Reviewer’s report

Title: Mindfulness is not Associated with Dissonant Attitudes but Enhances the Ability to Cope with them

Version: 1 Date: 28 May 2019

Reviewer: Adrian Wan

Reviewer’s report:

The study attempted to explore whether mindfulness sub-skills associate with decreased implicit-explicit discrepancy (IED); and if mindfulness sub-skills moderate the relationship between IED and intention/ behavior related to red meat consumption (RMC). The authors proposed a longitudinal study with 3 follow-up time points utilizing quantitative data acquired from subjective reports of the relevant constructs. It was claimed that mindfulness sub-skills were not associated with decreased IED as hypothesized; and that acceptance buffered the effect of IED on intention.

Given the popularity of mindfulness practice, and its revival in empirical research, the scope of the study is interesting and relevant to the development of mindfulness-based intervention as a potential pathway for behavioral change and cognitive change by way of working through psychological dissonance. To this ends, the rationale of the study were explained and discussed in details, and the key concepts were also adequately explained. The study design is appropriate to answer the proposed research questions, and the methodology of the research was also clearly articulated in the manuscript.

Before considering for publication, please consider the following queries:

1. Typos were found in the manuscript, such as "We programmed *he* SC-IAT by means of the software Inquisit by Millisecond…” (p. 10, Line 20), and "…participants has to press *i* on their keyboard." [italic is missing] (Line 10, p. 51).

2. Ethical approval number is missing/ incomplete (p.8, Line 33)

3. The sample was recruited from an online sample; will the recruitment strategy imposed potential limitations / confounding to the findings?

4. It is unclear (or not explicitly stated) why d-score was adopted for data analysis (p. 12, Line 4)

5. It was mentioned that three items were adopted to measure intention to reduce RMC (p. 12, Line 29), can you specify how these three items were generated?

6. Can you explain why using the KIMS-E as the measurement for mindfulness in your study?

7. In the methodology section, can you briefly explain the rationale for your sample calculation? And I am aware that the dropout rate between Baseline and One-month follow-up is about 33.6%, and only 32% were maintained at the third follow-up time points. How would you comment on this reduction in maintenance rate? And would such attrition impact on the results of the findings, or the research study as a whole? The number of attrition appeared to be quite a lot.
8. The second limitations you have mentioned in Discussions (p. 24, Line 44-49) is important. Since it is a known issue based on existing research (reference #66), so have you considered any other possible options in minimizing the conceptual discrepancies between "implicit attitudes towards red meat" vs. "explicit attitudes towards the *consumption of red meat*?"

9. What other alternative hypotheses you can come up with in the context of the study? Any other confounding variables that might help making sense of the results reported in this study? I think it is also interesting to explore the role of compassion/ self-compassion as a mediator of change, or as a potential buffer against psychological discrepancies and dissonance. This is because core to all mindfulness practices are the cultivation of compassion towards the self and the others. Maybe, further research can go towards that line of inquiry.

I reckon that this scope of the study will shed lights on the potential role of mindfulness play in changing our intention and behaviors, which will further contributions to the development of mindfulness-based interventions, and change-related framework that would guide mindfulness practitioners in their work. It is also uncommon to have research papers with null findings being published, yet I do recognize the contributions of null findings in empirical/ evidence-based practice research. Therefore, please consider to give the above questions some thoughts, so that the community can learn more from your meaningful work on mindfulness practice, and its potential mechanism of psychological/ cognitive-behavioral change.

Finally, I wish you all the best in your revision, and further research!

**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.

No

**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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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