Author's response to reviews

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

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Author's response to reviews: see over
Dear Editors and Reviewers,

Thank you very much for your comments and providing reviewers’ comments. We have modified the manuscript in response to the comments and suggestions.

I. Revised according to editor’s comments
   1. Had a native English speaker edit the paper.
   2. Changed the title 'Introduction' to 'Background'
   3. All figures had a figure title listed after the references in the manuscript file
   4. The figures were cropped as closely as possible to minimise white space around the image. Yet, if we crop further, we can’t see the statistical parameters (such as path coefficients or factor loadings…)
   5. The manuscript conformed to journal style.

II. Revised according to the comments of reviewer 1: Colleen Fisher

Introduction
   1. It is not until the Findings section (p.9) that the authors note that the Motivation component of the IMB model is made up of three sub-constructs (i.e., attitudes, norms and behavioral intentions); this should be articulated clearly in the Introduction. Yes, we added this info in the Introduction.

   2. Although the author(s) have made a case for the need to adapt the IMB model, several things remain unclear. It would be helpful if the recommendations by Aronowitz and Munzert cited [p. 4] were listed for readers who are unfamiliar with them. More importantly, it is still not clear how the authors propose that the model should be modified until later in the paper—yet this should be made clear in the Introduction. Readers should know from the outset how the model will be adapted and what additional constructs will be examined.

   Aronowitz and Munzert suggest that based on results of qualitative research, type of intervention and population, Aronowitz and Muzert suggest adding items to constructs of the model such as information, motivation and behavior skills.

   3. [p.5] The last paragraph of the Introduction does not make sense since the proposed modifications to the IMB model have not been previously explained. Further, it would be helpful if the components of the construct “psychosocial stress” were articulated more clearly.

   Psychosocial stress is a combination of four factors, mobility index, social isolation, depression and alcohol use (See Table 1 for details).

   4. [p.5] “… and less psychosocial stress are less likely to uptake drug”—In addition to the awkward wording here, it appears that the focus is on whether or
not respondents began using drugs. Yet, the measures reported appear to assess “level of drug risk.”
*Uptake drug was replaced with drug risk behavior.*

**Method**

5. [p.6] What does it mean that “up to 3-6” venues in each district were selected? Was it less than three in some districts?
*No, it wasn’t. To make clearer, the word “from” was used for “up to”*

6. [p.7] The statement “many of them interviewed many participants at the same time” suggests that respondents were interviewed in groups rather than individually. Please clarify this.
*It is not a group interview, but an individual one. To reduce the effect of outside environment, we did in a manner that interviewer A interviewed one participant, while interviewer B interviewed another participant, and interviewer C interviewed another participant, and so on at the same time in order to avoid participants come and look at one’s interview.*

7. [p.8] Content in paragraph 1 of the Data Analysis section is repeated in paragraph 2
*We deleted one part of this to avoid the repetition.*

**Findings**

8. [p.9] It would be more meaningful if the descriptive statistics were reported for each of the three Motivation constructs individually.
*It’s good to do that, yet because of the paper space (word count) and because we did not see any articles (with IMB model) present 3 motivation sub-constructs individually.*

9. [p.10] The last sentence of paragraph 1 describing the original IMB model fit should state more clearly that only one of the three fit criteria were met.
*Yes, we provide more details on this. The model was fit with data for one criterion (ML \( \chi^2 = 16.57, P > .05 \)), although two other criteria of the fit (CFI and RMSEA) were not met.*

10. [p.10] It is not clear what makes the significant relationship between behavioral skills and behavior “notable” since this is the relationship hypothesized by the original IMB model.
*This significant relationship can be explained by a mediating role of behavioral skills (which was examined in the last paragraph of section “Results”). We deleted “notable” for avoiding a confusing.*

11. [p.10] “. . .were more likely to have behavioral skills necessary to do so . . .”—it should be clarified that these were “perceived behavioral skills” since self-efficacy rather than actual behavioral skills were assessed.
*Yes, you are quite right. Therefore, a word “perceived” was also added for clarity.*

**Discussion**

12. [p.11] “Compared with other populations, the addiction proportion of our sample . . .”—are the terms “drug use” and “addiction” being used synonymously?
*Yes, they are.*
13. [p.12] “. . . close to 60% of the sample of current drug users injected drugs . . .”—the authors should clarify whether “current drug users” refers only to the 17% of the sample referenced earlier. 

No, 60% referred to here was the percentage of drug users in Yang et al.’s study, not our sample. We deleted “current” for more clarity.

14. [p.13] As noted above, the DV is stated as likelihood of “taking up a drug” at the bottom of paragraph 2 when it is described elsewhere as a composite level of drug risk. 

Because the DV was formed of a number of variables, it is good to call the DV as risk drug use behavior. I revised this consistently.

15. [p.14] I would suggest revising sentence 3 in paragraph 2 as self-report bias and recall are separate measurement issues. 

Yes, I revised this accordingly with a separation of two biases.

16. [p.14] The statement about construct validity requires further revision as it is not clear how this was done or what correlations are referenced. 

I added some further info. The construct validity of the variables in the model has been examined mainly based on Pearson’s product moment correlation statistics between pairs of variables in the model.

Table 1

17. [Footnote] For the motivation and skills scales, do you mean “semantic differential?”

Yes, this is a semantic scale (for example, 1=very bad, 2=bad, 3=not decide/don’t know, 4=good, 5=very good).

18. [Footnote] “All of the above variables” should read “All of the above measures” 

I revised this accordingly “all of the above measures”.

19. [Footnote] If existing IMB measures have been adapted, a brief explanation of how this was done should be included here or in the manuscript body.

This was actually done in the manuscript. The adaptation of the existing IMB measures was based on the qualitative findings to inform the constructs; this info was mentioned in the introduction, method section of the manuscript.

20. [Abstract] “to account for [predicting?] drug use among the above population”

I revised as “predict” rather than account for, although the latter can also be used.

21. [Abstract] “indicated that the study provides a better fit”—do you mean the original model provides a better fit?

I revised that “the original IMB model provided a better fit to the data that the modified version did”.

22. [Abstract] “men who are better informed and motivated for HIV prevention are more likely to predict behavioral skills” (the men are not predicting the skills)
You’re right. This sentence was revised accordingly: *predict was replace with report and/or engaged in* …

23. [p.3] “besides migrants’ most individual characteristics” –what does “most individual” mean?

*Most individual characteristics mean most of the individual characteristics. I deleted “of the” to make the phrase shorter. Anyway, I deleted the word “most” to make clearer.*

24. [p.4] “behaviors among migrants have received an enormous attention”

*We revised as follows: although sexual risk behaviors among migrants have received a fairly great attention, little is known about drug.…*

25. [p.5] “we conducted the qualitative research”

*This sentence was revised as “a qualitative study was conducted……”*

26. [p.5] “aimed to explore the living experiences”—do you mean “lived experience?”

*Yes, we mean lived experiences.*

27. [p.5] “The purpose of this study . . . than the original version to predict drug use behavior for HIV”—do you mean “HIV-related drug use?”

*Yes, we mean HIV-related drug use. We revised all these phrases consistently.*

28. [p.5] “It was hypothesized that male street laborers who have better HIV prevention”—do you mean “HIV prevention information?”

*We made a mistake. We added a word ‘information’ after prevention.*

29. [p.6] “. . . aiming to generate as many as possible the venues . . .”

*We revised as “The purpose of this exercise was to identify as many as possible the venues of male laborers…”*

30. [p.6] “. . . participants were screened if they met (1) being male . . . “ –do you mean “if they were (1) male?”

*We revised “…participants were screened if they were (1) male, 2) 18 to 59 years old…”*

31. [p.8] “These items were summed to form a composite score of drug use level”—do you mean “drug risk?”

*In this phrase, we mean “risk drug use level “*

32. [p.8] “As most single variables and model constructs were relatively of normality”

*We paraphrased this sentence in a clearer manner.*

33. [p.8] “. . . then their fitness was examined which one is better to predict drug use.

*We revised “examined on which of the models is better to predict risk drug use.”*

34. [p.9] “The an average income . . .”

*We deleted the article “an”*
35. [p.9] “The response rate was high, reaching 95%”—do you mean “representing 95%?”
   Yes, you are right.

36. [p.10] “All, but one path from the main construct to sub-constructs”—can the author(s) clarify what is meant by this?
   It means that all paths (except for one path...) from the main construct to sub-constructs

37. [p.12] “The findings of this study seem to support previous data.”—do you mean “support previous research?”
   Yes, we mean previous research....

38. [p.12] “... scored to the medium level of willingness . . .”—do you mean medium level of motivation?
   Yes, you are right.

39. [p.12] “... and scored to the ceiling for behavioral skills for HIV prevention”—consider revising “to the ceiling” and “for perceived behavioral skills?”
   We revised “reported perceived higher behavioral skills for HIV prevention....”

40. [p.13] “Overall, the current modified model is likely to have a substantial prediction. . .”
   We revised “Overall, the modified model is likely to have a robust prediction of...”

41. [p.13] “men doing low-skilled unregistered labors who are more informed and motivated are more likely to result in better behavioral skills which predicted a less likelihood . . .”
   We revised “…male street laborers who are more informed and motivated are more likely to report better behavioral skills, which, are in turn, less likely to be engaged in a risk drug use behavior...”

42. [p.14] “Further, we measured all, except for some, the model constructs . . .”
   We revised “Further, most of the model constructs were measured with multiple items which were assessed with adequate reliability...”

43. [p.14] “Interventions in this population . . .”
   We revised “Interventions designed for this population should seek ....”

Discretionary Revisions
1. [p.3] Is the full date necessary for the statistics presented in sentences 3 and 4 (e.g., “by 31 December 2009”)? The year would seem to be sufficient here. Also note run-on sentence 4.
   Yes, we revised only using the year.

2. [p.7] I would suggest using the term “variables” or “constructs” rather than “elements” in the first sentence of the Measures section. In the second sentence, “items” or questions may be a more appropriate term than “variables.”
Constructs were used instead of elements. Items for variables.

III. Revised according to the comments of reviewer 2: Thach Tran
The author made a number of changes to respond to my criticisms that I made of that manuscript. The manuscript was improved considerably with these changes. However, there are 3 of 4 comments as follows.

My Comment 2. Assumptions are the set of rules under which a statistical technique is carried out. The validity of the technique used depends on whether the assumptions are satisfied. Drug Use is the primary outcome and is highly skewed. Transferring into a standardized variable is not a method to transform skewed variables. 

*Because DV is not of normal distribution, we used Weighted Least Squares (WLS) approach for analysis that doesn’t require normal distribution, the new results are computed.*

My Comment 3. The IMB model has several limitations. Your study is to modify the model. If you agreed that the opposite direction is essential, why you didn’t include that into the modified model. 

*In this study, we would like to modify the model by adding more constructs rather than modifying the direction of the relationship paths. We wish that you accept this. We highly appreciate your comment.*

My Comment 4. I am still not sure what is the number of participants you included in SEM. I do not think the “bootstrap” option relates to this comment. 

*According to a statistician Prof. Everda Cunningham from Swinburne University (Australia), when data is not normal, Bollen-Stine bootstrap is used to adjust the x^2 for non-normality in AMOS. If the result shows P is not significant, then the model will fit the data.*

IV. Revised according to the comments of reviewer 3: Karen Wynter
The author has revised the manuscript considerably based on comments from all four reviewers. The manuscript is much improved in terms of organisation, clarity of description of aims and methods, and presentation of results. 

The following points still need to be addressed (Minor essential revisions):
1. The clause "to predict drug use behavior for HIV" in the aim (p.5) is still ambiguous - the drugs being used are not for HIV

*We revised “… to predict HIV-related drug use behavior”. This is also a suggestion from reviewer 1.*

2. I would encourage the author to suggest EXAMPLES OF "broader environmental and social factors" which may contribute to risky drug use behaviour (p.14). If other confounders such as highest level of education attained have been tested and found not to contribute significantly, this needs to be stated.

*This comment is appreciated. I actually examined many factors such as education, urban/rural origin, type of work, marital status, ethnic, religion, and with whom participants live during urban stay, but did not find a significant change in the model. These factors were not significant perhaps because of the fact that most of the research participants had very low level of education, were married, Kinh (the most common ethnic in Vietnam), Buddhist/ancestor*
workship, coming from rural areas, farmers (in original township) and manual workers in cities.
We stated in the paragraph before the final paragraph of the results section.

3. Field workers would have been asked to estimate the number of POTENTIAL participants (p.6), rather than participants
Yes, we added "potential" in the text.

4. In the Methods, it is stated that "Statistical significance yields at a threshold of P#.05." (p.8) which is inconsistent with threshold used throughout the paper (p<0.05)
We made a mistake on this matter, therefore we revised it with P<0.05.

5. I am still not convinced that a mean of 3 on a scale of 0 (never) to 5 (always) implies that the behaviour is "common", while a mean of 2 on a scale of 0 (never) to 4 (always) implies that the behaviour is "inconsistent". These are clearly ordinal scales and as such, cannot be easily summarised by means. Perhaps the percentage of respondents who selected the top two categories could be reported instead?
Due to the space (the paper was lengthy), we wish that you accept us not to analyse and present more types of statistics.

6. Model fit criteria should be presented (numerically) for all three evaluation criteria for both models.
Yes, we presented these.
- there are still several spelling and typographical errors
We revised these accordingly.
- the footnote labelling in Table 1 should be replaced with standard footnote notation
We tried to use standard footnote notation, but it occupied so much space in the bottom of the page, therefore, we wish that you allow us to keep unchanged for this matter.

V. Revised according to the comments of reviewer 4: Nathan Hansen
In general, this revised manuscript addressed my primary concerns with the original submission. The reorganization of sections and clarification of study aims was helpful.
- Of minor concern however, the omission of the description of measures used is problematic. This section was long in the original, so cutting it back makes sense, but it is almost removed entirely in this version. Knowing how the scales were used in creating latent variables is also an important piece of information.
One of the four reviewers required using a table for measures in order to reduce the length of the paper.

- The manuscript could use some editing as well--there are some confusing sentences where the wording is awkward and the meaning is lost or unclear.
Yes, we already asked one native speaker of English to edit this work.

- In relation to this, in the findings, the manuscript reports that for the modified IMB model "two other criteria of fit were not met," and for the original IMB model "the
model was not fit." My interpretation of the findings suggest that all indicies of fit were satisfied aside from the chi-square for the original IMB model. I think these findings were easier to follow in the original manuscript.

We revised “The indices of fit were satisfied given the Chi-square for the original IMB model…”

We look forward to hearing from you soon.

Sincerely,

The First, Correspondent Author

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