Reviewer's report

**Title:** Availability of exercise facilities and physical activity in 2,037 adults: cross-sectional results from the Swedish Neighborhood and Physical Activity (SNAP) study

**Version:** 1  **Date:** 16 January 2012

**Reviewer:** Ester Cerin

**Reviewer's report:**

The authors were responsive to the reviewers' comments. The manuscript now reads very well. There are a few remaining issues that I would appreciate the authors to consider.

1. **Page 11 - General results:** When we report median values for a variable, it is customary to report interquartile ranges rather than standard deviations.

2. **Page 12 - line 13:** '... spent more time on ...

3. The authors based their model estimates on a bootstrapping procedure. I assume they used simple non-parametric or parametric bootstrapping. They should use cluster bootstrapping which is available in Stata (see Cerin et al., 2009; a paper cited by the authors) ... and is quite straightforward. This is because the clustering effect was not nil. They observed a residual clustering effect in terms of ICC equal to 0.4%. The ICC is indeed small. However, clustering effects are not only determined by the ICC, they are also determined by the average number of subjects per cluster. The larger the number of subjects per cluster, the greater the clustering effect (also termed 'design effect'). They aimed to recruit 75 subject per cluster. So, an estimate of the design effect in this study is $1 + (75-1) \times 0.004 = 1.296$. This gives an effective $N = 2037 / 1.296 = 1,572$, which has implications for the standard errors of the model estimates. I would then suggest the authors re-run the analyses by modifying their bootstrapping procedures so that they account for clustering. Whenever we use a multi-stage sampling design we should by default account for clustering. If we adjust for clustering when the residual clustering effect is nil, we get the same estimates as when using standard procedures that do not adjust for clustering. However, if we do not adjust for clustering when it is present, we get biased estimates.

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**
I declare I have no competing interests.