

Endurance Difference between Physical Education Students and Non-Physical Education Students of Class 11 and 12

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Abstract

The present study aimed to compare the endurance levels between Physical Education (PE) students and Non-Physical Education (Non-PE) students of Class 11 and 12. A 2 km run test was administered to assess cardiovascular endurance. A total of 280 students participated, divided equally among PE and Non-PE groups. The results indicated that Physical Education students demonstrated significantly better endurance compared to their Non-PE counterparts.

Keywords

Endurance, Physical Education Students, Non-Physical Education Students, 2 km Run Test, Cardiovascular Fitness

1. Introduction

Endurance is a fundamental component of physical fitness that enables an individual to sustain prolonged physical activity. In the school context, students enrolled in Physical Education classes are presumed to have better physical fitness levels compared to those who are not. This study investigates the endurance differences between Physical Education and Non-Physical Education students in classes 11 and 12 using a 2 km run test.

2. Objectives of the Study

- To assess the endurance levels of Physical Education and Non-Physical Education students.
- To compare the endurance performance between these two groups.
- To highlight the importance of physical education in developing cardiovascular endurance.

3. Hypothesis

H₀ (Null Hypothesis): There is no significant difference in endurance between PE and Non-PE students.

H₁ (Alternative Hypothesis): Physical Education students have better endurance than Non-Physical Education students.

4. Methodology

Selection of Subjects

- School: Bethany Convent School
- Sample Size: 280 students
- Class 11:
 - PE Students: 30 Boys + 40 Girls = 70
 - Non-PE Students: 30 Boys + 40 Girls = 70
- Class 12:
 - PE Students: 30 Boys + 40 Girls = 70
 - Non-PE Students: 30 Boys + 40 Girls = 70
- Sampling Method: Random Sampling
- Test Administered: 2 km Run Test

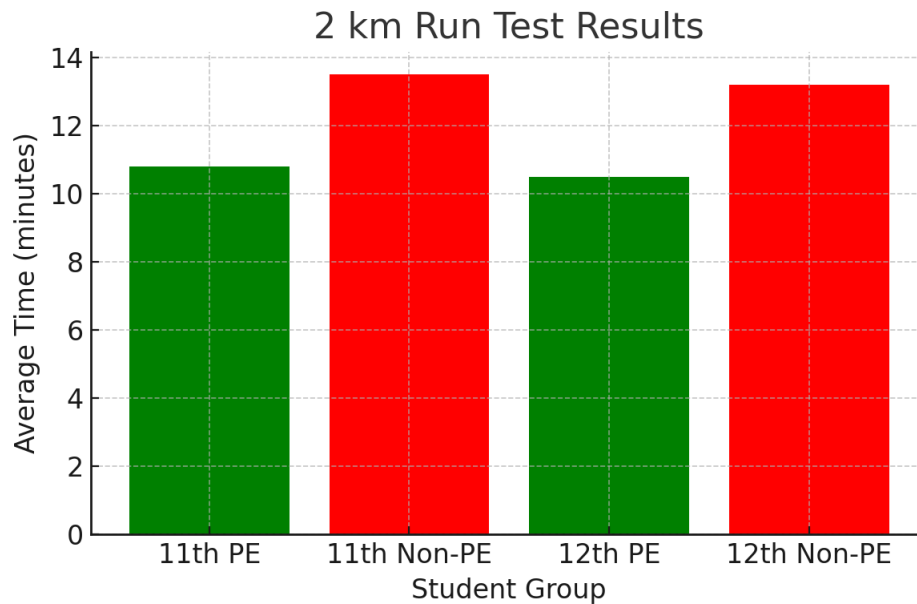
5. Results

Mean Completion Time:

- PE Students (11th): 10.8 minutes
- Non-PE Students (11th): 13.5 minutes
- PE Students (12th): 10.5 minutes
- Non-PE Students (12th): 13.2 minutes

Key Findings:

- PE students in both classes performed better.
- Endurance was consistently higher among PE students.
- Time difference was approximately 2.5 to 3 minutes.



6. Discussion

The study indicates that regular participation in physical activities, as structured in Physical Education programs, improves cardiovascular endurance. Non-PE students showed significantly lower endurance levels.

7. Conclusion

Physical Education students demonstrated significantly better endurance than Non-Physical Education students. Physical education plays a vital role in developing students' fitness levels.

8. Recommendations

- Encourage students to opt for Physical Education.
- Mandate regular fitness programs for all students.
- Motivate Non-PE students to engage in daily physical activities.

References

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