Reviewer's report

**Title:** Systematic review of the effects of schools and school-environment interventions on health: evidence mapping and syntheses

**Version:** 1  **Date:** 13 May 2011

**Reviewer:** Lehana Thabane

**Reviewer's report:**

This is a protocol of a systematic review “to map and synthesise evidence on: what theories and conceptual frameworks are most commonly used to inform school-environment interventions and/or explain school-level influences on health; what effects school-environment interventions have on health/health inequalities; how feasible and acceptable are school-environment interventions; what effects other school-level factors have on health; and through what processes school-level influences affect health occur”.

This is a statistical review of the protocol focusing primarily on the design, methods, and analysis plans. Overall, the review is well designed. Below are some suggestions for authors to consider:

1. Title: The title needs to reflect that this is a protocol of a systematic review. It can be easily be confused as a report of the review – which is what I also thought it was in reading the title.

2. Abstract: Background:
   a. The background seems rather long and can be broken down to include “objectives”. The objectives need to be separated into primary and secondary objectives.
   b. Replace “and/or” with “or”. Note that that “or” is a logical term that includes “and” in it. This needs to be corrected throughout the paper.

3. Abstract: Methods
   a. State the key databases searched.
   b. State if the review involved any plan to perform meta-analysis and if so, how issues of pooling across studies would be handled including assessment of heterogeneity.

4. Abstract:
   a. Consider adding another section on “Discussion/Conclusions” – which provide a brief discussion of the expected results.
   b. Overall, there are a few other elements missing in the abstract. This reviewer suggests following the PRISMA statement in framing the abstract. It recommends providing “a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and
implications of key findings; systematic review registration number” (http://www.prisma-statement.org/)

5. Background

a. Consider having a separate section on “objectives” or “research questions”, see comment 1(a) above. As recommended by the PRISMA Statement, it is important for the objectives or research questions to be framed explicitly “with reference to participants, interventions, comparisons, outcomes, and study design (PICOS)” as applicable.

6. Methods

a. Consider defining “school-environment intervention”.

b. It is unclear what the comparators are for evaluating the effects of the interventions.

c. Specify the time frame for the search for each database.

d. State how inter-rater reliability will be assessed.

e. For subgroup analyses or meta-regression, specify the subgroups/variables, corresponding hypotheses and rationale.

f. Specify how missing data will be handled for quantitative analyses.

g. This reviewer thinks it would be useful to include the data abstraction forms so that readers can have a full picture of the design plans. This will also help the authors to ensure that they are capturing the information on all key variables.

Overall, the design of the review seems sound.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'