Reviewer's report

Title: Differences in health-related quality of life between three clusters of physical activity, sitting time, depression, anxiety, and stress

Version: Date: 21 August 2014

Reviewer: Ronald Plotnikoff

Reviewer's report:

Thank you for allowing me to review this paper. This is a well-write paper on an interesting and salient issue related to public health. The statistical approach for these cross-sectional data is quite novel and the results are interesting.

Points to consider in improving the paper (Minor Essential Revisions):

1. Would it not make more sense to make the cut-points/categories based on clinical/and or public health guidelines? If not, I would suggest including a rationale as to why the categories were based on 'below average' and 'above average' scores.

2. Provide information as to how 'generalizable' the study sample is to the adult Australian population.

3. Data Analyses: To help readers, it would be beneficial to provide a little more detail (with simple) wording to explain the analyses of Aim 1 (cluster analysis).

4. I think the first part of the paper could be made a little clearer. It took a couple of reads to fully comprehend things.

5. The authors may want to add to the discussion section – that future prospective designs could further explore the relationships amongst these constructs.

Editorial:


7. Page 8 lines 3-5. There appears to be a word or two missing in this sentence.

8. Page 4 (line 12) The aim states identifying population subgroups with different behavioral profiles, while Page 8 line 4 in the Discussion states the aim is to identify subgroups of people with similar profiles. This needs to be clarified/made consistent.

9. Discussion. A number of the sentences begin with the word “That”. I believe these particular sentences could be reworded to improve readability/grammar.

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.