Reviewer’s report

Title: Post Traumatic Stress Symptom Variation Associated with Sleep Characteristics

Version: 0 Date: 15 Oct 2019

Reviewer: Laura Straus

Reviewer's report:

This study used Ecological Momentary Assessment (EMA) methodology to examine the impact of the prior nights' sleep on Posttraumatic Stress symptoms the next day. They found that self-reported total sleep time, trouble falling asleep, and difficulty staying asleep predicted PTSD symptoms the next day. This study is interesting, and the use of EMA is a strength. This study adds to the body of literature suggesting disrupted sleep plays a role in PTSD.

One major issue with this study is that it appears the only way PTSD was assessed was by self-report via the PCL-5. Supplement 1 suggests a little more than half of the entire sample from the larger study fell into the PTSD category, which would be an extremely high rate, even for servicemembers and veterans. Did the larger study aim to over-sample for PTSD? Was trauma exposure measured at all to independently confirm PTSD diagnosis? Please explain. The authors do state that their participants have "probable PTSD" rather than definitive, which is appreciated. However, if the authors did not collect any information about trauma exposure in their sample, this should be at least noted as a major limitation.

Minor points:

- The authors indicate the age range in their sample is 22-76, which suggests at least some of the participants were older and thus at risk for sleep apnea. Do the authors have any information about sleep apnea in the sample, or any other medical comorbidities that might affect sleep?

- No objective measures of sleep were used in this study (e.g., actigraphy), so this should also be noted as a limitation.

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

Yes
Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

Yes

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  
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Acceptable

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