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### LETTER TO THE EDITOR



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# Letter to the editor concerning the article "Relationship between school rhythm and physical activity in adolescents: the HELENA study" by Vanhelst et al. (2017)

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### **ABSTRACT**

Recently Vanhelst et al. published a study on the relationship between school rhythm and physical activity patterns in European adolescents in the Journal of Sports Sciences. With this Letter to the Editor we would like to comment on the practical implementation and further perspectives of the study.

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KEYWORDS Physical activity; School rhythm; health; adolescents

# Dear editor,

With great interest we read the article "Relationship between school rhythm and physical activity in adolescents: the HELENA study," by Vanhelst et al. (2017). The decreasing amount of physical activity and subsequently the increasing prevalence of obesity make research into this subject very relevant and important. The main finding of the study is that a long school rhythm is associated with higher physical activity levels, mainly during school recess, and less time spent in sedentary activities. Reading and discussing the article made us wonder about the authors' recommendations in the article.

The authors reported two hours difference in time spent at school per day between the short and long school rhythm. This two hours can roughly be divided into one hour extra teaching and almost one hour extra time in recess for the long rhythm group. On average adolescents in the long rhythm group had 4 min of moderate to vigorous physical activity (MVPA) per day more than adolescents in the short rhythm group. The authors suggested that even small differences in MVPA could have a positive effect on global health indicators and could therefore be of clinical relevance. In line with this, it was suggested that caregivers and health and school authorities should consider adapting their school rhythms for the promotion of physical activity. However, as the authors stated themselves drawing causal conclusions from a cross-sectional study is not possible. Therefore, suggestions on using these outcomes and conclusions in designing new school rhythms are in our opinion premature. In addition, the found difference in MVPA between the two school rhythms was small, while the information about physical exercise incorporated in this study was incomplete (e.g. information about the number of physical education lessons and after-school activities was not available). Instead, we believe that further research is needed before policy recommendations regarding school rhythms can be implemented. As mentioned by the authors, other studies have shown that intervention programs during recess or after school hours have a positive effect on the time spent in MVPA by adolescents (Beets, Beighle, Erwin, & Huberty, 2009; Kriemler et al., 2011; Lubans & Morgan, 2008). In order to work towards an effective intervention to increase the MVPA among adolescents, research into behavioral patterns is of great importance. We were wondering if the authors have recommendations for future research that could elaborate on their findings or on how these effective interventions could be implemented in school rhythms.

# **Disclosure statement**

No potential conflict of interest was reported by the authors.

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