Reviewer’s report

Title: Measurement instruments for quantifying physical resilience in aging: A scoping review protocol

Version: 0 Date: 03 Sep 2018

Reviewer: Thom Ringer

Reviewer's report:

Thank you for the opportunity to review this manuscript, which presents a protocol for a scoping review addressing an important topic (physical resilience in older adults) that has not yet been the subject of a rigorous review.

The manuscript has numerous strengths:

- The existence of a gap and the rationale for the review are well-justified.
- The objectives are clearly specified and are appropriate for a scoping review.
- The methodology is appropriate for those objectives and is well-described.
- It is for the most part clearly written.

I believe this article should be resubmitted with Major Revisions for the following reasons.

1. I would not style this research as a "scoping systematic review." This is clearly a scoping review. It is important to clearly distinguish the two signs, which have different objectives and methodologies. Further, an occasional objection to scoping reviews is that they are merely less rigorous systematic reviews; I think the term "scoping systematic review" would invite that (unwarranted) skepticism.

2. As readers may be less familiar with scoping reviews, I would explicitly lay out Arksey & O'Malley's Six Stage Process (perhaps as a figure)

3. Relatedly, did you intentionally omit the sixth stage ("Consultation Exercise")? If so, please state this in the manuscript.

4. On a similar note to #1 above, please clarify what you mean under "Data Synthesis & Gap Identification" in the sentence "If multiple studies involve older adults ... statistics may be used
to compile the data." Are you suggesting that you would perform an ad hoc quantitative synthesis/metaanalysis? If so, I would advise against it. I think this goes beyond the scope of this review and would necessitate a fully-fledged systematic review with critical appraisal. An abbreviated/partial data synthesis would dilute the paper’s impact.

5. Did you consult a reference librarian in developing the search strategy? If not, consider having it reviewed by one (and providing credit if indicated).

6. Have you considered a broader search strategy using terms adjacent to or synonymous with "resilience" that may describe a similar concept? For instance, you mention that physical resilience embraces such domains as "body function or structure," "activity and participation," etc. A potentially relevant study might use a term like "preserved activity" or "preserved function."

7. Please consider:
   - Reaching out to experts to suggest additional sources for review
   - Searching Pubmed
   - Conducting a grey literature search (unpublished studies, dissertations, white papers, etc.)

8. Please explain what you mean by "subjective appraisal" and when you think it might be "required" in the course of this review. Critical appraisal is not normally a part of scoping reviews; if you do intend to do any for whatever reason, it should be done rigorously and with the aid of commonly accepted instruments (e.g., Cochrane Risk of Bias Tool).

9. Please explain why you intend to exclude non-English language studies from your search.

10. I suggest you consider & make reference to Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology, Implement Sci, 2010, vol. 5 69, the other seminal article on scoping reviews which expands and comments upon Arksey & O'Malley.

11. Please shorten the introduction to 2 sides maximum.
Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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