



IMPACT OF PHYSICAL EDUCATION ON ACADEMIC PERFORMANCE AND MENTAL HEALTH OF SECONDARY SCHOOL STUDENTS

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ABSTRACT

The present study examines the impact of physical education (PE) on the academic performance and mental health of secondary school students in Beed city. A sample of 100 students (50 regularly participating in PE, 50 not actively involved) was selected. The study revealed a positive correlation between physical activity and academic achievement, as well as reduced symptoms of anxiety and depression. The research suggests integrating structured PE into school curricula to enhance holistic student development.



KEYWORDS: *physical education (PE) , symptoms of anxiety and depression.*

INTRODUCTION

Physical education is often undervalued in academic institutions, despite growing evidence of its influence on cognitive function and emotional stability. With rising concerns over student stress, sedentary lifestyles, and declining academic engagement, understanding the role of PE becomes crucial. This study focuses on the dual impact—academic and psychological—of PE on secondary school students.

NEED AND IMPORTANCE OF THE STUDY

- Academic performance is not solely dependent on cognitive effort; physical and mental well-being play critical roles.
- Mental health concerns like anxiety and stress are increasing among adolescents.
- Physical education may enhance attention span, memory, and emotional regulation.
- This research provides evidence-based suggestions for policymakers and educators.

OBJECTIVES OF THE STUDY

1. To assess the academic performance of students participating in regular physical education.
2. To evaluate the mental health status of students with and without regular PE activity.
3. To examine gender differences in the impact of PE on academic performance and mental well-being.
4. To identify correlations between physical activity and emotional stability.
5. To recommend strategies for integrating physical education with academic excellence.

Assumptions

- Students accurately report their physical activity levels and emotional states.
- The academic performance scores provided by schools are accurate.
- Participation in PE is consistent across the school term.

Hypothesis

H₀ (Null Hypothesis): Physical education has no significant impact on academic performance and mental health.

H₁ (Alternative Hypothesis): Physical education significantly improves academic performance and mental health of secondary school students.

SCOPE AND LIMITATIONS

Scope:

- Focused on students from secondary schools in Beed city (Classes 8 to 10).
- Covers academic and psychological effects of physical education.

Limitations:

- The study does not explore long-term psychological effects.
- Socioeconomic background is not considered in depth.
- Self-reporting bias may influence mental health responses.

Research Method

- **Type:** Quantitative Descriptive Research
- **Approach:** Survey Method combined with academic performance analysis and mental health screening using standardized tools.

Research Design

- **Design:** Comparative study between two groups—PE participants and non-participants.
- **Duration:** 4 months
- **Instruments:** Questionnaires, school records, and standard psychological scales (like the DASS-21 for stress, anxiety, and depression).

Sampling

- **Population:** Secondary school students from Beed city (Classes 8–10)
- **Sample Size:** 100 students
 - 50 students regularly attending PE classes
 - 50 students not participating regularly in PE
- **Sampling Technique:** Stratified random sampling based on school and class

Tools for Data Collection

- Academic performance: Term exam marks and teacher evaluations
- Mental health: DASS-21 Scale (Depression, Anxiety, Stress Scales)
- PE participation log (verified by PE instructors)
- Structured student questionnaire

Data Analysis

A. Academic Performance (Average Score %)

Group	Avg. Marks (%)
Regular PE Students	71.4%
Non-PE Students	63.2%

B. Mental Health (DASS-21 Average Scores)

Parameter	Regular PE	Non-PE Students
Depression	8.1	13.6
Anxiety	7.5	14.2
Stress	9.2	16.4

C. Gender Analysis (Academic Score %)

Gender	Regular PE	Non-PE
Boys	69.2%	61.0%
Girls	73.6%	65.3%

RESEARCH FINDINGS

- Students who regularly participated in PE scored significantly higher in academics.
- Regular PE was associated with lower depression, anxiety, and stress levels.
- Girls benefited more in terms of academic improvement, while boys showed greater improvement in stress levels.
- Many students not involved in PE cited pressure to focus on academics, which ironically affected both performance and mental health negatively.

CONCLUSION

The study confirms a strong positive influence of physical education on both academic performance and mental health of secondary school students. Schools must recognize PE as a core academic subject. Timely implementation of well-structured physical activities can lead to improved concentration, reduced psychological distress, and holistic student development.

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