Author’s response to reviews

Title: Impact of parent-adolescent bonding on school bullying and mental health in Vietnamese cultural setting: evidence from the Global School-based Health Survey.

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Version: 1 Date: 27 Oct 2018

Author’s response to reviews:

Authors would like to greatly thank the reviewers for constructive suggestions and comments on our manuscript. We have revised the manuscript to meet each of the reviewers’ suggestions and comments as below. The changes we made in the manuscript are marked in red. We are confident the revised manuscript will be greatly improved.

Reply to Reviewer 1:

Richard Rowe, PhD (Reviewer 1):

This study reports on the associations of parent-child relationship and factor relating to child mental well being (bullying, victimisation, loneliness, suicidal ideation) in a large Vietnamese sample.

The paper is well written and the geographical location of the sample makes the study of interest to readers who are more used to reading research from Europe and USA.

I do have two serious concerns about the ms, however.

1. The data collected are cross-sectional, but the results are interpreted with a strong causal framework of parenting relationship influencing wellbeing. This cannot be assumed. It is equally possible that mental health might impact upon parent-child relationship, for example. The ms needs to be re-written to only discuss associations rather than causal relationships. The discussion may then speculate on the causal mechanisms that might underlie these observed associations.
Response:

- According to the reviewer’s kind comments, we totally agreed that the cross-sectional study cannot make causal inferences and therefore mentioned it in study limitation in revised manuscript (Page 13, line 3-14). We carefully read all the manuscripts again and there are several misunderstanding sentences that were not same as our expectation. Thus, we amended all sentences to make clear this association rather than causal relationships throughout revised manuscript, and other discussion only did speculate on underlie causal framework (Page 11, line 4-9).

2. The measurement of the key variables of the study is based on only single items. This is a weakness in that multi-item scales would improve reliability. Furthermore, the use of validated scales would have increased confidence that the measurements adopted effectively measure the concepts that the authors assume that they are measuring. Further still, in some cases items have been combined together on the basis of subjective opinion, so far as I can see, and the chosen combinations may not be optimal. For example, see the discussion of the bonding construct below. More psychometric justification of the measures used, and especially of the combining of items as used here, is required in this write-up.

Response:

- According to the reviewer’s comments, we appreciate reviewer’s points for the measurement of this study. Single item for key variables is limited compared to multi-items scales such as: instrument used in public health for depression by The Center for Epidemiological Studies-Depression Scale (CES-D) with 20 self-reported items; or Parental Bonding Instrument (PBI) consisting of 25 items. In our specific context, we did not ready to use multi-items scales in this study because this topic is quite sensitive for large adolescent population in early research. Thus, single items in the proxy of meaning of mental health or parental-adolescent bonding was our choice to get the research message about relationship between parent-adolescent bonding and mental health among adolescence. We added this limitation in revised manuscript, and had recommendation for further study in Vietnam (Page 13, line 5-14).

The following specific points came to my mind as I was reading the manuscript.

p3 line 40. "Bullying behaviors differ between sexes, ethic groups" This point needs to be expanded to be meaningful, or to be deleted.

Response:
According to the reviewer’s recommendation, this sentence had no clear meaning in its that paragraph, then we removed this sentence in the background of revised manuscript (Page 3, line 7-21).

p3 line 58 intermediate not intermedia
Response:
- According to the reviewer’s recommendation, the typing errors was corrected (Page 3, line 27).

The parental monitoring question does not seem core to the bonding construct. It seems more like control.
Response:
- We really appreciate reviewer’s comment in this study. According to this important comment, we reconsidered and rewrote all referred paragraphs in the revised manuscript about the term “parent-adolescent bonding” to generalize our ideas about relationship between parent and their child (Page 5, line 19-27). The concept of a ‘bond’ between a parent and a child is generally accepted and consisted 2 dimensions: care and overprotection (by Paker et. al, 1979). Based on the proxy of a construct of parental bonding, we applied the limited single questions to highlight the parental care, monitoring and also control the child’s activities. In spite of the limited measurement (as discuss in comment above), our finding will be the first step for in depth study about this topic in Vietnam future.

Results
Clarify aOR in the text on first use.
Response:
- According to the reviewer’s recommendation, we added the clarification of abbreviations aOR on first use of results part (Page 8, line 8-9).

The odds ratios change little between unadjusted and adjusted models. I was surprised by this as I assumed there would be some correlations between predictors. Please comment on this and provide details of the correlations between predictors in the manuscript.
Response:

- According to the reviewer’s comments, the odds ratios (unadjusted and adjusted) in crude logistic regression and multivariable logistics regression model changed little. We checked the variance inflation factors (VIF) by multicollinearity which VIF results was around 1.0. Thus, there were no multicollinearity or the main predictor in multivariate regression model showed no strong correlation with others variables. Moreover, goodness-of-fit of all logistic regression models was assessed by Hosmer and Lemeshow Goodness-of-Fit Test with p>0.05, we mentioned in the data analysis of revised manuscript (Page 6, line 13-14).

Table 2. Clarify what the bold coefficients mean and ensure this rule has been applied consistently.

Response:

- According to the reviewer’s comments, we appreciate reviewer’s suggestion. Our purpose was to highlight the significant coefficients of the main explored variables related to parent-adolescent bonding and outcomes in both table 2 and table 3. We expected that the reader will find it easier to catch the important results in the tables. However, we amended all tables following the BMC Psychology guideline in revised manuscript (Page 8-10).

Reply to Reviewer 2:

Cixin Wang (Reviewer 2):

Thank you for the opportunity to review the article titled "Impact of parent-adolescent bonding on school bullying and mental health in Vietnamese cultural setting: evidence from the Global School-based Health Survey." I believe this is a less studied population and the topic is interesting. Authors used a large representative sample which is a strength of this study. I have some suggestions and comments, and hope these will be helpful for the authors in an effort to improve the paper.

Introduction:

Authors need to strengthen the introduction to build a stronger rational for your research questions and hypothesis. For example, you talked about parenting style broadly. But what is the definition of parent-adolescent bonding, and how does it related to your outcomes? You stated that "Vietnamese parenting styles draw mostly on Buddhist beliefs, emphasizing the interdependence of the family, respect for adults, and obedience toward parents." Do you think the results will be different from studies conducted in U.S. and other Western countries?
Specific research questions and hypotheses are needed.

Response:

- Thank you for the reviewer’s thoughtful comments, we tried our best to revise and clarify the research questions and hypothesis in the introduction part to strengthen rational of our research aim. We also rephrased the definition of parent-adolescent bonding, parenting style broadly, and the relationship between our predictor and outcomes (Page 4, line 1-2, 7-11).

Method:

Why did you use four binary outcome variables instead of continuous variables? It looks like you have some continuous measures on bullying and mental health outcomes (e.g., "how many days...").

Response:

- According to the reviewer’s questions, we used binary outcome variables instead of continuous variables because of two reasons. Firstly, the response measured bullying by question “how many days were you bullied during the past 30 days?” were categories as: “0 days”; “1 or 2 days”; “3 to 5 days”; “6 to 9 days”; … and “all 30 days” instead of the continuous response. Similarly, mental health outcomes (loneliness) also had category answers (never/rarely/sometimes/most of the time/always) (Page 5). Secondly, distribution of these variable is statistically skewed to the left, for example: the skewness of “be bullied” variable was 3.5; and parental control was 0.68. Then, we recoded these category variables as binary variables for further analysis.

You stated that "Parent-adolescent bonding was defined according to two components: parental acceptance and parental control." Have these measures been validated before? Some items in the parental acceptance scale seem to be measuring parental knowledge or parental monitoring, e.g., "How often did your parents or guardians really know what you were doing with your free time during the past 30 days?” I do not think those items are measuring bonding. You can just call them what they really are, e.g., parental knowledge, parental control.

Response:

- We appreciate the important comments from reviewer. According to the reviewer’s questions, the measurement which generally included all items used in this study was GSHS questionnaire (Global School-based Student Health Survey) which was developed by the WHO and CDC. In some previous validation studies, GSHS was reported to have acceptable validity. The average agreement between test and retest results was 77%, and the average Cohen’s kappa coefficient
was 0.47 [E Becker, Anne & Roberts, Andrea & Perloe, Alexandra & Bainivualiku, Asenaca & K Richards, Lauren & Gilman, Stephen & Weissman, Ruth. (2010). Youth health-risk behavior assessment in Fiji: The reliability of Global School-based Student Health Survey content adapted for ethnic Fijian girls. Ethnicity & health. 15. 181-97]. We added the validity of measurement (references) in methods part of the revised manuscript (Page 4, line 27-28).

For specific term “parent-adolescent bonding”, we clarified and interpreted this term in introduction, and we used the single questions in the proxy of parent-adolescent bonding in this study. We assumed that it generalized not only the knowledge of parent but also their agreement through 2 questions about understanding child problem and aware of free time activities. We named each variable same meaning of questions as reviewer suggested and made the discussion in the proxy of parental-adolescent bonding term. We think that further validation study about construction of parental-adolescent bonding will may be required in Vietnam.

Results:

In addition to reporting p value and CI, can you also report R square?

Response:

- According to the reviewer’s recommendation, we would like to thank reviewer for addressing the important point of the model fitness. We considered the goodness of fit model in this study by Hormer and Lemeshow Test with p >0.05. That results accessed the model fitness of all logistic regression model in this study. We added this points in data analysis of revised manuscript (Page 6, line 13-14).

Discussion:

Some part of the discussion reads like a summary of results. An in depth discussion about the contribution of your study is needed.

Response:

- According to the reviewer’s comments, we revised the discussion of revised manuscript to have the in-depth understanding and our contribution from study message (Page 11).

Minor issues:

Authors need to edit the paper for typos carefully. For example,
P3. The topic changed suddenly. E.g., "The core issues of violence among adolescents in school magnify concerns about school bullying." consider adding a transition sentence?

Response:
- According to the reviewer’s comments, we modified this paragraph in our revised text (Page 3, line 17).

P3. Missing the word "and" in this sentence: "Bullying behaviors differ between sexes, ethic groups"

Response:
- According to the reviewer’s recommendation, we deleted this statement as we think this sentence was not meaningful enough in that paragraph (Page 3, line 17-21).

p.4 "Studies in the USA conducted in adolescents…” Maybe change to "among adolescents."

Response:
- According to the reviewer’s recommendation, we corrected the sentence in revised manuscript (Page 4, line 4).

p.11 "The results of the present study suggest that the parent-adolescent relationship influence to mental health of adolescents." you should delete the word "to" in the sentence.

Response:
- According to the reviewer’s recommendation, we amended this sentence in the revised manuscript as suggested (Page 11, line 4-5).