ISSN 2278-8808
An International Peer Reviewed
SCHOLARLY RESEARCH JOURNAL
FOR INTERDISCIPLINARY STUDIES

IMPACT OF PHYSICAL EDUCATION ON CHILDRENS HEALTH

Gunvant B. Sangale[1] & Venkat Wagwad[2], Ph.D.

[1]*Samruddhi Prestigue Dhairy, Last Bus Stop Pune-41*

[2]*M.P.Ed,Ph.D (Phy. Ed), Manchar B.Ed College*

Abstract

The benefits that physical education can provide to a child's educational, emotional, social, and behavioral well-being are often overlooked, yet they are numerous. Physical education can address issues that Indian society struggles with on an ongoing basis. Issues include academic achievement, national healthcare, obesity, Type Two diabetes, and military readiness, among others. This study examined the relationship between physical education and academic achievement in children who were first-time test takers of both the Texas tests of choice. Physical education scores were determined using the Fitness gram. Academic achievement scores were determined using the Texas Assessment of Knowledge and Skills. The study required the use of a cross tabulation with chi square analysis.

1. Introduction

Physical activity provides the opportunity to be active, have fun, feel good, be healthy and express yourself. Active children are happy and healthy and more likely to become active adults. After any amount of physical activity your skin gets a glow. Impurities and toxins are released via perspiration. Perspiration also helps to produce your natural skin moisturiser, sebum and enhances blood flow to the skin. This helps transport oxygen and other valuable nutrients, which maintain your skin and give you that healthy glow.

Physical activity is defined as any form of exercise or movement and may include planned activity such as walking, running or other sports. It may also include daily activities such as household chores, gardening and walking the dog.

Fig.1.1 Students performing physical activities in school

Perhaps most importantly, physical activity develops children's self-esteem and confidence. Their ability to overcome difficult situations improves and they simply enjoy a better, sunnier outlook on life.

It is important to note that cognitive and behavioral responses to physical activity breaks during the school day have not been systematically investigated among middle- or high-school students. Teachers reported better classroom behavior for students who had more than 15 minutes of daily recess, according to an analysis of 1998–99 data for approximately 11,000 students ages 8 to 9. Thirty percent of students in the study had little or no daily recess. Further analysis showed that only 7 percent to 14 percent of black, Hispanic and low-income students had daily recess, compared with 54 percent to 67 percent of white and affluent students.

2. Literature Review

Schools serve as an excellent venue to provide students with the opportunity for daily physical activity, to teach the importance of regular physical activity for health, and to build skills that support active lifestyles. Unfortunately, most children get little to no regular physical activity while in school. Budgetary constraints and increasing pressure to improve standardized test scores have caused school officials to question the value of PE and other physical activity programs. This has led to a substantial reduction in the time available for PE, and in some cases, school-based physical activity programs have been completely eliminated. Yet advocates for school based physical activity programs argue that allocating time for daily PE does not adversely impact academic performance and that regular exercise may improve students' concentration and cognitive functioning.

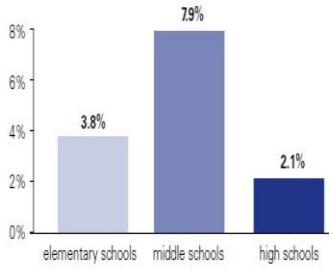

Fig.2.1 Percentage of Schools providing daily physical education

Students in the intervention group participated in daily 10-minute classroom activity sessions in addition to their regularly scheduled 80-minute PE class. Despite increasing in-school physical activity time by approximately 50 minutes per week, students receiving the extra physical activity time had similar standardized test scores for mathematics, reading and language arts as did students in the control group.

Physical activity is important for all children. It's best to talk with a health care provider before your child begins a physical activity routine. Try to get advice from a professional with experience in physical activity and disability. They can tell you more about the amounts and types of physical activity that are appropriate for your child's abilities.

Regular physical activity helps with weight management, helps you battle and prevent heart disease, boosts your energy level, helps with sleep and improves your mood. In addition, many studies suggest it may also have cognitive benefits for children, adults and older adults. Physical exercise may help children academically and it may improve memory in older adults. Exercise may even help if you suffer from depression and anxiety.

3. Objectives

The main aim of this study is to present that Physical education is the only subject in school in which children have the opportunity to learn the motor skills and acquire the knowledge to participate in a variety of physical activities. It is the only subject in which physical activity is a primary means of accomplishing educational objectives. Additionally, quality physical education is unique in providing adolescents with self-management skills to become independently physically active as adults. Physical education is critical to the education of the total person and requires a quality program taught by physical education specialists. The relationship between fitness and achievement appeared to be stronger for females than males and stronger for higher socioeconomic status (SES) than lower SES students. Again, the results should be interpreted with caution. It cannot be inferred from these data that physical fitness causes academic achievement to improve.

4. Hypotheses

Physical education plays a critical role in educating the whole student. Research supports the importance of movement in educating both mind and body. Physical education contributes directly to development of physical competence and fitness. It also helps students to make informed choices and understand the value of leading a physically active lifestyle. The benefits of physical education can affect both academic learning and physical activity patterns of students. The healthy, physically active student is more likely to be academically motivated, alert, and successful. In the preschool and primary years, active play may be positively related to motor abilities and cognitive development. As children grow older and enter adolescence, physical activity may enhance the development of a positive self-concept as well as the ability to pursue intellectual, social and emotional challenges. Throughout the school years, quality physical education can promote social, cooperative and problem solving competencies. Quality physical education programs in our nation's schools are essential in developing motor skills, physical fitness and understanding of concepts that foster lifelong healthy lifestyles.

5. Conclusion

Executive function plays a pivotal role in planning, organizing, and controlling goal-directed actions. The "executive" allocates and directs the basic cognitive processes toward achievement of a goal. The self-monitoring aspect of executive function allows one to make adjustments to selected strategies if the expected results are not obtained. Recent reviews have integrated the executive function literature with related concepts in developmental cognition Executive function, particularly the elements of inhibition and self-monitoring, is crucial to the development during the school-age years of the capacity to delay gratification.

Alternatively, the neural benefits of regular exercise may be like that of aerobic fitness and associated health benefits, which progressively improve with exercise but are lost with a period of inactivity. Future studies could address the minimum duration of a program of regular exercise needed to achieve an effect. It may be that most of the benefit accrues in the first few bouts of exercise, rather than accruing in linear fashion over several months. Additional dose comparisons on amount or intensity of daily exercise, or maintenance of the daily exercise program for a longer period may shed additional light on this exercise-cognition effect. For instance, it may be that 20 min of daily aerobic exercise would improve executive function if undertaken for a full year rather than just a few months.

References

Allegrante JP. Unfit to learn. Education Week. 2004;24(14):38–40.

American College of Sports Medicine ACSM's guidelines for exercise testing and prescription. 6th ed. Lippincott Williams & Wilkins; Baltimore: 2000.

Barkley RA. Linkages between attention and executive functions. In: Lyon GR, Krasnegor NA, editors. Attention, memory, and executive function. Paul H. Brooks Publishing Co.; Baltimore: 1996. pp. 307–325.

Blair C. School readiness. Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. American Psychologist. 2002;57(2):111–127.

Blair C, Zelazo PD, Greenberg MT. The measurement of executive function in early childhood. Developmental Neuropsychology. 2005;28(2):561–571.

Blair SN, Cheng Y, Holder JS. Is physical activity or physical fitness more important in defining health benefits? Medicine & Science in Sports & Exercise. 2001;33(6 Suppl):S379–399. discussion S419-420.

Booth FW, Gordon SE, Carlson CJ, Hamilton MT. Waging war on modern chronic diseases: Primary prevention through exercise biology. Journal of Applied Physiology. 2000;88(2):774–787.

Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: Results from the School Health Policies and Programs Study 2000. Journal of School Health. 2001;71(7):279–293.

Cabeza R. Functional neuroimaging of cognitive aging. In: Cabeza R, Kingstone A, editors. Handbook of functional neuroimaging of cognition. MIT Press; Cambridge, MA: 2001. pp. 331–377.

Campos AL, Sigulem DM, Moraes DE, Escrivao AM, Fisberg M. [Intelligence quotient of obese children and adolescents by the Wechsler scale] Revista de Saúde Pública. 1996;30(1):85–90.