

2017

Impact of After-School Activities on Meeting CDC Requirements in Virginian Adolescents

Dorcas Bentil
Old Dominion University

Leah Crouch
Old Dominion University

Vignette Kaltsas
Old Dominion University

Christina Luchau
Old Dominion University

Phoebe Wallen
Old Dominion University

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.odu.edu/ourj>



Part of the [Nursing Commons](#)

Recommended Citation

Bentil, Dorcas; Crouch, Leah; Kaltsas, Vignette; Luchau, Christina; Wallen, Phoebe; and Zheng, Lily (2017) "Impact of After-School Activities on Meeting CDC Requirements in Virginian Adolescents," *OUR Journal: ODU Undergraduate Research Journal*: Vol. 4 , Article 19.

DOI: 10.25778/ss9e-na44

Available at: <https://digitalcommons.odu.edu/ourj/vol4/iss1/19>

This Poster is brought to you for free and open access by ODU Digital Commons. It has been accepted for inclusion in OUR Journal: ODU Undergraduate Research Journal by an authorized editor of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

Impact of After-School Activities on Meeting CDC Requirements in Virginian Adolescents

Authors

Dorcas Bentil, Leah Crouch, Vignette Kaltsas, Christina Luchau, Phoebe Wallen, and Lily Zheng

Impact of After-School Activities on Meeting CDC Requirements in Virginian Adolescents

Dorcas Bentil, Leah Crouch, Vignette Kaltsas, Christina Luchau, Phoebe Wallen, and Lily Zheng
Old Dominion University, College of Health Sciences, School of Nursing



Abstract

Aim: To assess the correlation between after-school program attendance and meeting the Center for Disease Control (CDC) requirement of 60 minutes of moderate to vigorous physical activity (MVPA) per day.

Background: Less than 50% of all children meet the CDC required amount of MVPA.¹

Methods: Survey provided to 350 students in grades 6-12 describing participation in after-school programs

Analysis: We will analyze how many students participate in the after-school programs and how long those programs dedicate to physical exercise. We will also analyze what type of exercise is performed.

Limitations: We are limited to the students who are present in the classes we pass the surveys out to. Also, our data will only be analyzed on the surveys that are turned in complete.

Research Question: Do adolescents in grades 6-12 who attend and participate in schools that have physical after-school programs meet the daily CDC recommended 60 minutes of moderate to vigorous physical activity (MVPA)?

Hypothesis: Adolescents in grades 6-12 who attend schools with physical after-school activities are more likely to meet the CDC recommended 60 minutes of MVPA.

Methods and Materials

Sample: Convenience sampling, $n=350$, 6 schools (3 MS, 3 HS), 7 grades, 50 surveys per grade

Recruitment: Visiting student homerooms for each grade level and administering a survey

Subject selection: Subject chosen randomly by availability in the homeroom on day of survey distribution to students.

Exclusion criteria: Incomplete surveys; students who are absent

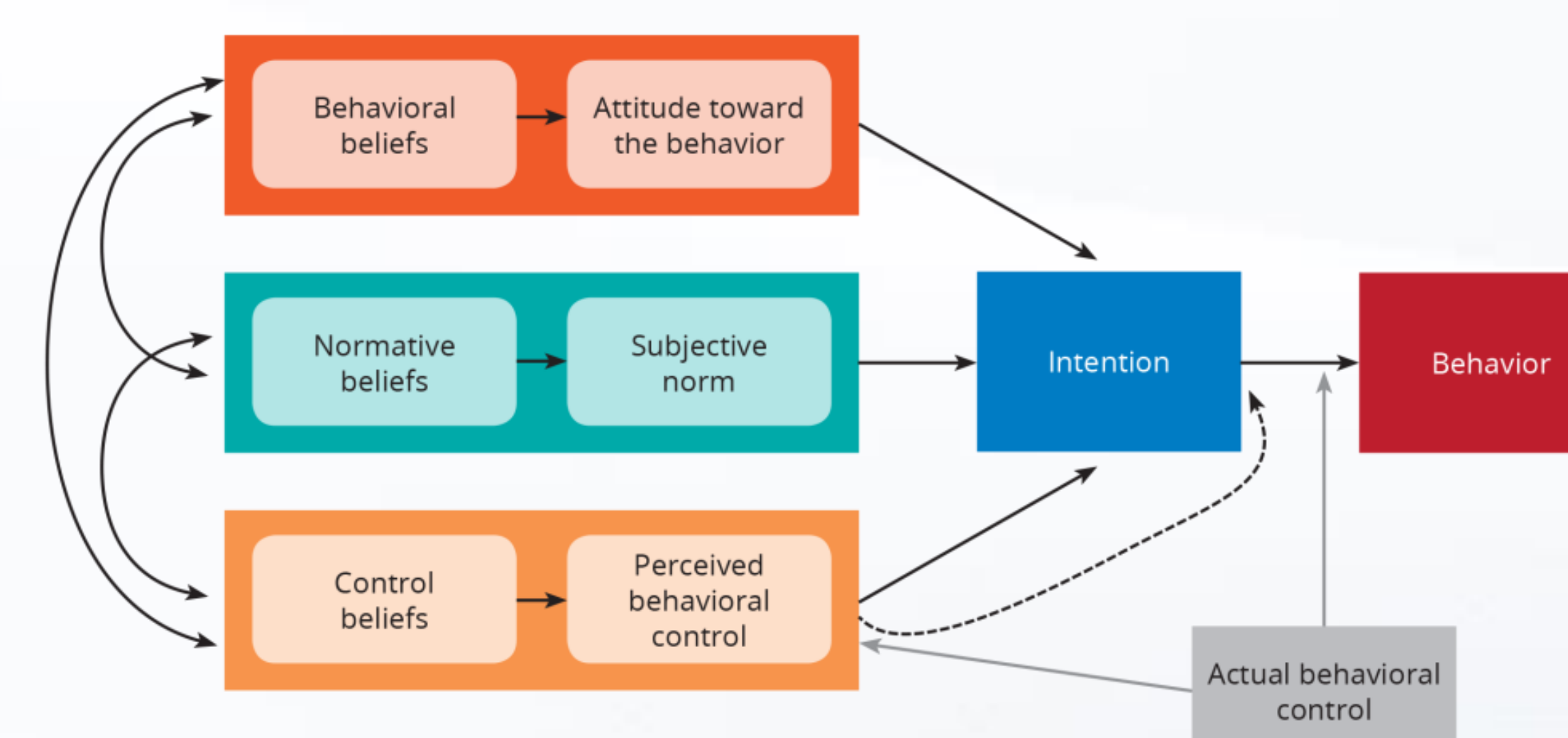
Materials: The Physical Activity Questionnaire for Older Children (PAQ-C) and Adolescents (PAQ-A); Modified Godin Leisure Time Questionnaire

Data Analysis

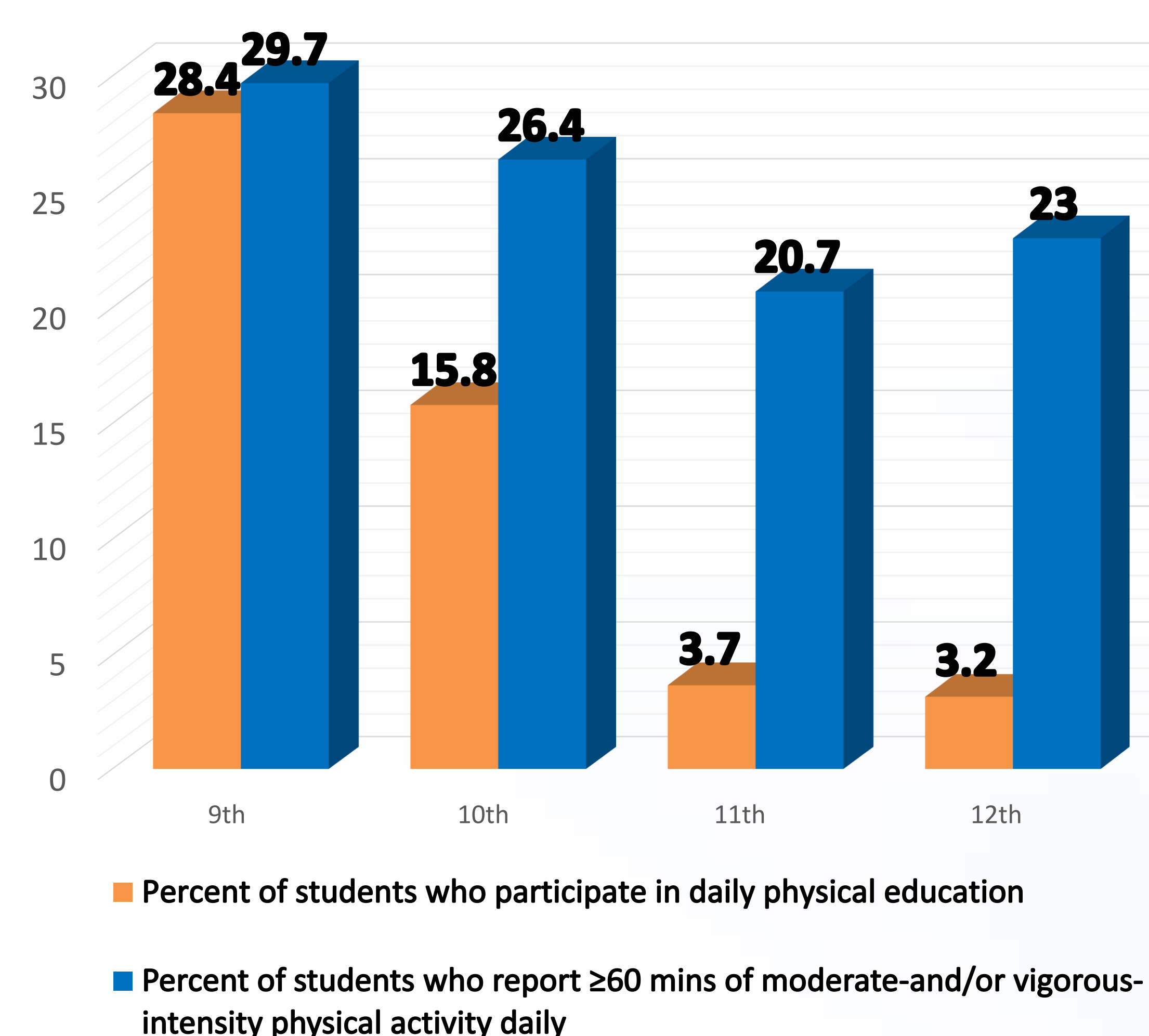
Design: Non-experimental analysis

- Determine results based upon student involvement in physical activity programs offered at their schools, types of physical activity performed, and minutes MVPA.
- Correlational analysis between after-school physical activity programs and the CDC recommended 60 minutes of MVPA.
- Quantitative data collected and analyzed based upon number of minutes participating in physical exercise daily.

Theory of Planned Behavior



Physical Activity and Physical Education of Virginia Adolescents Grade 9-12 (2015)



Source: Center for Disease Control³

Expected Findings

Support and validate our hypothesis. Schools providing more physical activity programs have higher rates of children meeting the CDC recommendation of 60 minutes of moderate to vigorous physical activity per day

Results significance. Highlight importance of meeting the physical exercise recommendation and how school can facilitate this standard of health

- Remind students to involve themselves in programs provided by their schools
- Encourage students to start programs that will help them meet the exercise recommendation if not already provided

Comparison to previous studies.

Bezerra et al. study on the relationship between health promotion in schools and health of the students

- Results found direct relationship between reinforcement of health promotion in schools and lower rates of obesity, hypertension, insulin resistance, and dyslipidemia.

Our study on the relationship between opportunities provided in schools for students to engage in physical activity and students meeting the CDC recommendation.⁴

- Expected results will point to a direct relationship between increased opportunities for students to engage in physical activity and higher rates of students meeting the CDC recommendation.

Conclusion

- If adolescents in grades 6-12 in a Virginia city school system are participating in after-school physical programs, they are likely meeting the 60 minutes per day of MVPA.
- Schools that offer physical activity programs have higher rates of children that are physically active.
- More research should be done to evaluate the effectiveness of after-school programs on a child's overall health, specifically if the programs influence childhood obesity.
- Further studies need to be conducted to evaluate in-school physical programs and their impact on physical activity participation and adolescent's overall health.

Interprofessional Roles and Responsibilities

During adolescence, individuals strive to discover and establish identity by experimenting with different behaviors, roles, and activities.

- Heavy influence from parents and others, especially peers, societal trends and pop culture.
- Adolescents "who receive proper encouragement and reinforcement through personal exploration will emerge from this stage with a strong sense of self and a feeling of independence and control."⁵
- Adolescents are influenced by their friends to participate in physical activity or not.
- Adolescents will be more successful at engaging in physical activity with support of peer, parent or coach.
- Support from peers and adults can help adolescents overcome self-image barriers to physical activity.

To increase the physical activity level of teens, get their friends involved, and teach them how to be physically active in traditional and non-traditional ways such as weight-lifting, yoga, rock climbing, and hip-hop dancing.

Acknowledgements

Dr. Jamela Martin, PhD, RN, School of Nursing Lecturer
Dr. Kaprea Hoquee, PhD, Clinical Counseling Lecturer
Emerald Robertson, Mental Health Counseling Graduate Student



Sigma Theta Tau International
Epsilon Chi Chapter