Reviewer’s report

Title: Awareness of moderate-to-vigorous physical activity: Can information on guidelines prevent overestimation?

Version: 2
Date: 18 February 2015

Reviewer: Corneel Vandelanotte

Reviewer’s report:

This is an relevant paper with some interesting outcomes, however there are some methodological concerns with regards to the measures obtained.

Introduction: Provide a definition of Subjective Norms

Methods, measures: The question around knowledge of MVPA seems incomplete, there are many different PA guidelines (e.g. for weight loss, fitness, colon cancer prevention). The questions should have included something along the lines of ‘to obtain health benefits’. Or ‘How active should you be to obtain health benefits?’ The reference to ‘recommendations’ is not needed in itself. Perhaps this should be noted in the limitations section. I also think an open ended question makes it really hard for people to answer this correctly, so I’m not surprised to see a very low level of knowledge being reported in this study, though question if it reflects reality.

Methods measures: Please clarify, people could not see the awareness questions when answering the knowledge questions? It may have influenced their answers. Also, I’m not convinced the question ‘My level of PA is very low – very high’ accurately reflect awareness of PA guidelines. Rather a question along the lines of ‘I think I am active enough to gain health benefits completely agree – completely disagree’ would have been more appropriate. The authors also refer to ‘sufficient’ activity levels in that same paragraph, though the question itself does not refer to sufficient or insufficient…there seems to be a mismatch here!

Further, what is the validity of the 1 question item to assess current level of physical activity? Is a one-item questionnaire really sufficient to assess activity levels?

Statistics: why were two logistic models run, why wasn’t walking pace in the same model as all the other variables predicting correctly assessing PA levels? It the authors know of no reason why the other variables would influence the findings on walking speed then it should be fine to include in the same model I think. If indeed so, the same results would be obtained in a single model rather than 2 separate models.

Results: how do the authors know that the demographics of those who answered the questionnaire were similar to those who didn’t?

Discussion: based on the issues mentioned with the measures, I’m not sure I can
support the conclusions the authors draw, especially in relation to low knowledge of the guidelines relates to awareness.

Discussion: Can the authors report what level of knowledge and awareness were reported in study [26]? So the readers can judge for themselves if there has been no progress at all in the last 3 years.

Discussion: The authors should acknowledge the evidence that shows that even slow walking results in some health benefits; anything is better than nothing.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests