Reviewer’s report

Title: Association Between Baseline Psychological Attributes and Mental Health Outcomes After Soldiers Returned from Deployment

Version: 0 Date: 19 Jun 2017

Reviewer: Chantelle Whelan

Reviewer’s report:

This is an interesting paper that requires some revisions before being suitable for publication.

There are some issues with the structure of this paper. The GAT is described in detail in the introduction section, this would be better placed in the methods section. It would also be beneficial for the reader to put the study aims at the end of the introduction, instead of half way through the section.

The study aims also need to be made more explicit. At present, the sentence 'In this study, we explore one potential strategy to achieve this goal' comes after discussing the development of strategies to recruit physically and mentally fit individuals, which may reduce the costs of mental health problems. This study does not address all of these issues. Physical fitness and the financial implications of pre-deployment screening are not measured. The specific aims of this study should be outlined in order to adequately review the methods used in this study.

More detail is required in the methods section. There was no mention of justification for the sample size used. I would have found it helpful to have the GAT questions as an appendix to get a better understanding of how the 14 attributes were measured. I found the sentence 'We found similar results using different aggregations of the GAT questions' unclear. Perhaps having the questions would have helped in my understanding of this. The statistical methods section also requires further information. A description of the statistical software used to carry out the analysis should be reported, as well as details of the statistics reported in the results section (Odds ratios and Confidence Intervals). There is also no mention of the statistical significance level used.

There is some demographic data missing from Table One - 'Males', 'Caucasian' and 'Single' are not included in the table.

The discussion is currently quite limited, focusing predominantly on the financial implications of pre-deployment screening. A discussion of the 14 attributes and how they related to post deployment depression and PTSD could broaden the scope of this section.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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