Reviewer's report

Title: Modeling Predictors of Drug Use among Male Street Laborers in Urban Vietnam

Version: 1 Date: 12 October 2012

Reviewer: Karen Wynter

Reviewer's report:

Major Compulsory Revisions:

1. The research question:
The research question is not presented in the Abstract at all. Therefore the following sentence in the Results section of the Abstract makes no sense to the reader: “Contrary to the hypothesis, overall measures of fit via structural equation modelling (SEM) indicated that the study provides a better fit to the data when analyzed at the original IMB model than at the modified version”.

The research question is not clear. In the first sentence of the Abstract and the final sentence of the Introduction (p5), the author states that the paper is about modelling “predictors of drug use for HIV”. The reader may be forgiven for thinking this paper is about predicting the use of (medicinal) drugs for HIV, which is not the case. The aims of the study should be reworded to reflect the research question more accurately.

Overall it needs to be clearer that this research tests two models, one of which (modified model) includes psychosocial factors. This needs to be explained in the Data Analysis section of Methods, as well as the aims of the study.

2. The section on Measures (Methods) (p.6 – 9) is lengthy and difficult to follow. I suggest that this be shortened, possibly even in a Table summarising each measure. It needs to be clear how each construct in the SEM models was derived.

3. Reporting of validity and reliability of scales:
Cronbach’s alpha confirms internal consistency of scale items, but it is only one form of reliability and validity assessment, and this should be acknowledged in the limitations (Discussion).

If there is evidence of construct validity (p.11), this needs to be presented – correlations between subscales does not constitute such evidence.

4. Please discuss possible reasons WHY men who are informed and motivated and have the necessary behavioural skills do not exhibit consistently safe drug use behaviour. This is particularly important given than the psychosocial aspects tested in the modified model were not significantly associated with drug use. The authors should suggest broader environmental and social factors (not within the
individual) which may contribute, and recommend these as avenues for future research.

5. It is standard practice to avoid presenting significance as \( p=0.00 \), rather \( p<0.001 \).

Minor Essential Revisions:

6. A reference is needed for the term “social mapping” (p.5). Also, were field workers asked to estimate the number of participants, or potential participants/ eligible men?

7. Not sure what is meant by “measuring levels of exposure to HIV/AIDS information and prevention” (p.6). Please clarify.

8. The correct abbreviation for the Center for Epidemiologic Studies Depression Scale is the CES-D (p7).

9. It’s not clear how the description of Drug use behaviour on p.9 aligns with Table 1. Perhaps this would be clarified by using a different term instead of “Level of” in Table 1, for example “frequency of…” (What does Mean (SD) “Level of” refer to?)

10. Amos 18 is not the same as SPSS (as referenced on p.9), although both computer packages are licensed by the same company.

11. I’m not sure why a mean score of 3 on a 0 – 5 scale means that the behaviour concerned is “common”, while a mean score of 2 on a 0 – 4 scales means the behaviour concerned is “inconsistent” (p.10). Some clarification is required.

12. Consistency is required about whether statistical significance is indicated at \( P#.05 \) (p.9) or \( P<.05 \) (e.g. p.11).

13. Please give prevalence data of existing studies when comparing study data with such studies (injection risk behaviours, Lurie et al; Deren et al.; Yang et al, p12).

14. Please specify comparison group when stating “engaged in drug-taking behaviour at lower level of safety” (than whom?) and “scored to the ceiling for behavioural skills for HIV prevention, but practiced a higher level of drug use risk behaviour” (than whom?) (p.13).

15. Is the behaviour in question (outcome) using/taking up drugs, or using them /taking them up safely? (p.14). Please clarify.

16. Minor but important language changes required to clarify meaning:
   - SEM was conducted with 450 male laborers should read “SEM was conducted with data from 450 male laborers” (p.9)
   - Item “parcels” should read item “scales” / “clusters” / “groups” (depending on
what the author means) (p.10)
• “addictive” should read “addicted” (p.12).
• “were understandable” should read “showed understanding of” or similar (p.12).

Discretionary Revision

17. Please clarify the data collection period for the study by Hien (2002) – between 15 October 1999 and when? (p.3)

18. “Curiosity” may not be the correct term in the sentence “Men who had...experienced psychological issues such as curiosity, depression, fatalism, revenge, and family and social pressure...” (p.4). Please replace with the correct term.

19. Is it true to say that Cronbach’s alpha of most scales >0.70? (p.6)

20. Rather than stating “there appeared to be no relationship between information and behavior” (p.11), would it be more accurate to say “there appeared to be no direct relationship...”?

21. Model fit is evaluated using only one criterion for the original model (p.11), and 3 criteria for the modified model (p.12). These criteria could be presented more consistently.

22. It would be preferable to avoid the term “street men” (p.12).

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

**Quality of written English:** Not suitable for publication unless extensively edited

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

**Declaration of competing interests:**

I declare that I have no competing interests