

7 May 2021

To: Prof Rebecca Xing
Editor: Brain Sciences

RE: Response to Reviewer 2 (Manuscript ID: brainsci-1179335)

The authors wish to thank Editor for the opportunity to resubmit and the reviewer for the valuable feedback and recommendations. We provide a point-by-point response to each comment (highlighted in yellow) below. We also indicate where revisions were made in the manuscript and attach the revised manuscript titled, "The use of magnetic resonance imaging techniques in assessing the effects of alcohol consumption and heavy drinking on the adolescent brain: a scoping review protocol".

Sincere regards



Ms. Nancy Hornsby
On behalf of co-authors

Reviewer 2 comments:

The authors describe the methodology they aim to employ for scoping review regarding the use of MRI for assessing the effects of alcohol consumptions in adolescence. The proposed methodology sounds good, nevertheless, I have easily found a more recent review from 2017 (<https://www.frontiersin.org/articles/10.3389/fpsyg.2017.01111/full>) about the use of MRI to study the effects of drinking in adolescence. The authors should acknowledge this work and consider if their proposed scoping review is still relevant given this more recent review. The authors should include this reference and adjust their motivation accordingly.

RESPONSE: Thank you for the very helpful comments and we have acknowledged the publication in our protocol. We have also extended the justification for the current scoping review and provided the justification for conducting our review para. 2, pg. 3: "To the authors' knowledge, the last most recent reviews of brain MRI studies for adolescent alcohol use were undertaken in 2014 (23) and 2017 (243). The 2014 review included 21 studies (10 sMRI and 11 fMRI) covering the period 2000 to 2014 and provided a qualitative synthesis of the evidence without appraising the quality of the studies. Similarly, the 2017 provides an overview of structural and functional abnormalities associated with heavy drinking during adolescence without providing an assessment of the quality of the evidence included... While it is important and useful to generate a summary of the scientific literature, it is also imperative that the scientific robustness of the evidence be investigated, which the current review will do. In addition, the 2017 review was not a systematic/scoping review and it is therefore possible that relevant literature could have been missed.

Moreover, they should address some minor issues in the following sections:

1. No actual limitations are presented.

RESPONSE: Limitations were reported under the "Strengths and limitations" section. We have now split this into two sections with limitations reported under a separate "Limitations" section (pg. 7)

4.1 please state that terms will also be searched in the title and abstract, i.e. the [tiab] field code.

RESPONSE: This has been added in the last paragraph (in the "Search strategy" section), pg. 4

4.2.2 what if a study involves MRI and other imaging modalities? Will the MRI part be included? Please clarify.

RESPONSE: Under "Inclusion criteria" (pg. 5), we have now specified that studies investigating other imaging modalities will be included only if MRI sequences are reported.

4.2.2 systematic reviews are both in the inclusion and exclusion criteria.

RESPONSE: We have fixed this error; systematic reviews was removed from "Exclusion criteria" (pg. 5)

6. Authors state that they include grey literature (e.g. theses, conference papers), however, these are part of the exclusion criteria. Please clarify if these would be included or not.

RESPONSE: We have clarified that grey literature will be included; this has now been added under 'Inclusion criteria' (pg. 5).