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Title:
"Socio-cultural Adaptation and Its Influencing Factors for Chinese Medical Aid Team Members (CMATMs) in Africa"

Dear Editors and Reviewers,

The authors very much appreciate the thoughtful and critical feedback from the reviewers and editors. We are delighted at your decision that we revise and resubmit this manuscript.
The reviewers are clearly familiar with the topic, as is exemplified by their close and accurate review of this manuscript.
The manuscript has been revised according to the reviewers' comments, and all changes have been highlighted for ready identification. In addition, we have addressed each of the comments from you specifically, and the following points are the replies to editor and each reviewer point by point.

Hope the revision is satisfactory and this manuscript is now acceptable for publication in your journal.

* Please be noted that the page and line number may be changed after MS is changed.

I am looking forward to hearing from you soon.

Sincerely,
Authors

Response to Reviewer 1 Comments

Point 1: 25-32: The abstract is very solid. It might have more detail than it needs (e.g., you could delete specific statistics and just keep the conclusions from the findings in the abstract).

Response 1: As you suggested, we rephrased the abstract in revised MS.

Point 2: One of my main recommendations is to give more context—maybe a paragraph—that describes Colleen's approach to adjustment (that is, that includes both psychological and sociocultural adjustment), and explain how the two notions are distinct but related. The argument above *might* suggest moving the "Furthermore" paragraph (lines 72) to above "Studies" (lines 57). That is, the line of argument here might be: 1) domains of adjustment and how sociocultural adjustment fits in here; 2) general findings related to sociocultural adjustment, to demonstrate why it merits specific focus; 3) how/why sociocultural adjustment relates specifically to CMATMs. [Then, later, when you mention depression, refer back to psychological adjustment).

Response 2: We have revised the introduction part following the line of argument suggested by reviewer 1 (line 63 to line 100). We have introduced the definitions and variables of psychological and sociocultural adjustment, and the relationship between the two dimensions. Internal and external factors have also been introduced. We have moved "Furthermore" paragraph (lines 72) to above "Studies" (lines 57).

Point 3: Provide clearer definition of some terms: 1)"sociocultural adaptation", 2)"expatriate willingness", 3)"psychological withdrawal cognitions?";4) discuss what are the dimensions of sociocultural adjustment.

Response 3: 1) sociocultural adaptation We explain the term when we introduced the dimensions in the revised manuscript (line 67-68). Socio-cultural adaptation=socio-cultural adjustment. We noticed that some scholars used "socio-cultural adaptation", while some used "socio-cultural adjustment". In this article, we chose "socio-cultural adaptation" because our previous article (also funded by the same project and has been published) used this term. We decided to use the same term to maintain consistency; 2) expatriate willingness means the likelihood of accepting a job offer that requires relocating overseas to work for an organization for a specified time. To make the meaning more clear, we revised the term "expatriate willingness" into "willingness", e.g. "…, which offers a possible explanation for present the low willingness to participate in medical aid programmes in African countries."(line 106-107); 3) psychological withdrawal cognitions we mistyped, it should be "psychological withdrawal"(line 85); 4) the dimensions of sociocultural adjustment this could be found from line 80-86.

Point 4: 1) Clarify the total number of surveys sent and the response rate;2) Was any incentive given to potential participants to participate? 3) Consider the usage of "sex" instead of "gender".

Response 4: 1) We did not check the total number of surveys sent, because we distributed our electronic questionnaires non-randomly, using the information platform of the Global Health Institute of Wuhan University; 2) No incentive was given to potential participants to participate. We have added this in line 143; 3) we have used "sex".

Point 5: It looks like you used F tests (was it ANOVA?) to determine if differences existed within variables with multiple categories in the predictor variable (e.g., level of hardship), using t-tests for follow up pair-by-pair comparisons. If this is so, make this point clearer. Normally in such cases, I am used to researchers using something like Scheffé or some other "post hoc" analysis that SPSS allows as options in ANOVA analysis.

Response 5: We used ANOVA analysis to determine if differences existed within variables with multiple categories in the predictor variables. In Prof. Dr. Chen's doctoral thesis, we did the pairwise comparisons, and we don't think it is necessary in this paper since the stepwise multiple linear regression models were performed (Table 4).

Point 6: The results are mostly well-reported, though I have a couple of questions. Table 4 shows stepwise multiple regression. Did you the variables in any "blocks" (e.g., first entering demographic variables?). If so, it would be good for the reader to know that.
172: "those worked" à "those who worked"—this is one of the only writing errors I found in the whole document! (very nice); Consider noting up front that there were no differences in sociocultural adjustment based on sex, marital status, or educational level (at least if I am understanding the stats correctly; On table 3 (and any other table that goes to 2 pp), put column headings on top of 2nd Add a "note" at the bottom of table, either to note that * = p < .05 OR . . . see next note.

Response 6: Thank you for your comments, we rephrased the text and added some descriptions in revised MS. As for the editing, we are following the ijerph's instructions.

Point 7: I found some of the findings confusing (or at least incomplete). Just as an example, the results section notes that those with higher income core higher on overall adaptation, social morality, and social service; but the findings suggest that they were higher in all dimensions (also, since at the end of the stats, you note that "all $B > 0$, $p < .05$," you don't need that after each specific score). Even this conclusion, however, may not be accurate to the table. For example, you note higher scores for those with the highest income on overall adaptation (but 190-250K has a higher mean), social morality (though two of the income brackets have higher means than those with the highest incomes), and social service (the only item where highest income bracket, indeed, has highest mean). What I recommend here is twofold and includes both the table and the write up. First, on the table consider marking within the table means *within* each category that show significant differences. Recalling that a significant "F" only means that there is significance somewhere in the results, your follow-up t-tests (probably a Scheffé or some other text, rather than a t-test) could show exactly where the difference(s) lie(s). I don't have the stats to know, but, just for example, under "Gross annual aid income" you could do this (though subscripted letters may be lost through review software formatting). And 2) once which specific differences are significant is clear, make sure that the summary of findings in paragraph lines 170-182 aligns precisely with the findings. But, as reported, findings seem clear, and I don't think you need more detail in actual reporting of findings.

Response 7: Thank you very much for carefully reviewing this paper, we corrected these points and carefully checked the MS.

Point 8: 1) Table 4 is not in the format that I usually expect to see multiple regression reports in. Rather than a table with each of the categories of a variable (e.g., hardship) listed, as if entered separately, I would expect the variables (e.g., hardship, gross annual aid, etc.) entered as separate predictor variables, more as how appear in these examples: https://www.ncfr.org/sites/default/files/2017-01/regression.pdf. At the same time, such a table would be helpful, but I don't know that it would be essential for the manuscript; I would yield to the other reviewer on this point. 2) Probably move multiple regression paragraph to after discussion of Table 3 findings. The things noted in this paragraph, that such-and-such variables are "influencing factors" (if these stats allow us to determine causality, and not just relationship), though this doesn't tell us much more than table 3 does (except that table 3 clearly shows only relationship, not causality. I don't know about the assumptions of regression if it allows one to determine causal order). 3) Would you be able, with the regression, to tell reader which variables contribute the most to sociocultural adaptation?

Response 8: Our multivariable models included all demographic variables as indicated in the Methods section. Models selection were automated (we employed the stepwise techniques) so that only these variables with statistical differences were reported. We corrected this point that variables are not "influencing factors" but "related factors."

Point 9: 1) line 194: Format: Decide if you will use the Oxford comma with lists; follow whichever rule you choose consistently across the paper (e.g., compare with line 226); 2) The numbers indicated in the Aid Worker Security Report (aid workers killed, etc.)—are these worldwide, or only Chinese? 3) 199: Wording: While the wording is interesting, I'm not sure what you mean by "hierarchical hardships," "changes" and "difficulties"—what makes them "hierarchical"? 4) 218: Format: Magdalena Bjerneld or Bjerneld; 5) Word choice (227): probably "one article using data" rather than "study" including "studies".

Response 9: 1) We have made this revision**.** 2) It is worldwide. We added a sentence "Compared to 2016, 2017 saw a 30% rise in global fatalities" to make it clear (line 265); 3) The Ministry of Finance of the People's Republic of China classifies hierarchical hardships and grants hierarchical foreign aid allowances, basing on the natural environment, living environment and economic development levels (line 152-158); 4) Have revised- Bjerneld (line); 5) have followed word choice suggestions(line 297).

Point 10: 240ff: After which differences are significant, make sure discussion lines up precisely with significant findings. At least if I use table 3, annual aid predicts all aspects measured (though the highest income individuals are not the most adapted in every area). Table 4 seems to suggest the same thing. I did not make the same comparison for all of discussion, i.e., to verify that each claim in the discussion is supported by the statistics.

Response 9: We first used t/ F tests to compare the differences for the scores of all dimensions of socio-cultural adaptation between different population subgroups. And stepwise multiple linear regression models were the final step, they were performed to assess the potential related factors that might affect CMATMs' socio-cultural adaptation in all dimensions.
We also modified the revised MS as you suggested.

Response to Reviewer 2 Comments

Point 1: My suggestion is that while social-cultural adaptation in a new cultural place should be from both sides, it will be more comprehensives if examples of social-cultural practices from Africa can be included to support the arguments in the article. While this is an article of social-cultural adaptation of Chinese in Africa, the paper should also explain situations in Africa (particularly examples in different African countries if possible) to show a more complete picture. Africa is continent with different countries of diverse social-cultural practices. It will be more accurate if the article can include examples from some African countries can be included. Otherwise, it may give the readers there will be a "shared" social-cultural practice in Africa.

Response 1: We do agree with the comments that social-cultural adaptation in a new cultural place should be from both sides. But considering: 1) the fact that the medical aid teams are dispatched to about 30 African countries, and the number of CMATMs are quite uneven among the medical aid sites (e.g. there are over 20 members in some sites while there are only 2-5 members in some others); 2) the limitation of funding and time (the project was required to finish within one year), we found it impossible to explore the cultures of so many African countries in the project. Hence this paper discussed some shared points in African countries, e.g. language barriers, high risks in the form of infectious diseases and terrorist attacks, hardships (e.g. water shortages, power outages, a lack of living materials, houses being in disrepair and old household appliances are the norm, and lagging network communication facilities make communication with relatives and friends inconvenient). Besides, the purpose of this article was to provide suggestions for China to improve CMATM policy, hence the suggestions should focus on what China could do. Consequently, the article focused on “China’s side”-what China could handle. But it is true that further research could explore “Africa’s side” to better the understanding of the social-cultural adaptation of CMATMs in particular African countries. We have put the relative contents in limitation part.

Response to Reviewer 3 Comments

Point 1: 1) The theoretical framework is currently too meagre; 2) I am confused about the exact focus of the paper- socio-cultural adaptation or socio-cultural adaptation's subsequent relevance for expatriate willingness; 3) The choice of dependent and independent variables requires elaboration

Response 1: 1) the revised manuscript has more theoretical contents (line 63-100); 2) this paper focused on socio-cultural adaptation. To make this clear and concrete, we have revised some expressions (line 57-66), including the abstract (line 19-22); 3) the explanation of the choice of variables could be found in line 75-78, line 148-170. In brief, sex, age, marital status, age, educational level, previous overseas experience, length of service (we explained why we fine-tuned "length of residence" to "length of service" in line 169-172) are common characteristics, which have been widely used and proven in many studies. Type of service region and gross annual aid income are particular characteristics in this study (line 154-168).

Point 2: In line 99-100, it is stated that finished questionnaires were checked for effectiveness, and that incomplete or problematic questionnaires were not used. The authors gloss over this important point too readily. What exactly constitutes a problematic questionnaire? How many missings, and on what items, were required before a questionnaire was no longer considered? How many were removed as a result? This is important, because non-respons is typically not random. Simply removing questionnaires on the basis of missings (or other problems, although it is unclear what that is) is thus likely to result in selection bias. This is especially problematic in light of the dependent variable. It seems highly plausible to me that socio-culturally adaptation is related to responding to the questionnaire. I would like to see more information on non-response and would be interested to know what 'problematic' questionnaires are exactly. Moreover, I would like to see some reflection on the potential for selection bias, and how the findings should (or can) be interpreted in that light.

Response 2: All electronic questionnaires were distributed non-randomly by the information platform of the Global Health Institute of Wuhan University. Three hundred and thirty-five questionnaires were returned. Out of all the questionnaires returned from the potential participants, a total of 18 questionnaires were completed with poor quality (e.g., the answers were exactly the same for all questions and/or more than a third of the questions were not answered).
We agree with the reviewers. But we have to be very honest that we did not track this measure, and we do not know what exactly constitutes a problematic questionnaire.
In addition, as the clarification, we add this deficiency in the limitations section.

Point 3: Related to the previous point, I am interested in the extent to which the data are representative of the population. While Table 1 is useful in this regard, I would like to see the same characteristics for the research population (in so far as they are available). Otherwise, there may be serious limits to the external validity of the findings.

Response 3: The characteristics for the research population so far are not available. Since this study was commissioned by the former National Health and Family Planning Commission of the People's Republic of China (NHFPC). Prior to conducting this cross-sectional survey study, a QQ (a mobile instant messaging app with the largest user base in

China.) group that included most of the CMATMs in African countries was created by the NHFPC. By using the QQ group, all of the relevant information (including the contents and procedures) of the investigation were effectively publicized in advance, and related questions raised by the CMATMs in African countries were also answered in time during the investigation.

Point 4: While I recognize that this scale is used widely in the literature, I would still like to see the specific components that make up the 5 dimensions. However, the only reference that is provided (in line 112) is in Chinese. I think it is crucial that the authors provide an English translation of the individual components that make up the 5 dimensions (possibly for an annex), so that the findings can be interpreted effectively.

Response 4: Here's the English translation of the individual components.

Socio-cultural Adaption Scale

Please select a number from the following five numbers that matches your situation.
(1 = very difficult 2 = big difficulty 3 = general 4 = very little difficulty 5 = no difficulty)

(1 = very difficult 2 = big difficulty 3 = general 4 = very little difficulty 5 = no difficulty)		Please Write numbers
1	Adapt to diet in host country	
2	Adapt to shopping environment in host country	
3	Adapt to residential environment in host country	
4	Adapt to traffic in host country	
5	Adapt to weather in host country	
6	Adapt to the rhythm of life in host country	
7	Communicate with foreigners in the language spoken in their country	
8	Make friends with foreigners	
9	Make friends with people from your own country in host country	
10	Participate in activities organized by foreigners, such as weekend dances and volunteer activities	
11	Understand the humor and jokes of the local people	
12	Understand foreign culture	
13	Adapt to the service of restaurants and shops in host country	
14	Adapt to banking services in host country	
15	Adapt to the services of local hospitals	
16	Understand the traffic rules of host country	
17	Adapt to the social norms of host country	
18	Adapt to public health in host country	
19	Understand the basic laws of host country	
20	Adapt to the religious culture of host country	

Point 5: I am confused about the regression analysis. It seems that most of the independent variables were not included in Table 4. Why is that the case? If they are confounders, then they per definition have to be included in the regression. I also think the authors should discuss the assumptions underlying linear regression analysis. For instance, are the dependent variables normally distributed? In other words, why is linear regression most appropriate there, as opposed to alternatives?

Response 5: We determine if differences existed within variables with multiple categories in the predictor variable in Table 3, and most of them showed no statistical differences.
Our multivariable models included all demographic variables as indicated in the Methods section. Models selection were automated (we employed the stepwise techniques) so that only these variables with statistical differences were reported.
Our data are measurement data, but they can also be used as counting data, considering that, in the literature, linear regression were used, and our data were normally distributed, that's why we did so.