Author’s response to reviews

Title: Who drinks sugar sweetened beverages and juice? An Australian population study of behaviour, awareness and attitudes

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Author’s response to reviews:

Dear Dr Mockridge,

We thank the reviewers for their feedback and we have addressed each point in turn below.

Technical Comments:

1. On uploading your revisions, please remove texts such as ‘Insert table # here’, any tracked changes or highlighting and include only a single clean copy of the manuscript.

   Done

2. Please move all the figure and table legends out of the results section and place them after the References in a section called "Figures, tables additional files".

   Done
3. Can the authors confirm that they have explicit written/verbal consent (and not mere permission to interview) from the parents/legal guardians for participants between 15 and 17 years of age. We would also like this statement to be added to the existing ‘Ethics approval and consent to participate’ statement

The wording has been updated to state that explicit verbal parental consent was obtained.

Reviewer reports:

M. Zheng (Reviewer 1): This study examined the correlates of sugary drinks consumption including both SSB and fruit juice among a large sample of Australian population. It looked into the three types of the correlates: demographic, risk factors, and attitudes/knowledge. The study replicates the existing findings, but also provides further insights on how attitudes/knowledge affects SSB consumption. The paper is generally well-written, but the presentation of the result tables requires some amendment.

Methods:

Please provide rationale for the definition used to categorise moderate and high consumers.

Response: Additional information has been provided on page 6 regarding the rationale for categorising SSB consumers.

It will be great to provide more details regarding the collection and categorisation of correlates of SSB consumption for future reference and comparison with other studies. For example, I suppose body mass index was calculated by reported height and weight? if not, please clarify. Also, what is your definition of fast food consumption?

Response: The complete list of questions, including definitions, were provided in Appendix A. To further clarify how they relate to variables used in the analysis, an extra column has been added to the table in Appendix A that specifies the variable sub-categories that were derived from the questions. We have also moved the sentence referring to Appendix A in the methods section so that it appears before the listing of variables, and have also expanded the sentence so that it makes it clear that definitions are also provided.
Any potential to compare participants and non-participants? If not, this should be noted as a limitation.

Response: No, unfortunately we were unable to collect information on non-participants. We have added a sentence about potential non-response bias to address this limitation.

Results:

The presentation of table 1 looks confusing and hard to interpret. I can see some percentages are out of the total population, but some are not. Table 1 presents the percentage of respondent in each SSB consumption category by study demographics. Maybe change the table 1 heading to reflect this. Please also explain the arrows in table 1, and provide what trend test was used as a footnote so the table can standalone. Also, add moderate and frequent in the table heading besides 1 to 6 times and 7+times respectively, to be consistent with description of your results. I strongly advise to amend the result table format for easy interpretation.

Response: Table 1 has been updated to add clarity and address these comments. Specifically:

- ‘by demographic subgroup’ has been added to the table legend and column title
- An extra column for N (i.e. total sample) for each subgroup has been added to make it clearer how the percentage for SSB consumption is derived
- ‘Moderate’ and ‘frequent’ has been added to the subtitle of SSB consumption column
- A footnote has been added for ‘trend’ title
- The footnote explaining the arrows has been expanded. A note has also been added to the methods section to explain this further.

In result section, you should outline what the results showed, rather than providing interpretation. For example, for page 9 line 12-17, is this really what your result table showed?
Response: We have removed the subjective language from the description of the results.

Discussion

No discussion was made for BMI, can you please provide some discussion on the null finding for BMI?

Response: We have added a paragraph on page 12 to discuss the null finding of BMI. We have also added a note about the limitation of self-reported weight in being able to accurately categorise BMI on page 14.

Reviewer 2 (Reviewer 2): PEER REVIEWER COMMENTS: To view the full report from the academic peer reviewer, please see the attached file.

REVIEWER COMMENTS FROM REPORT: This study uses a regional representative survey in Australia and addresses an important question: What are the factors associated with SSB consumption? The results shed more insights on the relationship between behaviors and SSB consumption, especially the significant relationship between fast food consumption and SSB. The prevalence of under-awareness of health risk of SSB is also illuminating. Overall this is an interesting study.

REQUESTED REVISIONS:

Please add notes to explain the arrows clearly in Table 1 and discuss them in the results section.

Response: The footnote for Table 1 has been expanded to further explain the use of arrows, and a sentence has been added to the methods section to explain this analysis further. Reference to the adjusted standardised residual results has been added to the results section (page 7 & 8).

BMI is the consequence of SSB so may not be listed as a covariate in the regression model.
Response: There are many factors that contribute to BMI and having a high BMI may influence how people behave, such as going on a diet and reducing SSB consumption. We have added an extra paragraph on page 12 of the discussion that expands on the lack of relationship between BMI and SSB consumption.

Please label the correct choice of the attitudes and knowledge in the tables and in the main text.

Response: The text and tables are now consistent. A note has been added to Table 1 to indicate the ‘correct’ answer or the answer that aligns best with contemporary evidence. While the sugar content of 100% juices can vary, a typical 100% orange juice has the same amount of sugar as a typical soft drink so “same” has been selected as the correct answer. No ‘correct’ answer has been assigned to the diet beverage question because of the uncertain and changing state of the evidence. The text has been amended where it did not already indicate which response was correct.

Yours sincerely,

Associate Professor Miller