Reviewer's report

Title: A Transtheoretical Model (TTM) based questionnaire for smoking cessation for adults: psychometric properties of the Iranian version

Version: 1 Date: 20 October 2013

Reviewer: Kate Walsh

Reviewer's report:

Review of “A Transtheoretical Model (TTM) based questionnaire for smoking cessation for adults: psychometric properties of the Iranian version”

The current study examined the factor structure and psychometric properties of an Iranian version of the TTM questionnaire for smoking cessation. Validating the measure in this sample has potential to advance research and clinical work on smoking cessation in Iran. Below, I have outlined a number of concerns about the theoretical rationale, approach, and conclusions that dampen my enthusiasm for the manuscript:

1. Are there reasons to believe that the TTM would vary by ethnic characteristics or differences in an Iranian sample (versus a US sample)? This becomes important when determining how to approach instrument validation in a unique sample.

2. One criterion for inclusion in the study was “planning to quit within the next 30 days”; however, the TTM questionnaire uses responses to this item to classify individuals into stages of change. Any psychometric evaluation of a measure where some of the questions are constants could be problematic. Why was “planning to quit in the next 30 days” an inclusion criterion?

3. The following statement in the methods is unclear: “In fact this part of the questionnaire does constitute a construct and thus was not included in the factory analyses.”

4. The rationale for conducting a PCA (a data reduction technique) is unclear. The brief 38 item measure is already being used and there seems to be a reasonable theoretical model upon which to base a priori hypotheses. Why not just conduct a CFA and see if the model that typically fits for western samples also fits here.

5. Why was .5 used as an item cutoff for the PCA?

6. For the CFA, a GFI of .91 and a CFI of .93 do not reflect “good” model fit. Please provide citations for all statistical tests and cutoff used.

7. Based on the figure on page 20, it appears that a second-order factor is being tested for process of change, with behavioral and experiential subfactors. There is no mention of this in the analytic approach or the results. Please clarify.
8. It is unclear how stage of change was incorporated into the model. Please clarify.

9. The figure on the last page has no caption or title and it is unclear what the numbers represent. Please clarify.

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

**Declaration of competing interests:**

'I declare that I have no competing interests