Reviewer's report

Title: Measuring determinants of implementation behavior: psychometric properties of a questionnaire based on the Theoretical Domains Framework

Version: 5 Date: 9 February 2014

Reviewer: diane dixon

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In my review of the original manuscript I expressed two primary reservations. I was concerned that the application of PCA as a method of factor analysis introduced a danger of diluting theory from the analyses. Similarly, I was also concerned that the authors were suggesting modifications to the structure of the TDF that could not be robustly supported by the existing evidence base, i.e. I was suggesting the area would benefit from replication studies. I also raised a number of other issues for the authors to consider.

I feel the authors have adequately addressed each of my primary concerns. The revised description of the factor analysis procedure clarifies the relationship between the results of the OMG analyses and the application of the PCA. That PCA is a secondary process to the OMG analyses addresses my concern about the use of the non-theory based PCA as the means of determining modification to the structure of the TDF.

The revised manuscript now states the need for additional replication studies to assess the reliability of the proposed changes to the structure of the TDF. The authors have also adequately addressed each of my other more minor concerns.

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