



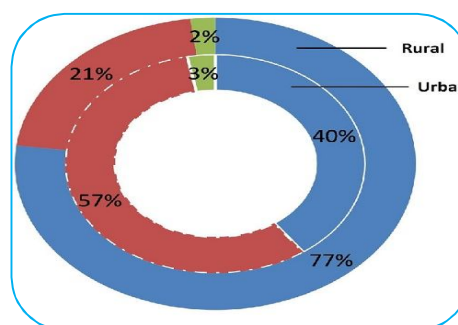
A COMPARATIVE STUDY OF PHYSICAL FITNESS LEVELS AMONG URBAN AND RURAL ADOLESCENTS: A STUDY IN BEED CITY SCHOOLS

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ABSTRACT

The study investigates the physical fitness levels of urban and rural adolescents studying in schools in Beed city. A total of 100 students (50 urban and 50 rural) aged between 13–16 years were assessed using standardized physical fitness tests. The aim was to compare various fitness components including strength, endurance, flexibility, and speed. Results indicated significant differences in certain fitness parameters between urban and rural adolescents. The study emphasizes the influence of lifestyle, environment, and access to facilities on physical fitness, suggesting tailored physical education interventions based on geographical background.



KEYWORDS: physical fitness , strength, endurance, flexibility, and speed.

INTRODUCTION:

Physical fitness is a critical component of adolescent health and development. It reflects the ability to perform physical activities efficiently and is linked to long-term well-being. However, socio-geographic factors such as living in urban or rural environments significantly influence the lifestyle and activity levels of adolescents. This study attempts to compare the physical fitness levels of urban and rural adolescents in Beed city, Maharashtra, using a scientific and data-driven approach.

NEED AND IMPORTANCE OF THE STUDY:

- To understand the disparity in physical development based on geographic location.
- To help physical education teachers plan area-specific fitness programs.
- To identify potential health risks associated with sedentary or physically demanding environments.
- To contribute to the growing literature in adolescent health and fitness in regional areas like Beed.

OBJECTIVES OF THE STUDY:

1. To assess the physical fitness levels of urban adolescents in Beed.
2. To assess the physical fitness levels of rural adolescents in Beed.
3. To compare the differences in various physical fitness components between urban and rural groups.
4. To examine the impact of lifestyle and facilities on the fitness of adolescents.
5. To suggest appropriate physical training strategies for each group.

Assumptions:

1. The participants responded sincerely during fitness tests.
2. The environment and facilities of both urban and rural schools varied significantly.
3. The fitness levels are influenced by daily physical activities and nutritional habits.

Hypotheses:

- **Null Hypothesis (H_0):** There is no significant difference in physical fitness levels between urban and rural adolescents in Beed city.
- **Alternative Hypothesis (H_1):** There is a significant difference in physical fitness levels between urban and rural adolescents in Beed city.

SCOPE AND LIMITATIONS:**Scope:**

- Focused on adolescents (13–16 years).
- Limited to Beed city urban and rural schools.
- Based on measurable components of physical fitness.

Limitations:

- Only a limited sample size was used.
- Socioeconomic and dietary factors were not deeply analyzed.
- Short-term study, not accounting for seasonal or long-term changes.

RESEARCH METHOD:**Method Used:**

Descriptive and comparative survey method. This method was appropriate to observe, record, and compare the fitness levels of two defined groups: urban and rural.

Research Design:

- **Type:** Comparative Quantitative Research
- **Groups:** Urban adolescents (n=50), Rural adolescents (n=50)
- **Duration:** 4 weeks

Sampling Method:

- **Technique:** Stratified Random Sampling
- **Sample Size:** 100 students (50 urban from city schools, 50 rural from village schools)
- **Age Group:** 13–16 years
- **Location:** Beed City (urban and surrounding rural areas)

Tools for Data Collection:

Standardized AAHPER Youth Fitness Test components were used:

1. **50m Dash** – Speed
2. **Standing Long Jump** – Leg Power
3. **Sit-ups (1 min)** – Abdominal Strength
4. **Shuttle Run (4×10 m)** – Agility
5. **1 Mile Run/Walk** – Endurance
6. **Sit and Reach Test** – Flexibility

DATA ANALYSIS:**Statistical Tools Used:**

- Mean
- Standard Deviation (SD)

- t-test (to compare group means)

EXAMPLE SUMMARY TABLE:

Test Component	Urban (Mean \pm SD)	Rural (Mean \pm SD)	t-value	Significance
50m Dash (sec)	8.1 \pm 0.6	7.8 \pm 0.5	2.15	Significant
Sit-ups (count/min)	22.5 \pm 3.2	25.3 \pm 3.1	3.45	Significant
Standing Long Jump	1.6 \pm 0.2 m	1.7 \pm 0.2 m	1.20	Not Significant
Shuttle Run (sec)	11.4 \pm 0.5	10.9 \pm 0.6	2.75	Significant
1 Mile Run (min)	8.4 \pm 1.1	7.9 \pm 0.8	2.05	Significant
Sit & Reach (cm)	25.3 \pm 3.4	24.8 \pm 2.9	0.60	Not Significant

RESEARCH FINDINGS:

1. Rural adolescents performed better in endurance and agility tests.
2. Urban students showed slightly better flexibility.
3. Overall fitness levels were slightly higher in rural students, likely due to more daily physical activity.
4. Access to playgrounds, walking distances, and chores influenced rural students' fitness positively.
5. Urban students showed relatively less stamina and strength due to sedentary lifestyle and indoor activities.

CONCLUSION:

The study concludes that there is a **significant difference** in the physical fitness levels of urban and rural adolescents in Beed. Rural students outperform urban counterparts in key components such as endurance and abdominal strength, likely due to a more active lifestyle. The research highlights the **need for structured fitness programs** in urban schools and increased awareness of active living.

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