Reviewer’s report

Title: A cluster randomized controlled trial for child and parent weight management: children and parents randomized to the intervention group have correlated changes in adiposity

Version: 0 Date: 05 Sep 2017

Reviewer: Rebecca Liu

Reviewer’s report:

Strengths

- Well-designed study

- Long-term follow-up study (follow-up up to 18 months)

- Large sample of parent-child dyads (curious to know whether there were any dropouts from the 184 dyads within the post-baseline time points; otherwise please clearly state there was no dropout)

- Low-income ethnically diverse sample of children and parents

Weaknesses

- Not sure whether or not the authors were limited by word count, it would be recommended to use People First Language when referring to those living with obesity throughout the manuscript. http://www.obesityaction.org/weight-bias-and-stigma/people-first-language-for-obesity

- The main title and running head title are slightly overstated re: highly correlated changes in adiposity.

The Pearson correlation coefficients for the control group were not provided so it is difficult to consider the title when we are unaware whether the 'highly correlated changes' are a result of the intervention or the control setting (usual care). Please provide Pearson correlation coefficients for the control group or a clear explanation for why it was not included, along with a less overly stated title.

- Curious to know about other similar studies (differences in income status/ethnic differences) and whether they found the same result (only changes to adiposity and no changes to weight status, health behaviors, nutrition, exercise, self-efficacy), what then helped to improve their WC, triceps and subscapular measures in the current study? Could you speculate based on the results found in other studies? Please include this in your discussion.
*See also introduction line 26, Page 4 "Approaches found most effective have incorporated both behavioral and cognitive strategies with parental involvement"; how does this sentence relate to your study if no significant changes in correlation coefficients were found in behavioral and self-efficacy measures? Please reflect back to the background information that was provided in the introduction into your discussion. (role of ethnicity, role of income status that may influence the results and speculate why?)

-Qualitative results/findings/anecdotes were provided throughout the discussion (page 9 and 10). This is new information.

If the authors choose to include this in the discussion, I think it is important to consider the study as a mixed methods study and incorporate changes throughout the manuscript (methods, results, etc.)

-The study was primarily made up of female participants, is this typical in dyad studies? Could the authors speculate whether this impacted the study results (in the discussion) or how this may only applicable to female parent dyads (7% of sample were male parents)? (maybe limitation section)

-What considerations were made in the current study's intervention that would cater to low-income, ethnically diverse families versus the interventions that were highlighted in the introduction specific for non-Hispanic and middle-income families? (include in methods or discussion)

-Please reconsider grammar and sentence structure throughout the manuscript, especially in the following sentences,

line 31, pg 9 "This study adds to the science suggesting" suggest rewording to "adds to the literature" OR "adds to the subject area" but not science (too broad and vague).

line 16, pg 10 " Many then went to play after school", 'many' what?

Please review entire manuscript for incomplete sentences.

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.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No

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:

Needs some language corrections before being published

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