Reviewer's report

**Title:** Childhood socioeconomic position and adult leisure-time physical activity: a systematic review protocol

**Version:** 1  
**Date:** 13 October 2014

**Reviewer:** Jonas David Finger

**Reviewer's report:**

This paper describes the study protocol for a systematic review on childhood socioeconomic position (SEP) and adult leisure-time physical activity (LTPA).

I agree that LTPA is an important health behavior and that it is of considerable interest to understand its association with childhood SEP.

Discretionary revisions:

(1) Methods/Design, Eligibility criteria: The definition of “childhood SEP” could be more specific and detailed. Income measures and other common measures of childhood SEP such as the Family Affluence Scale (FAS) are not mentioned in the manuscript.

(2) Methods/Design, Eligibility criteria: The primary research question is “to assess whether an association exists between childhood SEP and adult LTPA”. The eligibility criteria “minimum age of 25 years at measurement of physical activity” will lead to an exclusion of studies which publish results for adult populations 18+ years. I understand that from 25 years onwards SEP is less likely to change and that this cutoff is used in some longitudinal studies to define “own adult SEP” which is used for adjusting the association between childhood SES and adult LTPA. This is also a secondary objective of this study. However, I see here a bit of a conflict between the secondary and the primary aims when defining the eligibility criteria. The authors need to make sure that they do not exclude studies they have to include to adequately test their primary hypothesis (because they select the eligibility criteria based on a secondary objective).

(3) Methods/Design, Eligibility criteria: Studies can be representative even if they are not based on “community dwelling samples” (e.g. telephone samples). This eligibility criterion could be defined more generally (e.g. population-based samples).

(4) Methods/Design, Eligibility criteria: The direction of the association between SEP and LTPA appears to differ among countries with different income levels (positive SEP-LTPA relation in high-income countries, negative SEP-LTPA relation in low-income countries). It could be reasonable to define an eligibility criterion for the country income level or to consider this issue during the analyses.

(5) Methods/Design, Search strategy: The paper would benefit if the full search
strategy is presented for at least one data base.

(6) Methods/Design, Study selection: The authors could explain how duplicate publications will be handled.

(7) Methods/Design, Data extraction: The authors could use common data extraction templates such as the Cochrane Consumers and Communication Review Group’s data extraction template.

(8) Methods/Design, Quality assessments: The authors also could use other common study quality assessments such as the STROBE guidelines to evaluate the study quality.

(9) Methods/Design, Synthesis: The authors could define which effect measures studies need to report to be included in the meta-analysis.

(10) Discussion, first sentence: The terms used in this sentence are confusing. I suggest that the authors clearly define childhood socioeconomic position and adult leisure-time physical activity in the background or the methods section and use these terms consistently throughout the manuscript.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests