Reviewer’s report

Title: Developing a tool to measure satisfaction among health professionals in Africa

Version: 2 Date: 21 February 2013

Reviewer: Elina Dale

Reviewer’s report:

Major Compulsory Revisions - The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

1. The authors have improved the quality of the manuscript since the first review and seem to have addressed most of the original comments. However, the methodology could benefit from additional revisions.

2. The original comment read as following: PCA used for making “adjustments to the final instrument” is described under the section on construct validity. PCA is not used for construct validation in general. If it is used for screening an initial set of items or extracting factors, then it should be described under the appropriate section. Moreover, the reason for conducting PCA as opposed to other methods of extracting factors (for example, parallel analysis) is somewhat unclear, and it would seem that authors do not provide sufficient justification.

In response, the authors removed the sentence on PCA and state the following: "By performing EFA, we were able to identify the underlying factor structure.... From the EFA analysis we found that, of the 44 items, 43 were on their original dimension, with loadings coefficients ranging from 0.42 to 0.84."

How did they decide on the number of factors following the EFA? Did the authors look at eigenvalues? Screeplot? Was the only criterion in selecting items following EFA was the size of factor loadings? What about fit indices? Residual variance? It seems to me that it is still unclear to the reader the methods and reasoning for extracting the 9 factors, which is an important part of the development of the scale.

3. The authors have not provided the estimators used in EFA and CFA and these are considered to be important basic parameters of the model. The response to referred to fit indices.

4. It will be good to provide a short table with basic item distributions as it is commonly done in literature (means, std etc).

Minor Essential Revisions - The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.

1. It would be useful if authors reflected on why regardless of high factor loadings
they observed such high residual variances. High residual variances signal important information regarding the validity of the model.

2. It would be good to cite a methods paper to support their choice of methods for criterion validation. Specifically, for the following: "The score was divided into quintiles, with the top quintile considered as 'very satisfied'. Chi-squared testing was used for comparisons." Basically, it seems the factor scores were obtained, made into binary variables, and then used as observable variables.

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

**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.