Reviewer’s report

Title: Recess physical activity and school-related social factors in Finnish primary and lower secondary schools: cross-sectional associations

Version: 1 Date: 4 September 2014

Reviewer: Jan Seghers

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The main purpose of the study was to investigate the cross-sectional association of physical activity during recess time with school-related social factors. The authors should be complemented for the large sample size and multilevel approach.

Major Compulsory Revisions

1. Data analysis was performed for boys and girls separately (abstract, p. 2, lines 28-30). In the background section of the manuscript, please provide some rationale for conducting this gender-specific analysis.

2. Previous literature consistently showed that (school-related) social factors are important predictors of participation in (school-related) physical activity. For instance, having a lot of friends increases the likelihood to be physically active (for review, see Fitzgerald et al., Journal of Adolescence, 2012, 35(4): 941–958). In this study, however, (school-related) social factors were considered as an outcome variable of recess physical activity (i.e. recess physical activity as a vehicle to promote social development in school) (p. 4, lines 65-66). In many countries, building social relationships and promoting social responsibility are important learning objectives of school physical education (PE). Is this also the case in Finland? How many hours of PE per week are scheduled in Finnish schools? Was the impact of school physical education taking into account in the analysis? I recommend the authors to elaborate on the association between social factors and school physical education and the potential impact of this relationship on their results (p. 4, lines 94-96).

3. I have some doubts about the potential impact of participating in physical activities at recess on changing the ‘relatedness to the school’ and ‘school climate’, in the way that it was assessed in this study. In my opinion, a school perceived as having a good ‘school climate’ is likely to offer a lot of opportunities to be physically active during recess which in turn might increase the likelihood to be physically active during recess. Furthermore, the ‘relatedness to school’ measure was derived from the Self Determination Theory (SDT). SDT suggests that meeting needs for autonomy, competence, and ‘relatedness’ will affect the type of motivation (from amotivation to intrinsic motivation) experienced, along with cognitive, affective, and behavioural outcomes. SDT hypothesizes that need-supportive environments facilitate autonomous motivation, which in turn will lead to positive behavioral outcomes. Please comment or clarify on this.
Minor Essential Revisions

1. In the abstract, it was stated ‘Analyses were conducted separately for boys and girls and for primary and lower secondary schools and adjusted for self-reported overall physical activity’ (p. 2, lines 28-30). In the methods section, it was stated ‘Analyses were conducted separately for primary and lower secondary schools’ (p.11, lines 228-229). Please correct or clarify this inconsistency.

2. I recommend the authors to include a brief description of the ‘Schools on the Move’ programme in the Methods section of the manuscript. More specific, what actions of the ‘Schools on the Move’ programme were focused on school recess time (e.g., providing game equipment during recess)?

3. One of the five statements in the physical activity questionnaire concerns playing ball games, with football as an example (p.7, lines 148-150). Ball games are, at least in some countries, more popular among boys than girls. As a consequence, this statement might be biased because of this gender difference in the popularity of playing ball games (football). How might this have influenced the observed gender difference in physical activity at recess composite score? Please comment on this.

4. In previous research, ‘peers’ and ‘friends’ have been operationalized in different ways. In this study, peer relationship mainly refers to relationships with classmates. During recess however, children can also play with older or younger children from other classes. Please comment on this.

5. What is meant by “climate in your school” (p.10, lines 197-201)? What was done to guarantee correct interpretation of this question?

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

Quality of written English: Acceptable

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