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

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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

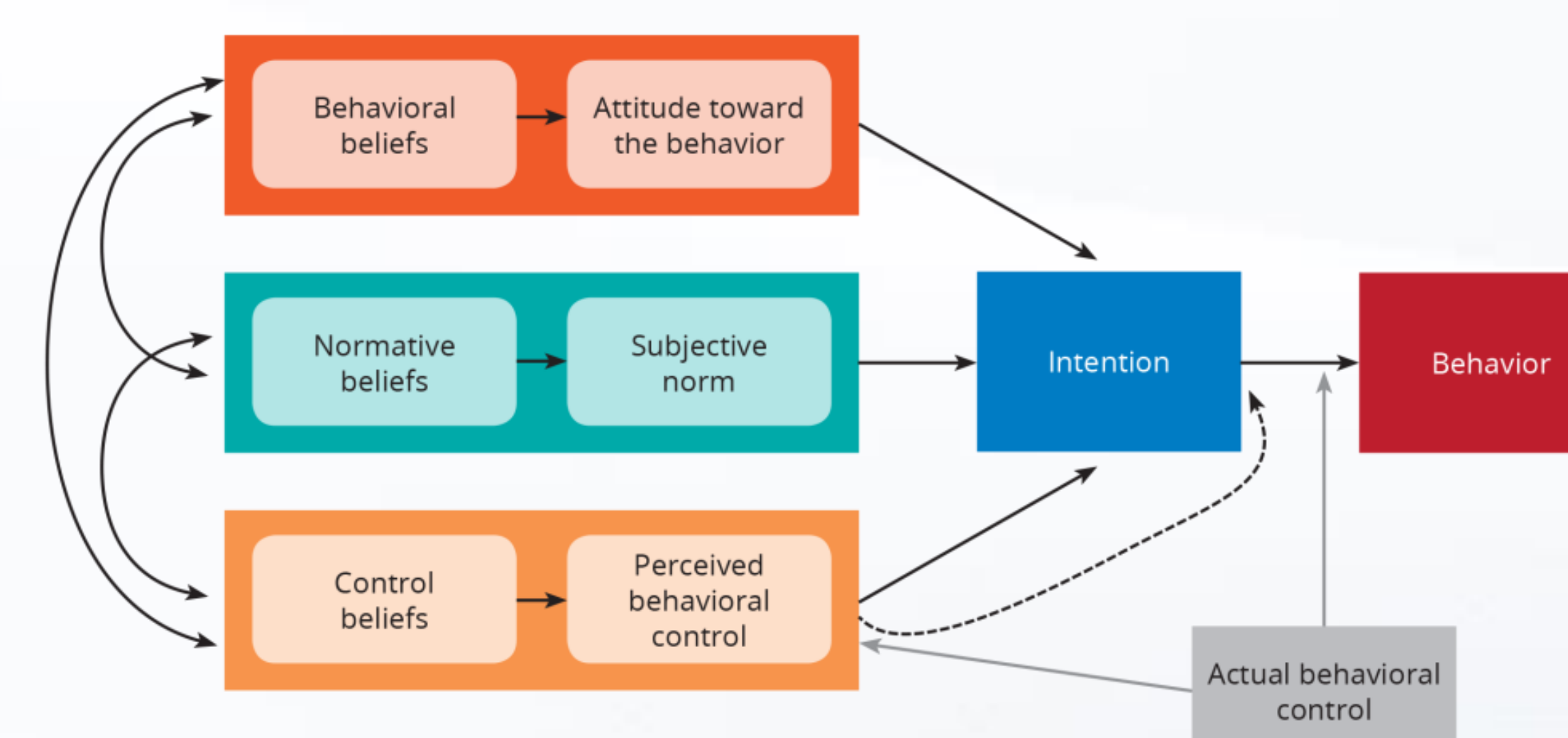
Materials: The Physical Activity Questionnaire for Older Children (PAQ-C) and Adolescents (PAQ-A); Modified Godin Leisure Time Questionnaire

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



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.

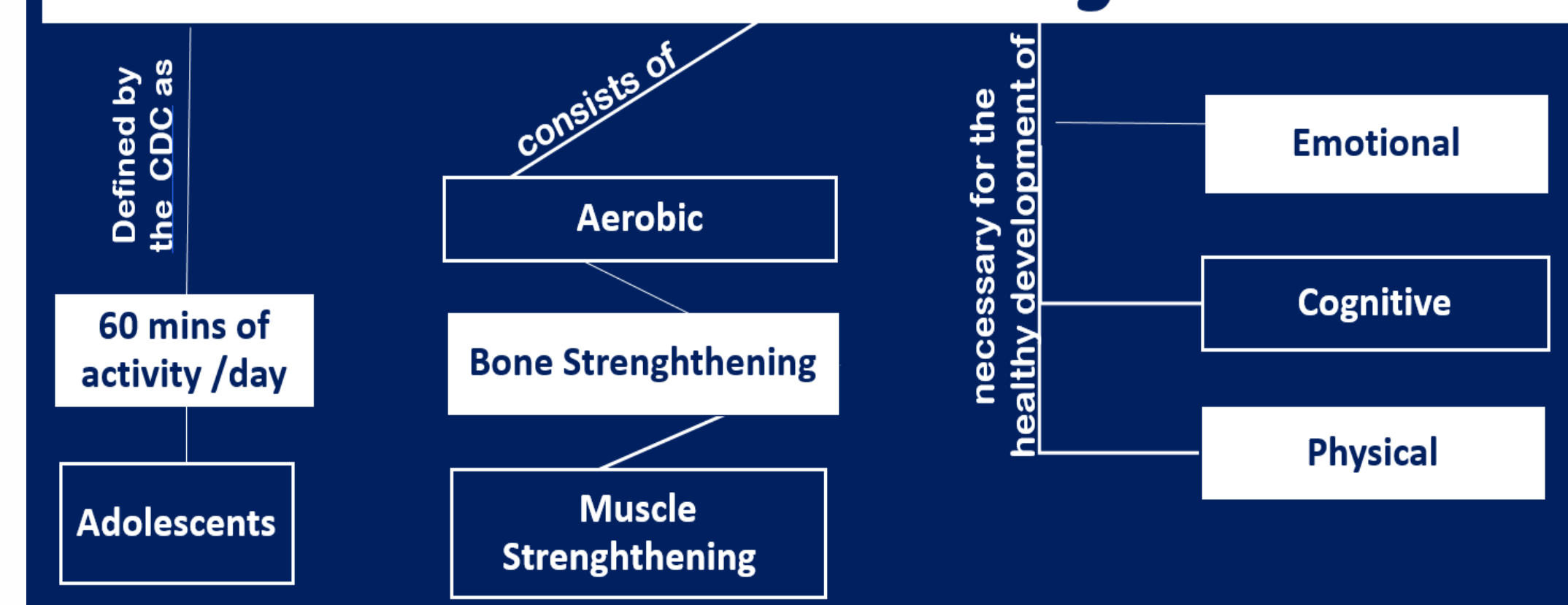
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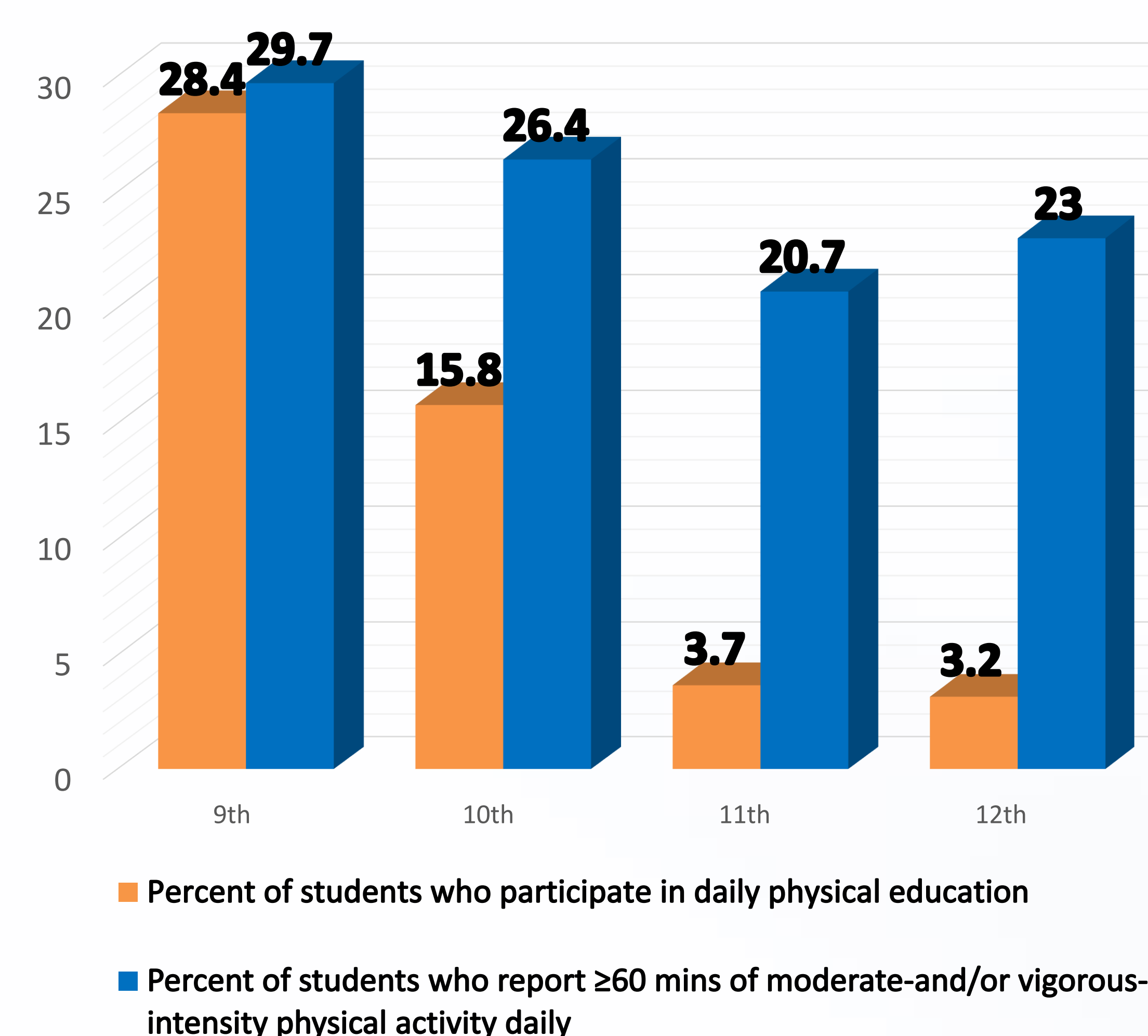
Active Lifestyle



Background and Significance

- Few children are sufficiently physically active.¹
- Studies have shown that exercise can reduce the amount of disruptive behavior by 70% on the days children exercised at school.²
- Physical exercise has been shown to have a positive effect on academics as well as emotional behaviors.
- With childhood obesity on the rise, this will be an important study to determine if this school system is providing the CDC recommended amount of physical exercise to the selected population.
- There have not been many studies done to show if students are receiving the amount of physical exercise at school that they should be.

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.