Author’s response to reviews

Title: The mediating role of resilience and self-esteem between negative life events and positive social adjustment among left-behind adolescents in China: a cross-sectional study

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Author’s response to reviews:

Dear editor:

On behalf of my co-authors, we thank you very much for giving us an opportunity to revise our manuscript. We appreciate editors and reviewers for their positive and constructive comments and suggestions on our manuscript entitled “The mediating role of resilience and self-esteem between negative life events and positive social adjustment among left-behind adolescents in China: a cross-sectional study” (ID: BPSY-D-18-00857).

After received your comments, we carefully studied the comments and made major revisions on the previous manuscript. All the changes made in the manuscript are marked in red color, which may help the reviewers to compare with the previous manuscript. If you need further information or revision about our manuscript, please contact us at your early convenience. We would like to express our great appreciation again to you and reviewers for comments on our paper.

Yours sincerely,

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Response to the reviewer #1:

Dear reviewer,

Thank you very much for your comments on our manuscript. The authors really appreciated it. We have read the comments carefully and made revisions to the manuscript. The changes in the revised manuscript were marked in red. Please allow us to address the issues you raised one by one.

(1) The hypotheses can be tested using SEM and hierarchical linear regression analysis is thus redundant. Moreover, given the "categorical nature of the questionnaire" as well as the non-normality of the variables, linear regression (OLS) should not be used.

Response: Thanks for your professional comments. According to your suggestion, we have deleted the results of hierarchical linear regression analysis in our revised manuscript, just leaving the results of SEM to test our hypotheses.(See: figure 2, table 1, table 2)

(2) In the Introduction section it reads "Psychological adjustment was measured by resilience and self-esteem." In psychology, this adjustment is defined as "…the relative degree of harmony between an individual's needs and the requirements of the environment" (Anderson, Novak, & Keith, 2002, p. 32). Psychosocial adjustment refers to a good psychosocial functioning and well-being a life-altering event or transition.

Response: Thanks for your professional comments. One of goal of our study is to explore the mediating effect of resilience and self-esteem in the relationship of negative life events and positive social adjustment. We are sorry that we defined an inappropriate composite indicator to measure resilience and self-esteem. In our revised manuscript, we are not going to talk about psychological adjustment anymore. Instead, two specific variables (resilience and self-esteem) were used in our manuscript, such as “Hypothesis 1: NLEs are negatively related to resilience, self-esteem and PSA” in page 4/line 27, “Hypothesis 3: Resilience and self-esteem mediate the relationship between NLEs and PSA” in page 4/line 29.
(3) Robust corrections in structural equation modeling have largely supplanted asymptotically distribution free (ADF) methods (see Huang, Bentler, 2015; Savalei; 2014). Moreover, results from Monte Carlo study revealed that Maximum-Likelihood methods are superior to Asymptotically Distribution-Free Methods for treating incomplete nonnormal data (Gold, Bentler, & Kim, 2003). I am advising against using ADF. Maybe Bayesian SEM (implemented in Amos) could be a valuable option to deal with non-normal variable.

Response: Thanks for your professional comments and suggestions. According to your suggestion, the Bayesian approach was applied to our structural equation modeling (SEM) framework, which using the so-called Markov chain Monte Carlo (MCMC) methods. The main results of Bayesian statistics were shown in figure 2 and table 1 in our revised manuscript. Meanwhile, the literal description of the statistical analysis (See: Methods section/statistical analysis/page 7/line 16-40 /in red font) and the results were re-written (see: Results section/page 8/line 26-35; page 9/line 1-16 /in red font). Besides that, the confirmatory factor analysis of the scales were re-analyzed using the Bayesian approach in our revised manuscript (See: Methods section /Measures/ page 6/line 5-12; line 18-21; line 26-31 ; page 7/line 3-7).

(4) As a method for dealing with item non-response, I am suggesting maximum likelihood methods which are implemented in AMOS or multiple imputation. Single imputation should not be used.

Response: Thanks for your professional suggestions. According to your suggestion, the missing data of the scale in our original data set was handled using maximum likelihood method in AMOS 20.0. In our revised manuscript, we have re-analyzed the model using the complete database.(See: figure 2, table 1).

(5) The fact that, after adding third step in hierarchical linear regression analysis, the effect of NLEs on PSA was no longer significant does not indicate that resilience and self-esteem are moderators. Moderator is not a synonym of mediator. Moderation and mediation are different.

Response: We are sorry that we misspelled mediators as moderators in our original manuscript. We have read through the full text several times, in case of some errors in our revised manuscript. If our manuscript needs further revision, please give us some comments. Thank you again for your valuable comments

(6) Adding the direct relationship between self-esteem and resilience to the model requires more justification. Not enough case was made for such important revision of the model. Moreover,
I agree that self-esteem is the base of self-perceptions and is related to psychological problems (NOT "psychology problems"); however, resilience is not an example of psychological problems.

Response: Thanks for your professional comments. In order to get a good fit in the final model, we added the direct relationship between self-esteem and resilience to the model in our original manuscript, without regard to adequate theoretical and empirical evidences. That was an inappropriate practice that should be avoid. Per to our original hypotheses (Figure 1), the theoretical hypothesis model was reformulated using Bayesian SEM in our revised manuscript. The main results of Bayesian statistics were shown in figure 2 and table 1. The results showed that the hypothesis model was well fitted using Bayesian SEM. We did not talk about the direct relationship of self-esteem and resilience any more in our revised manuscript, and we have tried our best to revise the discussion of our manuscript according to the latest results. The changes in the revised manuscript were marked in red.

(7) Longitudinal design cannot determine causality.

Response: Thanks for your comments. We have corrected “To combat this limitation, future studies should consider a longitudinal design to track the PSA of the LBAs through their growth trajectory.” as “A longitudinal study can better explore the association of NLEs, self-esteem, resilience, and PSA, that track the PSA of the LBAs through their growth trajectory. ” in page 12/line 14-15, and “Because of the cross-sectional design of the present study, we plan to design a longitudinal study to confirm the dynamic relationship among NLEs, psychological adjustment, and PSA” was corrected as “Because of the cross-sectional design of the present study, we plan to design a longitudinal study to better understand the dynamic relationship among NLEs, resilience, self-esteem, and PSA” in page 13/line 1-2.

If our manuscript needs further revision, please give us some comments. Your valuable and kind comments will be highly appreciated. Thank you again for your help.

Yours sincerely,

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Department of Health Statistics
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Response to the reviewer #2:

Dear reviewer,

Thank you very much for your comments. We have made revisions to the manuscript as you suggested. The changes in the revised manuscript were marked in red. If our manuscript needs further revision, please give us some comments. Thank you again for your valuable comments.

Yours sincerely,

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