Reviewer's report

Title: Validity of self-reported leisure-time sedentary behavior in adolescents

Version: 1 Date: 13 October 2010

Reviewer number: 1

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Since there are line numbers to reference directly, I will refer comments to general sections and/or specific pages.

Page 3:
- reword last sentence in the 1st paragraph - "relatively easily"
- Could more information be provided as it relates to the need to understand the type and context of behaviors? Why is it important to know the type and context of sedentary behavior from a research and measurement perspective?
- What did Klesge and Jago work find anything relating to social desirability in boys and girls? Also, the paper states that is has not yet been studied in youth, what age group are the authors referring to.
- In the intro section, do the authors want to talk more about what has been done as it relates to the validity of self-report measures and objectives measures of sedentary PA and then start the limitation of these and how the current studies is expanding upon these or filling in the holes. This will add in the need for the current study.
- More as it relates to social pressures to lead to inaccuracy in self-report measures (over/under reporting of sedentary behaviors)

Page 5:
- Also, should readers be directed to paper that discusses the methods of TAAG if it is not Stevens (2005).
- Is the criterion for adherence or an arbitrary time that the authors developed? Needs to be referenced or clarified.
- Authors’ state that 10 girls were recruited specifically who participated in youth sports program. Why was this important for these articles, since the analyses or results did not examine anything specifically relating to the 10 girls?

Page 6:
- Participants wore accelerometers from Friday to Wednesday (6 days) and SAPAC access physical activity for (3 days). Could this have affected findings? What was the rationale for using all 6 days for physical activity assessment (objective measures)? Were there any differences between the total days and the last 3 days? Clearly state why 6 days was assess objectively and sedentary
behavior was only recalled for the last 3 days. Will it be appropriate to do 3 days objective and recall?

Page 7:
- Examples of cues that were used for the recall.

Page 8:
- The minutes that were reported reads as it 660 for all weekday and 1020 for weekend, would it be appropriate to change to 660/day for weekday and etc.
- Assume that an acclimation period was provided to allow students to become familiar with the devices. Since project was part of a larger study (TAAG) maybe reference that as it relates to more specific details for the intervention.

Results section:
- Mins and mins. are used throughout this piece – needs consistency.

Page 14:
- State some of the findings or previous studies. Specifically Cradock et al., 2004. It would be beneficial to have more details as to the study (differences, compare vs. contrast) since it found a significant correlation between time spent in sedentary behaviors and physical activity.

Page 15:
- State that sedentary behaviors are difficult for children to recall. Provide information on why they are difficult to recall.

Page 17:
- How will the implications have the potential to delay action from interventionist and policy makers?

Table 1
- Could the total for self-reported behaviors be added to the table?
- Is there a difference between girls self-report (roughly 322 mins) and accelerometer PA (354 mins)? The means appear to be close.

General items:
- Is gender the appropriate term used to describe the participants?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.