Reviewer’s report

Title: The association of body image distortion with weight control behaviors, diet behaviors, physical activity, sadness, and suicidal ideation among Korean high school students: a cross-sectional study

Version: 0 Date: 11 Sep 2015

Reviewer: Cristina Cadenas-Sánchez

Reviewer's report:

Major compulsory revisions

Page 7

Cut-points used for the authors were the Cole et al. 2012. This is a good choice because it is commonly used. Nevertheless, authors used more than Cole cut-points and they cannot compared between each other. My recommendation is to use the same cut-points for all samples. Indeed, I have read that there are special cut-points for Korean population.

This point is a major concern because is one of the main variables of the study and the data could change using different cut-points depending on the population age group.

Minor essential revisions

Abstract

Keywords: The keywords that the authors provide are the same words that the title mention. In order to have a higher diffusion of the article, it is recommend to change the keywords with other synonym or words such as older children or depression.

Introduction

Page 3

- First sentence need to be supported by references. Please provide it.

- Line 18-19: This sentence (from Unhealthy to disorders) should be at the end of the first paragraph. It is interesting to note that first authors should describe and explain the unhealthy weight control behaviors and then provide the consequences such as clinical eating disorders.
- Paragraph 1 and 2 need to be connected. Authors could join both paragraph and summarize it.
- Line 51: please change "under-studied" for information are scarce or something relate to it.
- Line 54: Nationally should be national

Page 4
- Line 6, remove among and replace for "in".
- Forth and fifth paragraph should be joined and reduced.

Page 5
- Line 8: Is better to provide the aims of the study instead of the research questions to facilitate the reader the understanding of the paper.
- Line 31: replace nationally for national.

Page 7
- Line 18. Include finally before We selected 34.760 high school students..
- About the sample size, What happened with the other half of the sample? Was the reduction due to the age group? If not, explained better the reason of this sample missed.
- Also, it would be interesting to include a flow chart graph with the different steps in order to obtain the sample size

Page 9
- Line 39: The sentence concerning the software used for the statistical analyses should be placed at the end of the paragraph
- Line 42: What type of ANOVA did the authors use? Please provide more information about it.
- Line 42: Please provide de definition of ANOVA when is the first time that it mentioned.

How was tested the body image? Which was the equivalent between body image and BMI? Please provide information about that.
- Line 49: How was the comparison between demographic and socio-economic with body image?

Results

Page 10

- Line 20 should be titled more general such as "Body weight status and subjective body image"

- Line 29: I recommend to remove the last part of the sentence from the comma and replace for and the female Kappa value was moderate (Kappa=0.44).

Demographic characteristics paragraph should be the first paragraph. It is common to provide first demographic information and then, the main results of the article.

Page 11

- Line 39: remove "as well".

Page 14

The first paragraph of the discussion section should contain the main results obtained (according to the aims established previously). Please include it.

Line 27 onwards: It really interesting the influence factors showed in previous studies but the authors must discuss their results with the previous studies.

Pag 15

- Line 16: Please provide reference in order to support this affirmation.

Pag 16

- Strength section: I recommend to reduce this paragraph.

- Limitation section should include that the method used to obtained the measurement is self-reported and not the most objective methods.
Tables

The article presents plenty of tables. I recommend to include only the 3 main tables and the rest of it to send it to supplementary material.

Table 1.
- The BMI (line 6) row should be on the top, then the gender and finally the cut-offs.
- Indicate in the legend the meaning of the abbreviation used such as BMI.

Table 2.
- Please provide the same decimal for all the data. See overall agreement column and kappa column.
- Indicate in the legend the meaning of the abbreviation used such as BMI and CI.

Table 3.
- Please include "," in the first row (i.e. n=20,264)

Table 4, 5, 6 and 7.
- Please include "," in the sample size as you have done in the rest of the tables.

Table 7 and 8
- I recommend to add a column specific for the P-value instead of *, **, ***

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

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.

Not relevant to this manuscript

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

Not suitable for publication unless extensively edited

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