Reviewer's report

Title: How explicable are differences between reviews that appear to address a similar research question? A review of reviews of physical activity interventions

Version: 2 Date: 20 June 2012

Reviewer: Philip Baker

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Minor essential

1. The authors have used the AMSTAR to quality assess the included systematic reviews. Given that other tools also exist and are specific and widely used for Public Health (e.g. Health Evidence Canada) the reasons for the choice of the AMSTAR should be specified. This point can also be included in the discussion pertaining to the experience of this tool for public health and health promotion intervention systematic reviews.

2. In this study there are a relative small number of reviews (n=8) and only one topic area, thus, the authors should a bit more be careful about the limits of generalization. The limits of generalization are especially important given the mapping exercise itself is dated.

3. The heading "To what extent do reviewers answering a similar research..." Isn't Fogelholm of low quality (AMSTAR=4)? I can't see how it can be called "high quality" (may be an error in referencing).

4. Heading "Does the methodological quality of reviews..". Please explain "met our criteria for adequate search strategy". Was Amstar being used or the author’s own criteria. Generally it is accepted that more extensive searching required for Public Health - Mala Mann and others from SURE @ Cardiff has done some work demonstrating this (e.g. presentation at Cochrane Colloquium 2010).

5. Main findings: Given the limitations, I'm not sure that I fully agree with the statement "There was little evidence that methodological quality of reviews..." Isn't the lack overlap a product to some extent of a lack of quality? Yet it is difficult to conclude given the heterogeneity in the questions and definitions. The presence of the logic model in the included review would probably aided a greater transparency of what was being compared.

6. Weakness of the study: I would suggest the ending of the last sentence in para 2 ".. relate to one another will remain important to understand". (not sure validity is the right word.)

7. Methodological issues: Para 2 I suggest as statement about the heterogeneity of research questions.
8. Also in methodological issues, around Para 4. The authors make some good points about problems in linking the multiple publications arising from the same intervention. Perhaps it may be useful to explicitly make this a recommendation to those undertaking the intervention studies and publisher (and also aimed at journal editors).

**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.