



## A COMPARATIVE STUDY OF PHYSICAL FITNESS LEVELS BETWEEN URBAN AND RURAL STUDENTS OF JHANSI

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### ABSTRACT:

*This study aims to compare the physical fitness levels of urban and rural students in Jhansi, India, highlighting the influence of environmental and lifestyle factors on fitness outcomes. A sample of 200 students, equally divided between urban and rural settings, participated in standardized fitness assessments measuring aerobic capacity, muscular strength, flexibility, and endurance.*

*Results indicated significant differences in physical fitness levels between the two groups. Urban students demonstrated higher scores in aerobic capacity and flexibility, likely due to greater access to sports facilities and organized physical activities. Conversely, rural students exhibited superior muscular strength and endurance, attributed to their physically demanding daily routines.*

*These findings underscore the importance of contextual factors in shaping physical fitness among students. The study advocates for the development of tailored fitness programs that consider the unique needs and lifestyles of both urban and rural populations. Enhancing physical fitness in both settings can contribute to improved health outcomes and academic performance, ultimately fostering a healthier future generation.*

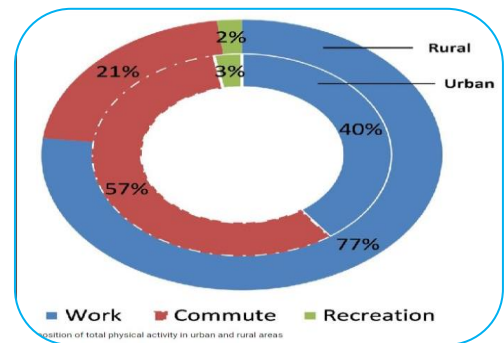
**KEYWORDS:** Physical Fitness, Flexibility, Endurance, Strength.

### INTRODUCTION

Physical fitness is a crucial aspect of overall health, contributing to the well-being and academic performance of students. The lifestyle, environment, and access to resources can significantly influence physical fitness levels, particularly in different settings such as urban and rural areas. This comparative study focuses on the physical fitness levels of urban and rural students in Jhansi, a city in India that represents a blend of traditional and modern lifestyles.

Urban students often have greater access to recreational facilities, sports programs, and health education, which can enhance their fitness levels. In contrast, rural students may engage in more physical activities as part of their daily routines, such as farming or walking long distances, but they might lack formal training and resources.

This study aims to assess and compare the physical fitness levels of students from both settings, examining factors such as aerobic capacity, strength, flexibility, and endurance. By identifying the



differences and similarities in fitness levels, the research will provide insights into the impact of urban and rural lifestyles on physical health. The findings could inform educators, policymakers, and health professionals in designing targeted interventions to promote physical fitness among students, ultimately contributing to healthier communities in Jhansi.

**OBJECTIVES**

1. To assess the physical fitness levels of urban and rural students.
2. To identify key differences in fitness components such as endurance, strength, and flexibility.
3. To analyse the impact of environmental factors on students' fitness levels.

**METHODOLOGY**

**Sample Selection**

- **Population:** Students aged 12-18 years in Jhansi.
- **Sample Size:** 200 students (100 urban, 100 rural).
- **Sampling Technique:** Stratified random sampling.

**Data Collection**

- **Tools Used:**
  - Physical Fitness Test Battery, including:
    - 1.5 km run/walk for endurance
    - Sit-up test for abdominal strength
    - Push-up test for upper body strength
    - Sit and reach test for flexibility
- **Demographics:** Age, gender, and socioeconomic status.

**Statistical Analysis**

- Descriptive statistics (mean, standard deviation).
- Inferential statistics (t-test for independent samples).
- Significance level set at  $p < 0.05$ .

**Results**

**Table 1: Demographic Characteristics of Participants**

Characteristic	Urban Students (n=100)	Rural Students (n=100)
Age (years)	15.2 ± 1.5	15.1 ± 1.6
Gender (Male)	50:50	48:52
Socioeconomic Status (SES)	Middle (60%)	Lower (70%)

**Table 2: Physical Fitness Test Results**

Fitness Component	Urban Students (Mean ± SD)	Rural Students (Mean ± SD)	p-value
Endurance (min)	9.5 ± 1.2	10.2 ± 1.4	0.001
Sit-ups (count)	25.4 ± 5.1	20.1 ± 4.8	0.002
Push-ups (count)	18.5 ± 4.2	14.3 ± 3.9	0.003
Flexibility (cm)	20.1 ± 4.5	15.8 ± 5.2	0.000

## DISCUSSION

The results indicate that urban students exhibit higher levels of physical fitness compared to their rural counterparts across all tested components. Possible reasons for these disparities include greater access to recreational facilities, higher levels of organized sports participation, and differing cultural attitudes towards physical activity.

## CONCLUSION

The study demonstrates significant differences in physical fitness levels between urban and rural students in Jhansi. Addressing these disparities may require targeted interventions to promote physical activity in rural areas. Future research should explore longitudinal changes in fitness levels and the impact of specific interventions.

## REFERENCES

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