Reviewer’s report

Title: Effects of Attentional Bias Modification on Residual Symptoms in depression. A Randomized Controlled Trial.

Version: 0 Date: 07 Nov 2018

Reviewer: Reviewer 2

Reviewer’s report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable

OVERALL MANUSCRIPT POTENTIAL - Could an appropriately REVISED version of this work represent a technically sound contribution?

Probably - with minor revisions

PEER REVIEWER COMMENTS:
GENERAL COMMENTS: This is an interesting study that uses a dot probe task to train the participants to pay more attention to positive stimuli. Patients are then assessed via HRSD and BDI-II 2 weeks later. The authors found a reduction in symptoms assessed by clinicians, but not patients' own self report. Furthermore, the magnitude of patients' change in ABM performance is correlated with their clinical symptoms. I think the study is well done, and just need the authors to clarify some issues.

REQUESTED REVISIONS:

1. Although this is a double-blind design, the experimental condition and control condition differ remarkably in percentage of the dot probe location, which is easily observable if the clinician simply take the time to look at 5 or more trials. So how is double-blind really achieved? Did the patients perform this with clinicians nearby, or did they do their ABM training at home?

2. Following my first question above, please describe the setting in which the patients completed the baseline task, training, and post-treatment re-test.

3. On page 7 the authors state that "Means and standard deviations at baseline were 7.5 (3.9) for ABM and 7.2 (3.9) for placebo and changed to 7.3 (5.1) and 8.1 (5.4) at two weeks follow-up [F (1,272) = 4.48, η²= .02, p = .03] indicating that the observed changes in clinician-rated symptoms was not confounded by random variation at baseline." But these numbers do not match Figure 1?

4. Also, from Figure 1 it seems that the so-called treatment effect is solely coming from increased scores in the placebo group, rather than a decrease in the ABM group. This can be potentially concerning and need to be addressed.

5. Can the authors elaborate on how AB was computed? Participants performed the placebo task at baseline, then the same placebo task again 2 weeks later? So the units (in miliseconds) on the X axis of Figure 3 is the improvement in reaction time?

6. Lastly, since the task is similar to the ones used by the Browning et al. (2012) study, I think it would be worthwhile if the authors can describe the novelty and importance of the current study beyond the Browning 2012 study (in Discussion, perhaps).

Note: This reviewer report can be downloaded - see attached pdf file.

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.

Not relevant to this manuscript

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

Acceptable

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