Reviewer’s report

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

Version: 1 Date: 15 Jan 2018

Reviewer: Diana Rancourt

Reviewer's report:

The authors have started to address my concerns; however, the both the Introduction and the Discussion should be strengthened by explicitly discussing the existing adolescent weight status perception literature and remaining focused on the variables of interest.

General

* There remain a number of places throughout the manuscript where the authors still refer to "weight" as opposed to "weight status."

* There remain a number of places throughout the manuscript where the authors have not revised to "people first language" (e.g., pg 5, lines 53, 58, 60, pg 6., line 9).

Abstract

1. The term "weight status perception" is not used consistently.

2. The reference group "normal weight accurate perception" is awkward and hard to follow. I'd recommend rephrasing as "Compared to individuals of normal weight who were accurate weight status perceivers, individuals of almost all other combinations of weight status and weight status perception had significantly higher odds of displaying any UDB outcome."

3. I'd recommend rephrasing the sentence that starts "Using not wanting to do anything…” for readability to something like this: "Compared to individuals endorsing "not wanting to do anything" about their weight, individuals endorsing all other WLI showed significantly higher odds for every UDB outcome, with individuals endorsing "wanting to lose weight" having AORs of the greatest magnitude."

4. Conclusion of the Abstract still reflects the message that accurate weight status perception will decrease UDBs, which is not supported in the adolescent literature.
Introduction

1. In terms of the sentence on pg. 5, line 19, it seem more accurate to rephrase to state: "Weight status perceptions are strong motivators of intention to lose weight, and weight status misperception is a stronger predictor of weight loss intentions than actual body weight."

2. The addition of the sentence on pg. 5, lines 33-36 references adolescents, but it is unclear to what the authors are references with the phrase "the important of weight perceptions among them has been documented." If there are data that do not support the associations between weight status misperception and weight loss intentions among adolescents, it seems important to include that information in the Introduction since the focus of the paper is adolescents. There should be sufficient information about weight status perception and weight-related outcomes that referencing work with adults isn't necessary.

3. The addition of "among adults" following citation 9 is inaccurate; citation 9 is a study on adolescents.

4. Pg. 5, line ~53: please use "people first" - "…individuals with obesity with the intention to lose weight…"

Discussion

1. On page 12, the reference to the body image literature seems to be a stretch. All weight status misperception tells us is that the individual misperceived their weight status; it does not provide any information as to whether the individual is preoccupied with a specific body ideal nor is it a direct indicator of body dissatisfaction.

2. The authors seem to be making an assumption that individuals who identify as White are of higher SES than individuals who identify as a minority in the USA. Further, it seems that the majority of the racial/ethnic differences emerged among males. The discussion of the association between the use of diet pills, etc., and cardiovascular disease seems tangential. I would encourage the authors to keep the discussion close to their data.

3. The study didn't measure body dissatisfaction, yet the Discussion references body dissatisfaction on pg. 14 as part of the implications of the findings.

4. I would like to see the authors expand on how the current findings fit with the existing literature, especially related to underperception being protective for youth with overweight/obesity (e.g., Chen, Lemon, Pagoto, Barton, Lapane, & Goldberg, 2014;
Rancourt, Thurston, Sonneville, Milliren, & Richmond, 2017; Sonneville, Thurston, Milliren, Gooding, & Richmond, 2015).

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.

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