Reviewer’s report

Title: Health Belief Model based evaluation of school health education programme for injury prevention among high school students in the community context

Version: 2 Date: 20 August 2013

Reviewer: Bridie Scott-Parker

Reviewer’s report:

Thank you for submitting your revised manuscript for consideration. I see that you have addressed the majority of the revisions requested by the Reviewers regarding your original manuscript. There are still a number of major and minor revisions required, however.

Major compulsory revisions

1. Abstract: Concluding that “The community-based school health education improved injury-related health belief” is very difficult to state given you did not sample the same students pre- and post-intervention. The main issue is that you do not know if there is some other factor you are not aware of (and therefore do not control) that explains the differences pre- and post-intervention. A more appropriate conclusion would not focus on this weak aspect of the paper, rather focus on the significance and intervention implications of the structural model findings.

2. Introduction:
   a. The first two sentences of paragraph three do not fit here. It makes more sense to introduce the HBM, then cite literature supporting its ability. One reference remains insufficient, and further literature review is required. Also, in what way did Arnold and Quine “investigate” bicycle helmet use?
   b. I still maintain that the explanation of the HBM, whilst greatly improved in this version, would benefit considerably from the inclusion of a figure using the terms listed.

3. Method:
   a. Page 8 section 2(1) contains 2 sentences referring to the grade one and two sampling strategy, after stating that “the effectiveness of health education was evaluated only for the high school students in this report”.
   b. The second Reviewer queried why sample sizes were so different pre- and post-intervention. This has not been addressed anywhere in the paper, and still remains an issue.
   c. I am still very concerned that you did not use the same sample to investigate the impact of the intervention. Given this HUGE issue (also see earlier comments), this element of the research should be more of an aside and of some interest, with the focus of the paper remaining on confirming the HBM structure in
the senior student sample.

4. Results

a. I am not sure why the error terms between item 14 (Food safety can effectively avoid food poisoning) and 15 (Hard to get used to fastening the seat belt while driving or to put on a helmet while driving a moped). I can think of no sound theoretical reason to include this, and error terms should not be allowed to covary simply to improve model fit. Please comment.

5. Discussion

a. At the moment, when the first paragraph is read a policy-maker would conclude that barriers to engaging in health behaviour is not important. This of course is not correct, and it merits adding the final sentence to this section: “Notwithstanding this, efforts to remove or minimise all barriers to engaging in health behaviour should continue.”

b. Some effort has been made to improve the Limitations element of the Discussion, however further limitations remain ignored/insufficiently addressed.

i. The different samples issue is FAR BIGGER than you give credit to. I recommend downplaying this aspect of the paper altogether, suggesting that this may be the case however further research is warranted.

ii. There was a very short follow-up period (6 weeks) therefore there is no indication of any long-term improvements in health behaviour as a result of the intervention.

iii. There were many different intervention efforts, therefore it is difficult to identify exactly which intervention is having the desired effect. This has considerable implications for effective intervention in this and other communities, particularly when as the Authors acknowledge resources typically are limited.

Minor essential revisions

1. Abstract:
   a. Sentence 1 in Background: “spread” should be changed to “developed”.
   b. Sentence 2 in Methods: you mention Shanghai as the community in the paper, so I don’t see why it can’t be stated in the Abstract also.
   c. Sentence 2 in Results: What does “The factor structure of HBM was given” mean?
   d. Sentence 4 in Results: BAR has not yet been defined.

2. Introduction:
   a. Paragraph 2 page 4: “it can not only use more resources” – please change the subsequent three references to ‘resource’ to ‘resources’ to be consistent.
   b. SER page 5: A word is missing between “A” and “person”. Is it ‘belief’?

3. Method:
   a. Line 1, section 1: With whom was the “extensive consultation”?
   b. “Most items were related to traffic health belief and sports health belief”: were
these two domains of injury prevention of particular interest? Interest in road safety is understandable given the injury burden arising from road traffic injuries, however I am not sure of the significance of the sporting injuries.

c. The final paragraph in section 1 refers to a “panel” — a panel comprising which people and how many people?

d. 2 decimal places is current practice in reporting Cronbach’s alpha. Be consistent.

e. Not every instance of ‘p’ significance (italics/lower case) has been corrected as stated in the Response to Reviewers. Please correct page 10 paragraph 2.

4. Discussion

a. “genelizability” should be “generalizability”

5. References

a. Some typographical errors

i. 8 and 24 require capitalisation of the journal title.

ii. 17. “latter” should be “later”

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

**Quality of written English:** Needs some language corrections before being published

**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.