

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

This paper was submitted to a another journal from BMJ but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Open. The paper was subsequently accepted for publication at BMJ Open.

(This paper received three reviews from its previous journal but only two reviewers agreed to published their review.)

ARTICLE DETAILS

TITLE (PROVISIONAL)	Symptoms of Post Traumatic Stress Disorder and Depression among Eritrean refugees in Ethiopia: Identifying Direct, Meditating and Moderating Predictors from Path Analysis
AUTHORS	Getnet, Berhanie; Medhin, Girmay; Alem, Atalay

VERSION 1 – REVIEW

REVIEWER	Angela Nickerson University of New South Wales
REVIEW RETURNED	15-Feb-2018

GENERAL COMMENTS	<p>I have reviewed the manuscript "Symptoms of posttraumatic stress disorder and depression among Eritrean refugees in Ethiopia: Identifying direct, mediating and moderating predictors from path analysis". My impression is that this was an ambitious and well-conducted study that is well-placed to answer some outstanding questions regarding mechanisms underlying refugee mental health. I have a number of suggestions for the authors:</p> <ol style="list-style-type: none">1. The conceptual clarity of the manuscript could be improved. For example, it would be useful for the authors to define each of the constructs they are interested in investigating (i.e., coping strategies, sense of coherence) in the introduction. Further detail regarding previous studies of these constructs and their findings would assist in building the argument for the current study.2. The authors may find it useful to refer to Miller & Rasmussen's 2017 paper on "The mental health of civilians displaced by armed conflict: An ecological model of refugee distress" when discussing the proposed mediating role of post-migration stressors in the association between pre-migration stressors and outcomes.3. The study would benefit from clearly outlined hypotheses to guide the development and testing of the model proposed by the authors. In particular, an explanation of the mediating and moderating effects the authors expect to find would assist in building the rationale for the analyses conducted.4. When describing the study instruments, it would be useful to provide examples of items. For example, it wasn't clear to me what the responses "strongly disagree" to "strongly agree" referred to in
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	<p>relation to pre-migration and post-migration stressors. Upon first reading, I would have thought that these would be events or stressors that the individual experienced or did not (i.e., a dichotomous response). Further explanation of this measure would be helpful. In addition, further detail regarding scales measuring "coping style", "resilience" and "social support" (including definitions of the constructs and example items) would be useful in understanding exactly what the authors were looking at. Finally, the authors presented a number of statistical analyses relating to the validity of these scales relatively briefly. I wondered whether these were always necessary- the brief reporting did not necessarily do the analyses justice (i.e., CFA), and it wasn't always clear why these were conducted on some scales and not others.</p> <p>5. The proposing of hypotheses would assist the authors in structuring the results section to enhance readability.</p> <p>6. Table 3 outlined mediating relationship[s, but did not specify what the mediators were in each of the paths tested.</p> <p>7. The discussion was relatively brief and could benefit from a more thorough consideration of how specific findings from this study fit with the existing literature both in refugees and other trauma-affected populations. This will assist in highlighting the way in which findings from this study inform theory and practice.</p> <p>8. The authors should include a comprehensive discussion of study limitations in the manuscript</p>
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REVIEWER	Francois Kazour Department of Psychiatry, Faculty of Medicine, Saint Joseph University, Beirut, Lebanon
REVIEW RETURNED	01-Apr-2018

GENERAL COMMENTS	<p>Dear authors, Thank you for this opportunity to review the manuscript "Symptoms of Post Traumatic Stress Disorder and Depression among Eritrean refugees in Ethiopia: Identifying Direct, Meditating and Moderating Predictors from Path Analysis". Here are some comments that may improve the publication. Best regards, Francois Kazour</p> <p>1. In the abstract: can you please cite the methods and the scales used for the evaluation of participants?</p> <p>2. In the introduction, it is important to give a definition of the variable "sense of coherence" and how it can affect mood and anxiety</p> <p>3. A brief overview of the situation of Eritrean refugees in Ethiopia would add valuable information to the manuscript</p> <p>4. Are there any mental health services provided to the refugees described in the study? Was there any intervention program designed to manage participants who suffered from PTSD, depression or any other psychiatric disorder?</p>
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	<p>5. when discussing : "gender based vulnerability of female refugees to post migration abuses", can you please develop the findings in the references you cite?</p> <p>6. On page 2, Line 50: is it possible to add an appropriate reference to the sentence?</p> <p>7. In Measures and Statistical analysis: please provide the definitions of the abbreviations used on their first mention in the text</p> <p>8. On page 11: lines 4-9: associations between variables cannot be considered as protective or risk factors. These are rather hypotheses to be discussed later in the article</p> <p>9. Can you please develop the limitations of the study at the end of the manuscript?</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer-1

Comment-1: The conceptual clarity of the manuscript could be improved. For example, it would be useful for the authors to define each of the constructs they are interested in investigating (i.e., coping strategies, sense of coherence) in the introduction. Further detail regarding previous studies of these constructs and their findings would assist in building the argument for the current study.

Response to the comment: We have now incorporated definitions of the constructs: sense of coherence as defined by Antonovsky (1987), and coping strategies as defined by Lazarus and Folkman (1984) in the introduction section of the revised MS along with findings regarding these constructs in some detail as suggested.

Comment-2: The authors may find it useful to refer to Miller & Rasmussen's 2017 paper on "The mental health of civilians displaced by armed conflict: An ecological model of refugee distress" when discussing the proposed mediating role of post-migration stressors in the association between pre-migration stressors and outcomes.

Response to the comment: We have now considered the comment for making use of the findings of "Miller & Rasmussen (2017) to explain the mediating effects of post-migration living difficulties.

Comment-3: The study would benefit from clearly outlined hypotheses to guide the development and testing of the model proposed by the authors. In particular, an explanation of the mediating and moderating effects the authors expect to find would assist in building the rationale for the analyses conducted.

Response to the comment: Based on the comment, in order to explain what our study is expected to address, we have now proposed specific hypotheses of the model in the revised version, which is entirely based on previous empirical evidence and theory. We have hypothesized the following: (a) sense of coherence, task-oriented coping together mediates the relationship between exposure to pre and post-migration living difficulties and psychological symptoms (PTSD and depression), (b) Social support moderates the effect of exposure to traumatic events on symptoms (PTSD and depression); (c) the interaction between emotion-orientated coping and task-oriented coping is associated with reduced symptoms of PTSD and depression.

Comment-4: When describing the study instruments, it would be useful to provide examples of items. For example, it wasn't clear to me what the responses "strongly disagree" to "strongly agree" referred to in relation to pre-migration and post-migration stressors. Upon first reading, I would have thought that these would be events or stressors that the individual experienced or did not (i.e., a dichotomous response). Further explanation of this measure would be helpful. In addition, further detail regarding

scales measuring "coping style", "resilience" and "social support" (including definitions of the constructs and example items) would be useful in understanding exactly what the authors were looking at. Finally, the authors presented a number of statistical analyses relating to the validity of these scales relatively briefly. I wondered whether these were always necessary- the brief reporting did not necessarily do the analyses justice (i.e., CFA), and it wasn't always clear why these were conducted on some scales and not others.

Response to the comments: Thank you for this suggestion. As per the comments, we have now included example of items for each measure for clarity. In addition, further details regarding definitions and examples of items were provided for constructs of coping style, resilience, and social support in the revised version. Moreover, we have now presented the findings regarding the validity in more detail. We have also fitted additional CFA models and presented CFA findings for all measures. This helps to maintain consistency of reporting and justifying the factor structure of all the constructs used in the Manuscript.

Comment -5: The proposing of hypotheses would assist the authors in structuring the results section to enhance readability.

Response to the comments: As we have indicated earlier, based on empirical evidence of previous mental health research in refugees and displaced people, we have now proposed our hypothesis.

Comment-6: Table-3 outlined mediating relationships, but did not specify what the mediators were in each of the paths tested.

Response to the comments: Thank you for your suggestion. We have now specified all the mediating variables along the path, which are accountable in the hypothesized relationship, and presented them under separate column in Table-3 in the revised version.

Comment-7: The discussion was relatively brief and could benefit from a more thorough consideration of how specific findings from this study fit with the existing literature both in refugees and other trauma-affected populations. This will assist in highlighting the way in which findings from this study inform theory and practice.

Response to the comments: Based on your comment, we have now come up with detailed presentation of "our discussion" of the findings in light of literature in humanitarian settings (i.e. on the mental health of refugees and trauma affected people) on the topic of the research interest.

Comment-8: The authors should include a comprehensive discussion of study limitations in the manuscript.

Response to the comments: We have now presented more comprehensive limitations of the present study.

Reviewer- 2

First, we would like to thank you so much for the important comments given by reviewer-2, from which we were able to learn a lot. Our response to each of the comments is presented point by point as follows:

Comment-1: In the abstract: can you please cite the methods and the scales used for the evaluation of participants?

Response to the comment: First, we would like to thank you for your comments. As per your suggestion, we have now included methods and the assessment scales used in the study in the abstract section.

Comment-2: In the introduction, it is important to give a definition of the variable "sense of coherence" and how it can affect mood and anxiety.

Response to the comment: Now we have given the definition of sense of coherence provided by Antonovsky (1987) in the revised version. literatures presented two possible explanations regarding the mechanism by which how mood/anxiety symptoms and sense of coherence can be related: (1) higher sense of coherence enable people to cope up with their mood/anxiety and those with lower sense of coherence cannot have strong endurance to cope up with their mood/anxiety problems; (2) higher mood/ anxiety diminishes/depletes individual's sense of coherence.

Comment-3: A brief overview of the situation of Eritrean refugees in Ethiopia would add valuable information to the manuscript.

Response to the comment: As per the suggestion, we have now presented an overview of Eritrean refugees currently living in Ethiopian refugee camps in general, and those who are living in Mai Aini refugee camp in particular in the revised version.

Comment-4: Are there any mental health services provided to the refugees described in the study? Was there any intervention program designed to manage participants who suffered from PTSD, depression or any other psychiatric disorder?

Response to the comment:

There are mental health services provided by clinical psychologists, a psychiatry nurse and by lay counselors with short term trainings for refugees in Mai Aini camp where this study was conducted. Mental health services rendered to the refugees include: individual and group counseling (reported in some detail in another paper), especially for those with trauma experience. There is a health center for general health service of the refugees. US based organization called Center for Victims of Trauma (CVT), Administration of Refugee and Returnees Affairs (ARRA) and International Rescue Committee (IRC) collaborate to give basic health and psychosocial interventions to Eritrean refugees. High scorers on depression and PTSD symptoms were encouraged to see counselors.

Comment-5: When discussing: "gender based vulnerability of female refugees to post-migration abuses", can you please develop the findings in the references you cite?

Response to the comment: Based on the comment given, we have now elaborated on gender based vulnerability of female refugees based on reports from the studies in refugees living in Ethiopia (reference we cite) in the revised version. Specifically, gender based physical violence in Shimelba, one of the biggest refugee camp for Eritreans in Northern Ethiopia, was reported by Fiseha, et al (2012) and that of the Somali female refugees who were victims of rape in the refugee camps in Ethiopia (Wirtz, et al., 2013).

Comment-6: On page 2, Line 50: is it possible to add an appropriate reference to the sentence?

Response to the comment: As per the comment, we have now indicated our references with full description in the revised version.

Comment-7: In Measures and Statistical analysis: please provide the definitions of the abbreviations used on their first mention in the text.

Response to Comments: Thank you again for this comment. In the revised version, we have now provided definitions for first mentioned abbreviations.

Comment-8: On page 11: lines 4-9: associations between variables cannot be considered as protective or risk factors. These are rather hypotheses to be discussed later in the article.

Response to comment: Thank you for this comment. As per the comment we have changed our labeling of mere associations by using terms 'risk' as well as 'protective factors'. Now we have made corrections to this, and only used it to strengthen the discussion.

Comment-9: Can you please develop the limitations of the study at the end of the manuscript?

Response to comment: We have developed a comprehensive description of the limitation of the study and included it in the revised version of the manuscript, but the house style of BMJ Open presentation for 'strength and limitation of the study' is next to abstract section using 3-5 power bullets.

Based on the comments given by the reviewers, we have revised the paper in accordance with our point by point responses.

