Reviewer's report

**Title:** Effective Elements of School Health Promotion Across Behavioral Domains: A Systematic Review of Reviews

**Version:** 1  **Date:** 26 January 2009

**Reviewer:** Guy G.S. Parcel

**Reviewer's report:**

The manuscript reports on a systematic review of reviews of the effectiveness of school-based health promotion intervention programs in order to identify elements of the interventions shown to be effective across the four behavioral domains of tobacco use, alcohol use, sexuality and nutrition. The purpose of the review is to make recommendations for key intervention elements that should be considered in planning and developing integrated school health promotion programs for adolescents that address multiple behavior domains rather than a focus on a single behavior. The authors argue that integrated approaches that address multiple health behaviors may be more acceptable to school-based adopters and implementers and more efficient if the elements of change are similar across the behavioral domains.

The authors have identified an import issue in school-based health promotion programs. Research conducted to develop and test health promotion programs for youth are typically focused on one or two health promoting or health risk behaviors. The limited focus is usually determined by funding agencies for the research or by limited resources to design and evaluate an intervention with multiple behavioral outcomes. To address this issue, the authors take an initial step of program planning by reviewing the existing literature to identify intervention elements that are shared by effective programs.

To accomplish the literature review the methodology of conducting a review of reviews is well justified by the authors and appropriate methods are used for conducting a systematic review. The methods are carefully and clearly explained with consideration given to inclusion criteria, selection of key variables and reliability of coded data. The data presentations meet the standards for systematic reviews and are adequately explained.

The findings from the review are clearly explained and there is a balanced discussion of the major conclusions. The authors effectively refer to findings from other studies and they are careful to provide support for their conclusions and recommendations. The results of the review are an important first step in planning and developing an integrated approach to health promotion programs for adolescents and valuable to other researchers and program planners working on health promotion programs that address multiple health behaviors.

**Major compulsory Revision**
Minor Essential Revisions

1. Pages 12, 13, 15, 19, 27, 28. The terms “aspects” and “elements” appear to be used interchangeably. It is not clear if the intent is for them to mean the same thing or if the authors are giving them a different meaning. If the same, suggest using only one term. If different, explain how they are different.

2. Page 20. Bottom of page. Delete “It might perhaps be especially beneficial for programs with a focus on abstinence”. The statement is speculative, not based on review findings, and confuses the reader in the transition from the previous sentence and the remainder of this sentence.

3. Page 29. First sentence. The identification of “intervention content that is not limited to dissemination of information” as an intervention element is confusing. There is a need to identify what the process is that would constitute an “element of the intervention” Content is not a process and “not limited to dissemination of information” is a negative leaving the interpretation open to many other processes as the “element of the intervention”

Discretionary Revision

1. In abstract last paragraph: state the four domains to clarify for reader.
4. Page 11. Second paragraph, first sentence, replace “authors” with “reviews”.
5. Page 11. Sentence: “The effect sizes (ES)…………………………………may explain the author’s qualitative statements.” is not clear in meaning. Suggest rewrite or deletion.
6. Page 21. “and another review focused on programs with a strong abstinence message” appears to be tagged on to the sentence without a clear explanation.
7. Page 23 and 24. When referring to the list of elements, it would make it easier for the reader to write out the elements instead of referring to them by their corresponding letters.

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