Reviewer's report

Title: Active transport between home and school assessed with GPS: a cross-sectional study among Dutch elementary school children

Version: 1 Date: 4 December 2013

Reviewer: Dorien Simons

Reviewer's report:

1. Major Compulsory Revisions

1.1. Introduction, first paragraph: the authors state that “it is essential to prevent a sedentary lifestyle at an early age: studies have shown that children that are more physically active early on in life are also more physically active as adults.” This is an incorrect conclusion as a sedentary lifestyle and physical inactivity are not the same. One can have a sedentary lifestyle but still reach physical activity recommendations by sitting 10 hours each day and doing 3 times a week one hour of sports. It is very important to make correct use of this terminology and to make a clear distinction between these two concepts.

1.2. Throughout the paper, the authors mention that ‘the aim of the study was to analyze the relationship between the distance between home and school and the children’s willingness to actively travel to school’. But the willingness of the children to use active transport was not measured (no questions were asked about feelings, opinions, choices, preferences, etc.). Furthermore, young children often do not choose their travel mode, because parents decide it for them. Could the authors please change or remove this term from the paper?

2. Minor Essential Revisions

2.1. Throughout the paper, both ‘active transportation’ and ‘active transport’ are used. Can the authors please be consistent in the use of terminology and always use the same term?

2.2. Introduction, second paragraph: can the authors please clarify in more detail why the use of GPS is better than the use of GIS? Or perhaps use a reference to substantiate this statement.

2.3. Methods, instrumentation/measures: it is not clear why BMI was calculated and why children were categorized into ‘normal weight’ and ‘overweight’. This measure was reported in table 1, but not used in any analyses, so it seems unnecessary to report this measure.

2.4. Methods, data handling: can the authors remove the word ‘Results’ in the middle of this paragraph?

2.5. Methods, statistical analysis: Could the authors please expand and make it clearer how the data were analyzed exactly? Can the authors also clarify why they used a multinomial logistic mixed-effects model?

2.6. Table 1: this table is not very clear. Can the authors please rearrange the
elements within the table? The words ‘Boys’ and ‘Girls’ do not seem to be at their correct spot, as it does not matches the columns underneath. Furthermore, the horizontal lines should be removed, except the ones at the top and bottom of the table, and the one underneath the title words. Also all vertical lines should be removed.

2.7. Table 2: the horizontal lines should be removed, except the ones at the top and bottom of the table, and the one underneath the title words. Also all vertical lines should be removed.

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

**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