Reviewer's report

**Title:** Correlates of objectively assessed physical activity and sedentary time in children: a cross-sectional study (The European Youth Heart Study)

**Version:** 2 **Date:** 3 June 2009

**Reviewer:** Jo Salmon

**Reviewer's report:**

Minor essential revisions:

Introduction: “Unstructured play outdoors [9-11], participation in organized sports [7,12] and mode of transportation to school [13-15] have all been suggested influencing on PA levels in children and thus possible targets for PA interventions.” Suggest rewording as follows “Unstructured play outdoors [9-11], participation in organized sports [7,12] and mode of transportation to school [13-15] have all been suggested CORRELATES OF PA levels in children and thus possible targets for PA interventions.”

Introduction: “TV viewing have been shown to be positively related to overweight in youth [1,16,17] and a reduced sedentary behaviour by limiting screen time to no more than two hours per day has been recommended [18].”

Suggest rewording as follows: “TV viewing HAS been shown to be positively related to overweight in youth [1,16,17] and REDUCING sedentary behaviour by limiting screen time to no more than two hours per day has been recommended [18].”

Discussion: “Our results suggest that outdoor play after school hours and sports participation is differently associated with percent time in MVPA depending on age group”. Suggest rewording to: “Our results suggest that ASSOCIATIONS BETWEEN outdoor play after school hours, sports participation AND percent time in MVPA VARY depending on age group OF THE CHILD.”

Discussion: “The different influence of the correlates on time in MVPA between age groups was mirrored by age group differences in self-reported participation in outside play and organized sports.” I’m not sure I understand what point this sentence is trying to make. Does this mean the results are conflicting (ie, to ‘mirror’ meaning opposing)?

Discussion: “These results also suggested that correlates associated with time in MVPA (i.e. organized sports or outdoor play) do not directly influence on time spent sedentary, as there were no significant associations between the self-reported correlates of physical activity with objectively measured time spent sedentary.” As this is a cross-sectional study design you can’t draw any conclusions about ‘direct influences’, this sentence needs to be reworded.

Table 1: Table 1 title is better, however, the authors should add SD to the table
heading. EG: “Mean (± SD) height and weight stratified by age and sex.”

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

**Quality of written English:** Needs some language corrections before being published

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

**Declaration of competing interests:**

'I declare that I have no competing interests'