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Original Article

The Impact of Physical Education on Youth Fitness and Health: Encouraging Active Lifestyles

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Abstract

The objective of the current study is to consider the effects of physical education (PE) on health and fitness among young people by concentrating on different aspects: the type of preferred forms of physical exercise, positive trends in mental health conditions, and involvement in physical activities. For data collection, this research applied structured questionnaires distributed to participants in three categories: high, low, and no PE program groups. The research design of the study was descriptive correlational. The results further showed that 40% of the students participating in physical education reported four to six hours per week, while these students reported experiencing great mental health benefits, such as improved concentration, more supportive peer interaction, increased self-esteem, and lower stress levels. Students exhibiting poor PE participation at school report moderate advantages to their mental health and moderate levels of physical activity. 60% of the no-after-school physical education program group engage in less than two hours of physical activity a week, and their mental health outcomes improved the least. Furthermore, children who experience physical education exhibit a higher preference for organized team and individual sports, whereas those students who have not been exposed to the program have little to no preference for any form of physical activity. The following are findings that underscore the significance of physical education in fostering consistent physical activity, bettering mental health, and affecting preference for specific forms of exercise. As noted by the report, inclusion of complete physical education programs in school curricula is important for making children live healthy, active lifestyles all their lives.

Keywords: *Physical Education (PE), Youth Fitness, Health, Physical Activity, Mental Health Improvements, Lifelong Active, Healthy Lifestyles.*

Introduction

Getting kids moving on a regular basis from a young age offers several proven health benefits, including lowering the prevalence of risk factors for coronary heart disease and promoting healthy musculoskeletal and body composition development. The Health Education Authority, which is now known as the Health Development Agency (HDA), recognized the importance of physical activity for children and youth and created standards based on these benefits. The main suggestion is to engage in at least one hour of moderately strenuous physical activity every day, which is the same as brisk walking. This should be achieved by lifestyle choices, recreational activities, and organized sports. The second piece of advice is to have kids do things that are good for their musculoskeletal health at least twice a week. Possessing strong bones, flexible muscles, and the ability to bear weight are all potential outcomes of such pursuits. Regular and organized physical activity is made easier through school physical education (PE). Consequently, the inclusion of PE in school curricula is frequently defended on the grounds that it promotes children's health and fitness. The reliability of this line of thinking is questionable because it has been tested so seldom. While there may be some truth to the claim, physical education is frequently cited as a means by which young people can fulfill their daily physical activity needs. One illustration of the significance of physical education in encouraging healthy living exercises is the 'Health of the Nation' targets of the United States. Increasing the availability and participation in daily physical education sessions is the focus of two of the three PE-related objectives presented here. Thirdly, we want more students to be physically active during class—that is, to spend half or more of their class time exercising.

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However, studies show that this standard is unrealistically high and is hence seldom satisfied in traditional PE programs.

It can be challenging to accomplish such a goal because physical education (PE) seeks to achieve so many distinct things. Physical educators around the world are in agreement that these are important goals to strive toward, but how those goals are defined, prioritized, and evaluated could vary from nation to country. Consequently, Simons-Morton identifies two broad goals of PE: (1) that students have the opportunity to be physically active in class, and (2) that they learn the skills and information necessary to maintain an active lifestyle outside of school. Physical education classes could legitimately center on helping students develop in areas such as motor skills, cognitive abilities, social skills, spirituality, culture, and morality. These factors may help youths build the behavioral and personal skills they need to be physically active for the rest of their lives, which would be a great achievement of PE goal 2. However, if that is the case, then these components ought to be a part of a curriculum that gives students a wide range of opportunities to be physically active, allowing them to pick and choose the strategies that work best for them. The data shows that team sports are the most popular form of PE in England, but they don't really reflect the activities that kids do while they're not in school, either at work or in college. Promoting a broader range of physical education activities is vital for fostering an enduring relationship with physical activity. As a result, it would be clear that young people may lead active and healthy lives without achieving athletic greatness.

Literature Review

Siedentop and Van der Mars (2022) offered an overview of each field while providing a thorough analysis of each occupation. Public policy at the federal, state, and regional levels is also covered in the book, with an emphasis on how laws impact different occupations that require physical exertion. Introduction to Physical Education, Fitness, and Sport, now in its ninth edition, remains an invaluable resource for students aspiring to careers in the diverse fields of physical activity. For anyone interested in becoming fitness instructors, program directors, leisure directors, or trainers, the latest version of this timeless book is jam-packed with updated material. Many different careers and fields are covered in this paper, including health, dancing, fitness, sports, recreation, athletic training, and sports administration. This edition includes five new chapters: dance education, health education, recreational leadership, excellent physical education programs, and modern physical education curriculum models. By learning about the most recent research on the effects of racial, ethnic, and economic inequality on physical activity and related professions, students will be better prepared to handle real-world problems. New facts, statistics, and information are interwoven throughout the book to help readers better grasp the concerns, problems, and programming solutions in various sectors, preparing them to tackle and solve those obstacles. The physical education chapters have been updated and enlarged to reflect recent trends and advancements. Additional chapters on health education, dance education, and recreational leadership expand the book's focus to include the interconnected fields of physical activity and the importance of these careers in promoting healthy lifestyles through regular exercise.

Griban et al. (2020) attempted to find out how motor exercise assisted young people in physical education to build healthy lifestyles. Materials and methods: The participants in the study were 647 students between 18 and 22 years of age. Research approaches include the literature review and synthesis, programs and curriculum evaluation, methodological support and training quality, questionnaires, and mathematical statistical techniques. Findings: The results show that most of the students did not have the knowledge required to live a healthy life, did not do enough physical exercises for their healthy lifestyle needs, educational activities were carried out irrationally, students had unhealthy habits, and other factors that adversely affect health. Conclusions: Attitudes of students regarding their healthy lifestyles cannot be modified through the existing physical education programs in Ukraine's institutions of higher education. Apart from these physical developments and acquisition of physical skills, the purpose of physical education should be to educate students to make healthy lifestyle choices.

Fletcher et al. (2018) covered topics such as the pathophysiology of cardiovascular system effects of

physical inactivity and PA, triggering factors, the role of preventive actions through personal, education/environment, and societal/authoritative factors, and factors that can be used to instruct health promotion caregivers on PA. The likelihood of death is 20% to 30% higher for inactive people as compared to physically active people. Thus, among the most modifiable risk factors for death worldwide, physical inactivity ranks high. The intricate "behavior" of PA is influenced by genes, environment, psychology, and social factors. Regardless of age or ethnicity, numerous scientific studies have shown that regular physical activity improves health, happiness, and cardiorespiratory fitness. Cardiovascular disease and other chronic illnesses are less common in this population compared to the sedentary population. Physical activity (PA) has beneficial health effects even at low doses, but longer and more intensive PA sessions are directly associated with better outcomes. This state-of-the-art review primarily focuses on "healthy PA." For the sake of global health, particularly the reduction of cardiovascular disease, it is imperative that local, regional, national, and worldwide efforts be developed and implemented to encourage PA among all individuals.

Herbert, C. (2022) presented in this publication summarize previous research that has shown a beneficial relationship between physical activity, mental health, and overall well-being. This holds true even for a sizable subset of emerging adults, college students. Conditions related to mental health, such as sadness and lack of physical activity, are becoming more common among young adults. A subset of emerging adults, college students sit for long periods of time and may be vulnerable to mental health issues. For instance, stress, worry, and depression are common among college students. This manuscript's overarching goal is to ascertain whether or not exercise and physical activity therapies have the ability to promote the mental health of emerging adults, particularly college students. In this manuscript, we will review the current research on the effects of exercise, exercise interventions, and short bursts of moderate to low intensity on college students' mental and physiological health, specifically looking at how these factors affect symptoms of depression and anxiety, as well as how these factors affect students' perceptions of stress and emotions, their awareness of their bodies, and their subjective well-being and quality of life. The project's idea, multimethod approach, and initial results from previous investigations are assessed in relation to the current status of science, healthcare needs, and forthcoming advancements. Additionally, the results imply that aerobic activities of a low to moderate intensity may be the most effective kind of exercise for enhancing mental health, alleviating psychological symptoms, and stress in the weeks following an intervention. Acute periods of certain types of exercise, notably yoga, appear to have a disproportionately positive impact on the post-workout processing of emotions, heart rate variability, and bodily signals. The results highlight the need for more comprehensive research into the mental and physical components that promote healthy lifestyle choices and enhanced mental and physical health among young adults, such as college students.

Neil-Sztramko et al. (2021) aimed to summarize the evidence that school-based treatments are beneficial in increasing fitness and moderate-to-intense physical activity in students from grades 6–18. Exercising regularly improves cardio-metabolic health, lowers body fat percentage, and boosts fitness in kids and teens. Among children and youths around the world, just 30% are able to get sixty minutes of moderate to strenuous physical activity per day. Schools are ideal locations for interventions since most people spend a significant amount of time either attending school or already there.

Research Methodology

This study aims to determine whether participation in physical education contributes to the enhancement of a child's physical activity and mental health, as well as the preferences for activity participation. The research design followed in this study is both descriptive and correlational in nature. To compare response from three different levels of physical education engagement, standardized questionnaire data were collected, and then analyzed using descriptive statistics.

1. Research Design

This research will explore the impacts that engaging in physical education would have on

participation in physical activity, mental health benefits, and social interaction advantages on preferences for the kind of physical activity that one would prefer. The type of research design used is both descriptive and correlational in this research. This study is to investigate the ways in which different degrees of participation in physical education (PE) have an impact on the physical activity routines of individuals, as well as their mental well-being and their preferences for various kinds of physical activities. In the field of physical education, that's what the study does-by studying three different groups-very high PE involvement group, poor PE engagement groups, and no PE program- using this methodology, the researcher is trying to establish association and patterns between participation of PE and the outcomes that will be considered.

2. Sample Size

A sample of 100 participants that differ in levels of physical education participation is targeted by the study. The participants come from a wide range of educational institutions that offer physical education classes. Grouped based on level of involvement in physical education are three groups.

- High PE Engagement
- Low PE Engagement
- No PE Engagement

The three groups will be compared to evaluate the effect of physical education on physical activity, mental health, and preferences for physical activities.

3. Data Collection

The structured questionnaire was utilized in the process of conducting this study. The tool was developed for the survey of three key indicators. These indicators are the benefit of physical exercise on the mental health and social interaction, preferences of participants with regard to the type of physical activity preferred, and the occurrence of physical activity in a week. Participants were requested to state the number of hours spent on physical exercise per week, and the reported hours were classified into four categories: less than two hours, two to four hours, four to six hours, and more than six hours. This was for the measurement of participants' participation in physical activity. Self-reported increases in focus, peer connections, confidence and reduction of stress were part of the methodology used to monitor the cognitive and social interaction results of the program. The participants themselves were also allowed to express their own preferences in regards to specific physical activities such as team sport, individual sports, and other forms of recreational pursuits. The participants were divided into three categories based on the level of participation in PE: those who highly participated in PE, those who participated less in PE, and those who did not participate in any PE program. From them, the data was drawn.

4. Data Analysis

Descriptive statistics were used in summarizing and interpreting the responses in statistical analysis of the obtained data. Based on the number of replies received in each category, the percentages for each indication were calculated. The three groups were compared based on their preferences with regards to physical exercise, mental health advantages, and engaging in physical activity. Such types of graphs as bar graphs and pie charts were used for the graphical illustration of the data, which helped in identifying the differences and similarities present among the groups. Through this comparison study, trends could be identified. For example, it would be found that individuals with high levels of physical education tended to have a higher propensity towards physical activity. In this particular group, mental health benefits were noticed. Individuals who participate in high levels of physical education are likely to engage in more structured team and individual sports compared to those who have a low level of participation or those who do not participate in any PE program. This is what the analysis of the data revealed.

Data Analysis

As the table 1 indicates, and the graphical depiction of weekly physical activity participation which it corresponds to demonstrates, there is a direct relationship between the time spent in physical activities and the time spent participating in PE. Individuals who have a high level of participation in physical education are more likely to engage in greater physical activity, with 40 % of them participating in four to six hours of physical exercise each week and 25 % going beyond six hours. There is a higher percentage of low physical education engagement, those with two to four

hours (40%) and a relatively fewer number of persons engaging for more than six hours only 10%. 60 % of those who did less than two hours of the total reported weekly physical activity are no engagement in any kind of the physical education program. Taken collectively, the data shows that participation in physical education exerts a positive influence on the amount of time an individual commits to physical activities. Therefore, physical education programs contribute to the development of healthy lifestyles.

Table 1: Engaging in Physical Activities on a Weekly Basis

Weekly Physical Activity (Hours)	High PE Engagement	Low PE Engagement	No PE Program
Less than 2 hours	10%	30%	60%
2-4 hours	25%	40%	30%
4-6 hours	40%	20%	8%
More than 6 hours	25%	10%	2%

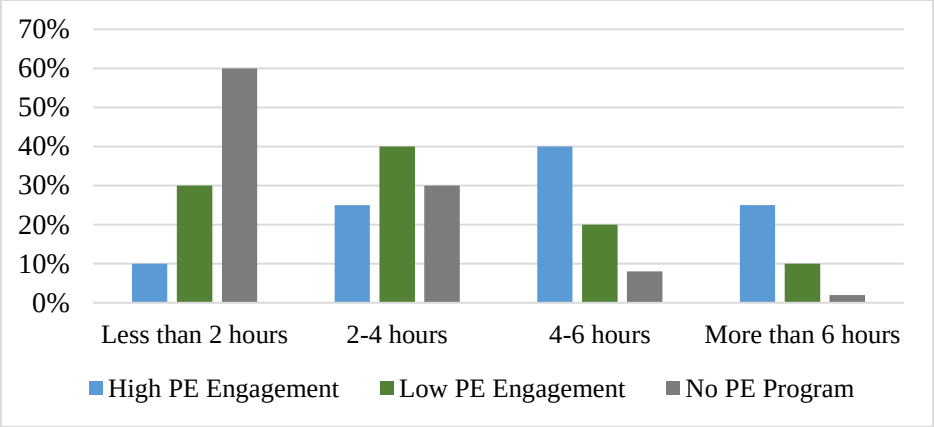

Figure 1: Graphical representation of Engaging in Physical Activities on a Weekly Basis

Table 2 and the graphical presentation it affords, provide an evidence-based view of the positive association of high participation levels in PE, which are linked with significant impacts on mental health as well as social interaction. Students who take PE to a high extent report much more significant improvement in concentration (65%), enhanced peer relationships (75%), confidence boost (80%), and a reduction in stress (60%) as compared to students who participate in PE at low levels or not. Although those with low participation in PE also have moderate benefits, with fifty percent of them reporting increased concentration and 60 % reporting improved peer interactions, the effects are not as palpable as they are in the group with high PE. On the other hand, individuals who do not participate in a physical education program portray the least improvement, showing only 25 % indicating improvement in concentration and 20 % showing a decrease in levels of stress. From this, it can be deduced that participation in physical education programs plays a significant role in improving both mental health and social skills.

Table 2: The advantages of social interaction and mental health

Indicator	High PE Engagement	Low PE Engagement	No PE Program
Improved Concentration in Class	65%	50%	25%
Better Peer Relationships	75%	60%	40%
Reported Confidence Boost	80%	55%	30%
Reduction in Stress Levels	60%	40%	20%

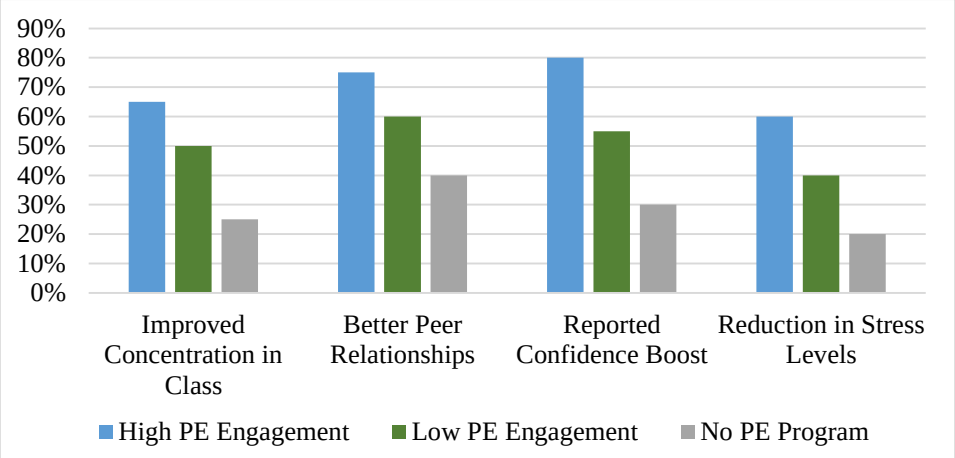

Figure 2: Graphical Representation of the advantages of social interaction and mental health

The data in Table 3 and the graphic representation of it show clear preference for different types of physical activities based on the hours spent in physical education. Those who spend more time in physical education have a significant preference for team sports, and 45 % of those choose activities like football, whereas 30 % choose individual sports like swimming. Only twenty percent of this population has a preference for participating in leisure activities such as yoga and dancing, which are considered to be lesser favorites. The people who prefer to participate in physical education less frequently have their preferences distributed fairly equally. 30 % of them choose the leisure activity, 25 % of them choose individual sports, and 30 % of them go towards team sports.

Table 3: Preferences for Physical Activity Type

Activity Type	High PE Engagement	Low PE Engagement	No PE Program
Team Sports (e.g., Football)	45%	30%	10%
Individual Sports (e.g., Swimming)	30%	25%	5%
Recreational (e.g., Dance, Yoga)	20%	30%	20%
No Preference	5%	15%	65%

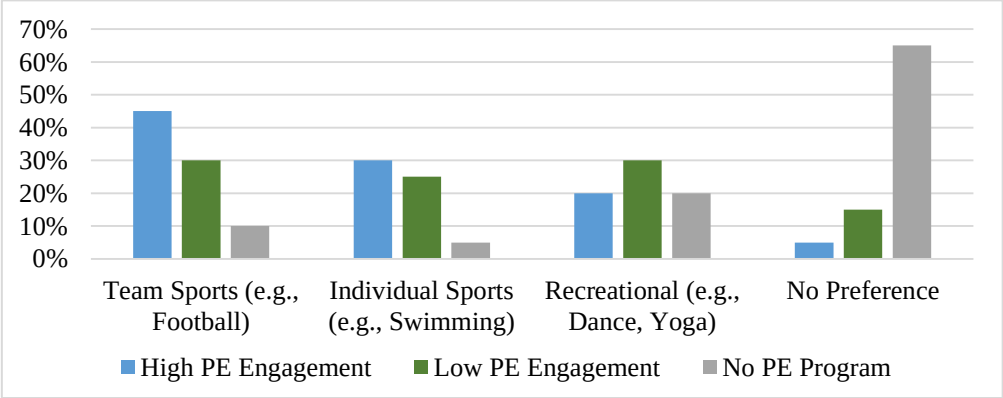

Figure 3: Graphical representation of Preferences for Physical Activity Type

Thus, physical education engagement impacts both overall participation in physical activities as well as type or category of activities, thereby leading to a strong team and individual sport involvement during times of high engagement in physical education. Those who do not engage in a PE program lack preference to a great extent, with 65 % of them stating that they have no preference for any activity type. Only ten percent of these individuals engage in team sports.

Conclusion

The study highlights how essential physical education is in encouraging the young to

have healthier and more active lives. It shows that children who participate in physical education at a high level not only exercise more but also enjoy far greater mental health benefits, including improved concentration, better relations with peers, higher self-esteem, and less anxiety. These benefits are reflected in their greater inclination toward organized physical activity, including both group and individual sports. Conversely, although not as salient as those in the high PE involvement group, pupils with low PE engagement show some improvement in these areas. The group without a PE program shows the lowest levels of physical activity and gains in mental health with a conspicuous lack of interest in any particular form of physical exercise. This suggests that physical education programs are essential for promoting regular physical activity and influencing preferences for different forms of exercise, especially in organized team and individual sports. All things considered, results point out how important it is to include intensive physical education programs in schools' curricula to contribute to students' long-term mental and social well-being besides the fulfillment of recommendations in physical activity. According to the findings, physical education is essential in providing young people with knowledge and motivation to lead an active, healthy life throughout life.

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Conflicts of interest
There are no conflicts of interest.

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