Reviewer's report

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

Version: 1 Date: 9 October 2012

Reviewer: Thach Tran

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Major Compulsory Revisions:
1. The author needs to include several probable confounders within the modified model in addition to 'psychosocial stress'. Firstly, the education level could influence all of the elements in the models. With the mean of 8 years, education levels of the participants could range from no education to year 12 completion. Secondly, venues (urban/rural) and types of work (construction/market/transportation) could relate to the accessibility to drugs, which, in turn, may affect drug use as the author in a previous study found. Finally, migration is also a probable confounder.

2. The author states that the majority of variables included in the Structural Equation Modeling (SEM) were relatively normally distributed therefore the Maximum Likelihood method was used. However, the primary outcome (drug use) was skewed because 82.89% of the participants did not use drug. The author needs to consider this in the model analyses.

3. The author tests the pathway from behavioral skills to drug use in the models. However, the relationship could be happened in the opposite direction. Non drug-users tend to choose positive answers for the questions within behavioral skills like “How hard would it be for you to separate syringes and needles when injecting drug with your friends” because they have no experience in the possible difficulties of this situation. Therefore, the opposite direction should be included in the model. Both directions could be tested in SEM simultaneously.

4. Table 2. Among 450 participants, the drug use level could not have a mean of 2.81 due to the lifetime drug use of 17.11%. Therefore, there is a concern about the numbers of participants involved in the analyses in Table 2 as well as in the models.

Minor Compulsory Revisions:

Introduction:
1. Provide further review of literature on the determinants of drug use in Vietnam as well as in similar settings.

Methods
2. Because interviews were conducted in various places which were not private, the avoidance of other presences was impossible during the interviews. The
strategies to control this problem or discuss the effect on the results in the Limitations needs to be stated.

3. In the Measures, ‘Access to HIV Prevention’ included is information and prevention. There is other Information below. Are they the same or different? If different, it seems that “Access to HIV Prevention’ was not used in any analyses.

4. Please provide the interpretations of path coefficients in the Data Analysis because there are several types of path coefficients in SEM.

Findings

5. Please provide the refusal rate.

6. Because the items 3, 4 and 5 in Drug Use Behavior were transferred into binary variables to construct the primary outcome, the results need to be reported besides means and SD.

7. In the first sentence page 12, ‘P=.00’ should be changed to ‘P<0.01’

8. Indirect pathways can be tested and calculated directly in SEM.

Tables and Figures

9. Table 1 should be restructured. Some ‘n’s should be ‘N’

10. Figures 3 and 4; Please add more notes for single-headed arrows, double-headed arrows, different types of path coefficients, and observed/latent variables. A figure should have enough information to stand alone.

Level of interest: An article of importance in its field

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