Reviewer’s report

Title: A school-based resilience intervention to decrease tobacco, alcohol and marijuana use in high school students: a pilot study

Version: 1 Date: 13 January 2011

Reviewer: Asha Goldweber

Reviewer’s report:

Major Compulsory Revisions

1. Overlooked seminal research by Mark Greenberg, Richard Catalano, and Suniya Luthar, respectively. Additionally, Ann Masten’s Chapter on “Ordinary Magic: Resilience processes in development” should be referenced.

2. All aspects of the manuscript (e.g., literature review, study design, and discussion, in particular) would benefit from a more developmentally sensitive approach. For example, why did the Australia study, cite 9, discussed on page 5 have diminishing effects, developmentally, for smoking (yet an effect for marijuana in grade 10)? What did those authors discuss? What are the implications? In another Australia study (cite 23, 32), how should the reader interpret the posthoc findings? This needs to be interpreted in light of extant theory and empirical research.

3. The paragraph on pages 5-6 regarding issues with intervention implementation is excellent. More of this is needed. Further, did these issues re: implementation vary by grade/age or where they more school wide?

4. Why was a non-controlled design selected? Although it is a pilot study further justification is needed. Additionally, a study that provided the foundation for your work is not mentioned until the discussion (p.14).

5. Please provide the consent rate for parents and the assent rate for youths.

6. Are the memorandum of understanding and school action plan unique to your study? Please discuss the importance and prevalence of these strategies.

7. Provide details on staff training or refer reader to another manuscript that does so. In fact, the details of the intervention are scarce.

8. Findings need to be unpacked further in the results and discussion section instead of leaving the reader to decipher the tables. For instance, in the manuscript the authors do not sufficiently address that school C remained identical in their overall median resilience and protective factor scores. School C also evinced declines in substance use, despite no improvement in resilience or protective factor scores (but they remained the same). This finding warrants further examination and explication. Were there issues with fidelity at school C only?

9. At the bottom of page 15 in the discussion, shortcomings of previously referenced studies (cites 23, 32, 38, 46, 9, 10) are mentioned but it is unclear
what aspect of those studies were related to their limitations and explicitly how the present pilot study improves upon these issues or not.

10. The limitations cited at the top of page 16 seem quite major. Despite these issues how does the present study uniquely contribute to the literature? For instance, research detailed in the introduction also demonstrates a declining trend in substance use.

11. The authors acknowledge that their study design does not allow for comparison against statewide school surveys but then proceeds to make the comparison. Please avoid this comparison or provide adequate justification for this approach and a more thorough explanation of your argument.

12. Isn't it possible that the effect is greater in the present study because the schools were particularly disadvantaged to begin with?

13. This may be beyond the scope of the manuscript however, it would substantially add to the paper: If some interventions work whereas others do not, what did your pilot study expose as the key ingredients for a successful intervention? In other words, what does your pilot study uniquely contribute to the literature? What are some caveats?

Minor Essential Revisions

14. Typos in references section (e.g., for the Gottfredson citation on page 22, delinquency is misspelled)

Discretionary Revisions

15. Page 3, cite 50, please provide an example of “provision of information”.

**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