Reviewer’s report

Title: Exploratory factor analysis of self-reported symptoms in a large, population-based military cohort

Version: 1 Date: 6 August 2010

Reviewer: Harris Lieberman

Reviewer’s report:

Major Compulsory Revisions:

1) Are the findings regarding mental health inherently biased because such factors were overrepresented in the survey? Also, are they biased because physical illnesses may have been overrepresented in the exclusion criteria? This is a potential weakness that should be addressed in the manuscript.

2) Why were 4-5 factor models uninterpretable?

3) Does the Kaiser-Guttman criterion apply to data sets that are as large as this one? What is the impact of such a large data set on the validity of the factor analysis?

4) Authors should provide more quantitative information on the results of their final factor analysis.

5) The issues of fatigue and lack of energy should be discussed with regard to potential or documented sleep loss of the population surveyed.

6) Can the location of the participants (US, OCUNUS, In-theatre) be determined and accounted for in the model or by using some other statistical approach? This is a key with regard to data interpretation and appears to have been ignored.

Minor Essential Revisions:

1) Explain the term “polychoric.”

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.