

2018

# Youth Physical Activity Patterns During School and Out-of-School Time

Pedro F. Saint-Maurice  
*Iowa State University*

Yang Bai  
*University of Vermont*

Spyridoula Vazou  
*Iowa State University, svazou@iastate.edu*

Gregory Welk  
*Iowa State University, gwelk@iastate.edu*

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# Youth Physical Activity Patterns During School and Out-of-School Time

## Abstract

This study describes age, sex, and season patterns in children's physical activity behaviors during discrete time periods, both in school and at home. Participants were 135 elementary, 67 middle, and 89 high-school students (128 boys and 163 girls) involved in a larger school activity monitoring project. We examined time spent in moderate-to-vigorous physical activity (MVPA) at recess, physical education (PE), lunch, commuting to/from school, before-school, after-school, evening, and weekend segments. Differences in MVPA by age, sex, and season were examined using a three-way analysis of variance and separately for each individual segment. Moderate-to-vigorous physical activity levels varied by context and were higher during recess ( $15.4 \pm 8.5$  min) while at school, and on Saturdays ( $97.4 \pm 89.5$  min) when youth were out-of-school. Elementary children were more active than their older counterparts only during lunch time, after-school, and Sunday ( $p < 0.05$ ). Boys were consistently more active than girls at all segments. Participants were only more active during non-winter than winter months during PE ( $p = 0.006$ ), after-school ( $p < 0.001$ ), and Sunday ( $p = 0.008$ ) segments. These findings showed that activity levels in youth vary during the day and season. The segments reflect discrete time periods that can potentially be targeted and evaluated to promote physical activity in this population.

## Keywords

accelerometer, moderate-to-vigorous physical activity, season, Youth Physical Activity Measurement Study

## Disciplines

Exercise Science | Family, Life Course, and Society | Gender and Sexuality | Kinesiology | Motor Control

## Comments

This article is published as Saint-Maurice, P.F., Bai, Y., Vazou, S., Wlk, Gregory Youth Physical Activity Patterns During School and Out-of-School Time. *Children*; 2018 5(9); 118. DOI: [10.3390/children5090118](https://doi.org/10.3390/children5090118).

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