Reviewer’s report

Title: Demographic differences in and correlates of perceived body image discrepancy among urban adolescent girls: a cross-sectional study

Version: 0 Date: 08 Jun 2017

Reviewer: Zali Yager

Reviewer’s report:

Thank you for the opportunity to review this important work. This paper is useful as there is a need to understand the correlation between body image and other health behaviours, particularly in relation to SES and other demographics. I think that the justification for the work needs to be strengthened, to emphasise what your paper is adding other than US data—there is a lot of US work on this topic in the psychology literature.

I find the focus on body image discrepancy quite interesting as the majority of psychology research has moved to more evaluative measures of body image, such as the body dissatisfaction subscale of the EDI or the body esteem scale. I suggest some further unpacking of the use of discrepancy—possibly drawing on papers and book chapters on body image measurement by Kevin Thompson and Tom Cash?

However the focus on body discrepancy means that other literature that might help to position or explain correlations between physical activity and body image, and SES have not been included—for example O’Dea and Caputi have a paper in 2001, and much of Dianne Neumark-Sztainers work has also not been cited.

The quality of the BMI, fitness, and PA data is quite high—well done

There is a minor error on page 4, line 36, where 'if' is used instead of 'is'

I found the presentation of the results for body image and weight status quite confusing on page 12—I wonder if that data would be better represented in a table?

The discussion also would benefit from broadening the comparisons to include some of the psychology literature and refining the ideas presented to be a little clearer.

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 am able to assess the statistics

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