

EXAMINING THE IMPACT OF PHYSICAL EDUCATION CURRICULUM ON SCHOOL FITNESS INSTRUCTION

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ABSTRACT

Increasing one's participation in physical education, physical exercise, or a sport has been shown in well-conducted longitudinal studies to preserve or even improve one's academic performance. When physical education, physical exercise, or sports take up a significant percentage of class time (up to an additional hour per day), students appear to learn more quickly per unit of classroom time. Physical activity has been linked to improved cognitive performance in children, especially those in elementary and middle school. While all three of these abilities are enhanced by physical activity, perceptual skills appear to be the most affected.

Keywords: Perceptual skills, physical education, curriculum, school fitness

I. Introduction

Most western schools have cut back on physical education instruction in the recent decade, freeing up more time for other academic topics. Schools have reduced back on physical education in an effort to boost student achievement due to budget cuts and increased pressure to reach academic goals. Non-academic hobbies were even viewed as detrimental to academic success by some of the school's most influential decision-makers. There is some evidence that participation in school-based physical exercise can improve students' academic performance directly or indirectly by improving social outcomes that have an influence on academic success.

Recent research has focused on whether or not physical exercise, such as participating in sports, might improve cognitive function, such as memory and concentration (Pan, et al. 2019). Large, comprehensive studies on this association between physical activity and learning behaviour have found that engagement in physical exercise, particularly sport, may have

cognitive advantages for schoolchildren. Sport, physical education, and other forms of physical activity have been linked to improved classroom behaviour and higher academic success in students.

II. The impact of PE, physical activity and sport on cognitive function

Several studies have examined the long-term (or chronic) effects of a few months of increased physical exercise on cognitive performance in young adults, and there is a large body of research on this topic (Norris, et al. 2020). Each physical education class or sporting event reflects a period of physical activity that may have an influence on learning on that particular day and over time. Memory, attention, perceptual skills, and even IQ tests are used to measure cognitive performance in computer-based exams.

III. The impact of physical education, physical activity and sport on academic achievement

A recent comprehensive assessment of the research on physical exercise, fitness, and academic success found the following important findings:

Physical exercise engagement among children has been proven to have a favourable impact on their academic performance in the vast majority of university-based, international studies.

Children's arithmetic skills improved significantly after a two-year physical exercise intervention. Compared to children in a control group (who did not get extra physical education), academic attainment in a second year follow-up was considerably greater for children in a case study group (Singh, et al. 2019). Out-of-school physical activity has a positive effect on test performance. Academic success was strongly associated with regular physical activity. A combination of BMI, food intake and physical activity accounted for as much as 24% of the variation in academic performance when factors like as gender, parental education, family composition and absenteeism were taken into consideration. Participation in physical exercise was shown to be significantly associated with improved academic achievement. Scholastic ability was positively correlated with greater levels of physical fitness, physical capacity, and physical activity. Students who said they exercised a lot spent more time participating in sports and had better grades as a result (Chtourou, et al. 2020). This is an in-depth analysis of the research referenced, highlighting both their merits and weaknesses. In many of the research, socioeconomic position, which is the biggest predictor of academic success, is not taken into consideration. Academic success is assumed to be influenced by

socioeconomic position because of the increased opportunities and conditions for learning that are afforded to students with greater socioeconomic class. After adjusting for socioeconomic and racial/ethnic characteristics, a recent North American study on public school pupils found that the link between physical fitness and academic success remained strong. Even when parental education was taken into account in a review reported by (Norris, et al. 2020), physical activity and academic success were still shown to be linked.

Furthermore, cross-sectional studies, which are prevalent in the majority of studies on the relationship between school-based physical education, physical activity, and sports, are problematic. No causal link can thus be shown between physical education, exercise, sports participation, and academic success (Kalb, et al. 2020). As a result, the remainder of this section focuses on well-controlled long-term intervention trials.

IV. Impact of physical education, physical activity and sport on school attendance.

It's possible to make significant findings about the impact of physical education and sport on attendance even though there are some issues with definitions and the length of absences, but there is enough consistency in the research to draw some useful conclusions.

According to a recent literature assessment of school-based therapies, sport and physical activities may be able to aid in the personal and social development of some disaffected young people under certain conditions (Dunton, Do, & Wang, 2020). This might indirectly improve school attendance by providing target populations with social capital through physical exercise. Successful school sport and physical education programmes have been related to lower absenteeism and better student development, two outcomes that may help keep kids in school and keep them from dropping out entirely, according to some research.

The following is a list of some of the strongest research on the link between sports activity and school attendance:

(Andrieieva, et al. 2019)

Among 3,686 African-American and Hispanic adolescents, sports activity was related with a decreased dropout rate, but there was no correlation between sports participation with educational achievement. The results of this study corroborated the idea that feeling linked to one's school helps one stay in school longer.

V. Maryland Adolescent Development in Context Study

Women who participated in athletics were less likely to be absent from school, according to a research that included 67% African-Americans and 33% European-Americans.

(Daly-Smith, et al. 2018)

In 2019, 2.4 million Texas kids in grades 3-12 participated in a series of Fitness gram assessments. An important finding of the study was the link between improved attendance and greater levels of physical fitness (Zhao, & Chen, 2018). After adjusting for socioeconomic class, ethnicity, and the size of the school, this critical conclusion remained unchanged.

(Zhao, & Chen, 2018)

Physical activity levels increased somewhat in this two-year intervention trial, but there were no significant changes to students' pleasure of PE or their attendance in classrooms, according to student questionnaires. There is minimal opportunity for growth when it comes to students' baseline levels of enjoyment and participation in physical education at the school in question, according to the authors.

(Healy, et al. 2018)

The Labour government's Physical Education, School Sport and Club Links national policy centred on the School Sport Partnership (SSP) programme in England, which aimed to address issues of participation, inclusion, and consistency across athletic options. When the school joined this alliance, it received additional yearly money to help expand its sports activities for all students. Participation in the initiative was widespread among English schools, and the results of (Dunton, Do, & Wang, 2020) evaluation of its impact were released.

VI. Impact of physical education, physical activity and sport on wider social outcomes which may impact on academic achievement.

It is suggested by the WHO that young people's social development is aided by physical exercise since it fosters self-expression, interpersonal engagement, and social integration. According to the researchers, young people who engage in regular physical activity are more likely to avoid substances like drugs and cigarettes (Healy, et al. 2018). Physical education, physical exercise, and sports are examined in this portion of the study to see if they have any influence on

- *the amount to which students feel a sense of belonging to their school*

- *students' ability to cultivate leadership and civic-mindedness through school-based volunteerism*

VII. School connectedness

Regardless of ethnicity, academic performance has been linked to a sense of belonging and contentment at school. An examination of student-school connections found that good associations with the school can assist prevent students from dropping out (Daly-Smith, et al. 2018). Increased school connectivity and satisfaction have previously been linked to regular physical exercise or sport; as a result, it's possible that regular physical activity or sport helps keep kids in school and away from dropping out. However, the data in this area isn't as clear-cut as one might expect. A study of 245 Finnish high school students found no link between their amount of physical exercise and how happy they were at school. In spite of this, a similar research revealed that physical activity was linked to overall contentment, with school discontent amongst girls being the biggest predictor of overall pleasure (Andrieieva, et al. 2019). Positive attitudes regarding school life are thus highly valued by the writers. Students who participated in extracurricular physical activities, while not achieving academically superior results, reported a higher sense of belonging to their university. Extracurricular physical activities, such as sports, have been linked to an increase in the number of encounters between children and people who care about them.

VIII. Anti-social behaviours

Young people who participate in organised sports had reduced rates of anti-social behaviour and teen pregnancy, according to a WHO research. Participating in sports lowers one's risk of smoking and drug abuse (Norris, et al. 2020).

It has been shown that sports activity is strongly linked to a person's ability to avoid drug and alcohol abuse. Students who are less prone to engage in anti-social behaviour are more likely to be engaged in their studies, which in turn leads to improved test scores.

VIII. Aspirations of young people

(Pan, et al. 2019) used data from the National Education Longitudinal Study to study the impact of athletic engagement on high school development and change. Students who participated in school sports saw an increase in their GPA, educational goals, sense of self-worth, and likelihood of applying to and being accepted to college during the course of their high school careers (Singh, et al. 2019). According to the authors, participating in sports

fosters school identity and a commitment to school-related ideals, which benefits both academic and non-academic results. Furthermore, the National Longitudinal Study of Adolescent Health also identified beneficial connections between physical exercise and numerous components of mental health, such as well-being and future expectations, as well as academic success.

IX. Positive social behaviours in school

Engaging in physical education and sport has long been seen to promote positive social behaviours. To combat anti-social behaviour and cultivate well-rounded young citizens, the United Kingdom's government has dramatically boosted spending for physical activity in schools (Pan, et al. 2019). An appropriate avenue for engaging the most vulnerable young people in society may be through sport and physical exercise. In the opinion of certain writers, physical education is a suitable setting for the development of socio-moral values and self-discipline. Basketball and outdoor adventure activities are both effective ways to generate excellent social outcomes. According to published research, the abilities that may be developed through these kinds of activities appear to be limitless and include self-esteem, teamwork, communication, and a sense of belonging.

Successful methods include "Sport Education" and "Teaching Personal and Social Responsibility," both of which have been well explored (Chtourou, et al. 2020). Sport Education promotes the growth of various important traits, such as physical and organisational abilities, fair play, self-responsibility, and respect for others, via the use of regulated games and scenarios. To the contrary, educating students about societal and personal responsibility is founded on the dissemination of positive values.

Researchers studying the social effects of physical exercise, on the other hand, are certain that "magic solutions" for deeply ingrained, multi-faceted social issues are not to be found in physical education and sport programmes (Kalb, et al. 2020). The absence of comprehensive and reputable research into the effectiveness of physical activity treatments also causes experts to hold widely divergent perspectives on their societal benefit. As a result, only a small number of programmes have been able to demonstrate a clear and long-lasting influence on juvenile behaviour that can be traced back to the physical activity intervention.

X. Conclusion

It has been demonstrated that participation in physical education, physical exercise, and sports improves a student's sense of belonging at school, his or her goals, the presence of positive social behaviours, and the development of leadership and civic abilities.

XI. References

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