Reviewer's report

Title: Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework

Version: 5 Date: 29 October 2012

Reviewer: Danielle Levac

Reviewer's report:

Thank you for the opportunity to re-review this manuscript. The authors have done a good job addressing the comments of the second reviewer. Although I had no comments in my second review, I have concerns now that I would appreciate if the authors address in their paper. I look forward to seeing this paper published as I know it will contribute to the ongoing discussion around scoping review methodology.

Major Compulsory Revisions

None.

Minor Essential Revisions

1) Matching research interests with the Arksey & O'Malley framework
   a. The authors state that researchers should consider the 'boundaries of the methodology and the types of research it can best support'. This is a difficult consideration at the moment in a developing field where boundaries have still not been clearly defined and where little guidance has been given on what types of research might be best for a scoping question. Perhaps the authors can rephrase this statement to one that urges others to contribute to the conversation on defining these boundaries.
   b. The authors state that a SR is 'not necessarily a stand alone method in answering a research question'. I don't agree with the way this is phrased and I think this detracts from the methodology to make this statement, though I do agree with the overarching assumption here which is that SRs can contribute to larger programs of research. Indeed I think that the point is already made in the previous sentence prior to the one in question so I would consider removing this sentence (ie 'not necessarily a stand alone method).
   c. The authors state that the material was 'critically analyzed' - in view of there being many different types of analysis methods, can the authors expand on what their was involved in their critical analysis.

2) Enhancing the six steps
   a. Step 3: Engaging 2 reviewers to apply inclusion/exclusion was a recommendation of Levac et al, not Arksey & O'Malley.
b. ‘Strongly recommend that assessing for quality is factored into Arksey & O’Malley’s framework.’ Can the authors add here how they would recommend that be accomplished. In the Table under your second recommendation for this step, I am not clear how quality of studies included/excluded can be assessed by ‘redefining search terms and clarifying concepts in the RQ.’ Please clarify.

c. Step 4 Charting: The way this is phrased gives the reader the impression that authors have to use Arksey & O’Malley’s 7 categories and that Arksey & O’Malley recommended this. Please clarify that this isn’t the case. Perhaps add a statement clarifying that authors can choose what to include in their charting framework and that while it is an option, it isn’t necessary to use a pre-determined typology from another study. Can you also define what you mean by typology and how it is similar/different to a charting form as it is confusing for the reader to have a new term introduced.

d. "...our purpose was to determine if we needed to make adjustments to the typology chart'. This is inherent in our recommendations as to why we would meet after charting 5-10 studies. Indeed in the Levac et al paper we suggest 'refining the form' and 'continually updating the form' and as such these recommendations have been made already, so please rephrase to make it clear that you are building on our recommendations.

e. Step 5: It is confusing to mention your '15 variables' as I don't believe this has been mentioned before. Also the notion of variables and sub-variables needs to be defined.

f. Step 5: The sentence 'our ability to..." is confusing as wasn't exploring the types of information needs being discussed by researchers part of your original research question?

g. 'preliminary graphs' - perhaps add more detail to explain what the graphs were describing.

f. "then we did an analysis' - can you add a descriptor as to what kind of analysis.

g. The subsequent brief examples of your findings seem to refer to 'most' and 'least' frequent mentions in the studies you reviewed. I'm not clear how this frequency count is the result of a qualitative analysis that you endorse in the previous paragraph.

3) Lessons learned.

a. Did you assess for quality of the studies included and how?

Table

Step 5 - your 3rd suggestion. This is not a new suggestion and it should be removed from this column. The first suggestion: I don't believe that it provides any concrete advice or guidance to the reader and I think it should be removed.
Discretionary Revisions

None.

Thank you again for the opportunity to review this manuscript.

**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 am the author of the Levac et al. recommendations.