

## ARTICLE REVIEWED

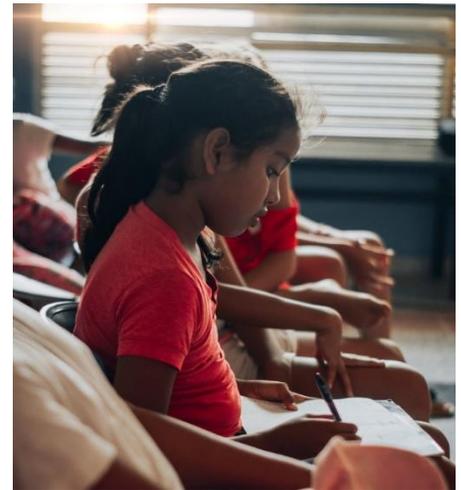
### *Sedentary Time and Behavior During School: A Systematic Review and Meta-Analysis*

H Egan, C. A., Webster, C. A., Beets, M. W., Weaver, R. G., Russ, L., Michael, D., Nesbitt, D., Orendorff, K. L. (2019). Sedentary time and behavior during school: A systematic review and meta-analysis. *American Journal of Health Education*, 50(5), 283-290.

#### THE PROBLEM:

Students are exposed to sedentary conditions (sitting in the classroom) throughout the school day. In other words, students are spending the majority of their school hours in a physically inactive state. Researchers have found that the more time participants have spent seated, the more likely they are to develop chronic diseases, such as obesity. This finding is a major concern as these health consequences continue to permeate throughout our society and can cause mortality.

Health and physical educators can reduce sedentary time during school by integrating a whole-of-school approach. An example of this may be implementing the components of a comprehensive school physical activity program (CSPAP) and/or providing classroom teachers with supplemental materials on how to promote physical activity in the classroom.



#### Research Summary:

Researchers wanted to determine the amount of time students spend in a sedentary state during the school day. Studies were identified between the years of February 2015-2016 and were included based on whether the research article was on school-based sedentarism. All of the research articles identified for this analysis took place during the K-12 school day in the United States. The studies included in this review used objective measures (accelerometers) to estimate how (in)active students were throughout the school day.

#### Conclusion:

A total of nine articles were included in this review. Sedentary time was measured at 64 schools (K-12) that contained a total of 2,786 students. Results suggested that students spent the least amount of sedentary time in physical education, followed by recess, and exergaming. Based on the nine studies included in this review, it was found that on average, students spend 63% of their school day in a sedentary state. This estimate far exceeds the amount of time students spend in a sedentary state after school. This finding is concerning as K-12 students are spending the majority of their waking hours sitting. Therefore, it is no wonder why a large amount of youth and adolescents are not achieving their 60 minutes of daily moderate-to-vigorous physical activity (MVPA) — students are not afforded the opportunities to be more active throughout the school day.

#### Key Takeaway:

Health and physical educators should take it upon themselves to seek professional development opportunities on how to get students active during classroom instruction, and throughout the school day, in general. This type of professional development will also benefit school staff and administrators on how to avoid excessive sedentary behaviors throughout the school day.



## ADDITIONAL RESOURCES:

- CSPAPs: A guide for schools: [https://www.cdc.gov/healthyschools/professional\\_development/e-learning/cspap/assets/FullCourseContent-CSPAP.pdf](https://www.cdc.gov/healthyschools/professional_development/e-learning/cspap/assets/FullCourseContent-CSPAP.pdf)
- Playing with Research in Health and Physical Education – Episode 73: CSPAPs with Dr. Collin Webster <https://anchor.fm/PwRHPE/episodes/73-CSPAPs-with-Dr--Collin-Webster-e9bc14>
- SHAPE America CSPAP Page: <https://www.shapeamerica.org/cspap/what.aspx>