Reviewer’s report

Title: Effects of school-based interventions on motivation towards physical activity in children and adolescents: protocol for a systematic review

Version: 1  Date: 13 Feb 2019

Reviewer: Anne Martin

Reviewer's report:

Many thanks for the opportunity to review the revised manuscript. The authors improved the reporting of their study rationale and methodology substantially and the manuscript reads much better now. However, the authors did not address some of the reviewer comments satisfactorily.

1. Reviewer 1 comment 10a - The justification given for not choosing a highly relevant database for this study is rather weak. The authors should at least run a search in the reviewer suggested database (Physical Education Index) and report the extend of overlap between the already selected databases. The authors response "We assume that including a further database will not affect our search results." needs to be backed up.

2. Reviewer 1 comment 11c - Restriction to English language publications. Please list this eligibility criterion as potential limitation of the review in the Discussion section. "Potential limitations of this review could include the restriction to ...."

3. Reviewer 1 comment 14b - It appears that the authors misunderstand the meaning of sensitivity analysis. A sensitivity analysis is not restricted to quantitative synthesis of data. It simply means that results of studies with high risk of bias or certain 'outlier' characteristics will be removed from the analysis. Results of the sensitivity analysis should then be compared with the synthesis results emerging from all studies to establish how robust the results are in terms of risk of bias or outliers. The authors should address this comment.

4. Reviewer 2 comment 28 - While the authors reported that they will use the findings of the risk of bias assessment in their discussion of the results, they failed to describe how the results of risk of bias assessment will be incorporated in the data synthesis. Conducting a sensitivity analysis as suggested by reviewer 1 (see point 3 above) would meet reviewer 2's comment.

5. Reviewer 2 comment 29 - The authors' response "An analysis of meta-bias, i.e. selective reporting or publication bias is not planned." is not satisfactory. The authors should address this point and state in their systematic review protocol how they will establish meta-bias or at
least state why they will not be assessing meta-bias. In the latter case, the authors should state this as a limitation of their review in the discussion section.

Minor comment: Line 203 (introduction) - Please correct the typo "trail" to "trial".

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