Reviewer’s report

Title: Trends and correlates of unhealthy dieting behaviours among adolescents in the United States, 1999-2013

Version: 0 Date: 23 Oct 2017

Reviewer: Jaimie Davis

Reviewer's report:

The manuscript is well written and addresses an important research question of how sex and race/ethnicity relate to prevalence of unhealthy dieting behaviors. Below is a list of concerns that I have with each section.

* Abstract:

  o The aims are to examine socio-demographic differences in UDB and to examine how weight loss intentions (WLIs) are associated, but your results in your abstract deal mainly with the sex and race findings. What about your WLIs and perceptions of weight categories? Would like to see these findings mentioned in the abstract as well.

* Introduction:

  o The intro really focuses on different weight categories, underweight, overweight, and obese and how these different weight categories engage in UDB. However, your main findings deals with sex and racial difference - suggest re-work your intro to reflect this in your introduction.

  o Please list your aims and hypothesis in last paragraph.

* Methods:

  o Missing data was only reported for fasting UDB, was this the only variable that had missing data? Please clarify.

  o Typically the term socio-demographic refers to sex, age, level of education, and employment status. For this study, you are really assessing sex and race, not socioeconomic measures. So I would rephrase your aims to reflect this.
Timing of measures is not clear, where each of measures asked at each wave and when did that wave occur - was it annually. I realize that specifics of YRBSS are found on the CDC website, but the authors should provide a bit more information on this point in this manuscript.

* Results:

- Your analysis stratifies by sex, but would suggest that you first assess the interaction of sex in the model, before stratifying.

* Discussion section:

- Please restate your findings in lay terms in your first paragraph.
- You mention that you do not have SES in this study, do you not have parental education or job that you could use as proxy measure?
- Use the term sex rather than gender throughout.
- I feel like the discussion section is rather weak and should be expanded upon. For example, I would add to the rational on why Whites have more UDBs than other races/ethnic groups. You mention SES, but I would also add that cultural beliefs and body images in different cultures may explain some of this difference. I would add a bit more detail on potential mechanisms in the discussion.

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 recommend additional statistical review

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

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal