indices as the corresponding first-order CFA and that therefore no statement can be made on empirical grounds as to which model is superior to the other. Thus the choice of a second-order model should be based on conceptual grounds. It is not entirely clear to me what the rationales for favouring the second-order CFA over the first-order CFA are.

11. Discussion, paragraph 4: The authors discuss the obtained model structure thereby citing primarily studies which obtained comparable results. As there are several studies which obviously obtained quite different results (as mentioned in the Background section), it would be important to enhance this section and discuss possible reasons for why the authors' results differed from those of others. Reasons may include translation issues, difference in sample composition and size, and also differences in the statistical models applied/estimators used (e.g. how to tackle the problem of items which are Ordinally rather than metrically scaled). This seems important given the fact that there is a debate regarding the dimensional validity of the EPDS.

12. The authors have not performed a cross validation of their data in order to demonstrate the generalisability of their obtained model. In view of the relatively high sample size this might have been useful to do, using e.g. a split-half (or more elaborated) method. Authors are asked to perform such an analysis or to comment on why this is not necessary here.

13. I've found the following spelling mistakes: sequentially instead of sequntially (Abstract/Methods section); "which is easy" instead of "which easy" (Background, first paragraph); "Analysis would only proceed" instead of "Analysis would only proceeds" (Background, last paragraph).

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests