

COMPARATIVE STUDY OF SELECTED PHYSICAL FITNESS COMPONENTS AMONG RURAL AND URBAN SCHOOL BOYS

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Abstract

Physical fitness is one of the aspects of total fitness. Physical fitness is not only one of the most important keys to a healthy body, but also the basis of dynamics and creative activity. Fitness is active not passive because from birth to death and from cradle to grave yard and individual is an active organism. One point of consensus is that physical fitness is a desirable quality which one cannot afford to neglect.

Physical fitness is a fundamental importance to all human beings. A man cannot move even an inch without proper physical fitness. Many prominent people in the field of medicine and in other fields have spoken and written about the need for exercise to maintain on organically sound body from birth to old age. Functioning of the body requires energy, which depends on the ability of the heart, lungs and blood vessels to process oxygen and deliver it to the muscles, where it becomes the fuel for energy.

Age is no bar for keeping oneself fit. To an older person, it might be the feeling of youthful vigor, to a stenographer it is the ability to type for eight hours at a stretch without developing aching shoulder muscles. To a coach, it is something which comes with training, whereas to a physicalist, it is functional state of the body defined in technical terms.

Fitness is for every body and not just for youth. This makes fitness every body's business. It is a part of education but it is also a part of life. Everybody who wants to be fit needs to do exercise. The basic problem is that the human body is designed and constructed for movement and vigorous activity, not for rest and it functions more effectively when it is active. "Most people take better care of the automobile than they do of their own bodies". The old saying is "If you don't use you lose it". If people are to develop and maintain a desirable level of health and fitness, they must participate regularly in well - designed exercise programme.

INTRODUCTION

The history of human race reveals that there must have been some kind of education of training for the physical well-being of the people in all societies of the world and that it was imparted either in an organized way or in a random manner. In ancient times, physical education was given in the form of hunting or training for warfare. Incidental physical education was given through games sports and manual work. First of all, Greece felt the necessity of imparting proper physical education to its youth and so included it in their education programme. During the 19th century, in the process of systematizing general education in many countries of Europe, physical education and youth fitness were assigned a definite place in their schemes of education'. The finding of the biologists, physiologists and psychologists confirmed the necessity of activating muscles of all parts of the human body for their natural growth and the health for all round development.

Science has established the fact that the efficient functioning of the body improves when it is used and regresses when it is not used. This means that all normal organs of the body perform more effectively and efficiently when they are regularly exercised.

Human body is built to be active and thrives on active. This realization has acquired for physical education and fitness programme an imperative place in the scheme of education in almost all the countries. Further the need of physical education and fitness programme becomes more and more urgent as a result of the increasing use of mechanic in industrially advanced countries resulting in lesser and lesser use of muscles and different parts of the body. Since then, demand for systematic physical fitness programme has been increasing dayby-day².

1.1 PHYSICAL FITNESS

Physical fitness is one of the aspects of total fitness. Physical fitness is not only one of the most important keys to a healthy body, but also the basis of dynamics and creative activity. Fitness is active not passive because from birth to death and from cradle to grave yard and individual is an active organism. One point of consensus is that physical fitness is a desirable quality which one cannot afford to neglect.

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Fitness is for every body and not just for youth. This makes fitness every body's business. It is a part of education but it is also a part of life. Everybody who wants to be fit needs to do exercise. The basic problem is that the human body is designed and constructed for movement and vigorous activity, not for rest and it functions more effectively when it is active. "Most people take better care of the automobile than they do of their own bodies". The old saying is "If you don't use you lose it". If people are to develop and maintain a desirable level of health and fitness, they must participate regularly in well - designed exercise programme.

A person who does not exercise regularly according to a well-designed programme will have an extra energy reserve because of the increased efficiency of the body. There is an old saying "Exercise may not necessarily add yours to your life, but will add life to your years". Indeed it is true.

According to BucheN,

"Fitness is the ability of an individual to live a full and balanced life, it involves physical, mental, emotional, social and spiritual factors as a capacity for their wholesome expression.

"We must change a nation of softies to a nation that is physically fit". The profession of physical education is grateful to president urged however for urging people to be more physically active former president of USA John Kennedy urged the schools to lay more stress on physical education programs and physical fitness.

Barrow has stated that fitness includes the mental, emotional, social as well as the physical aspect and all these components of total fitness plays a significant role for full and happy life. Further freedom from disease, organic development, and efficient movement,

alertness of mind, emotional maturing and social adjustment provide the frame work for fitness.

Physical fitness is based upon a solid foundation of the good health. Health living implies freedom from disease different strength, endurance. Skill, capacity to meet the daily demands and sufficient reserves to meet extra-ordinary stresses without undue fatigue besides mental development and emotional balance according to the maturity level of the individual.

1.2 CONCEPT OF FITNESS

Fitness is a term which is often used as synonymous as health in limited manner. Fitness denoted different facts of health. The term defined in various ways.

The President's Council of Youth Fitness, United States of America, defined 'Fitness' as follows.

"Fitness is the capacity of the individual to live and function effectively, purposefully and zestfully here and how and to meet confidently the problems and crisis which are among life's expectations'.

Clarke has similarly defined fitness as the ability to carry out daily tasks with vigorous and alertness without undue fatigue and with amble energy to enjoy leisure time permits and to meet unforeseen emergencies⁶.

During the great part of the history of the world, men have regarded the mind and body as separate entities. This belief came from many sources, widely separated in the time and space⁷.

Kennedy' emphasized the need for sound mind and sound body among the citizens. He said 'we do know what the Greeks know that intelligence and skill can only fiction at the peak of their capacity when the body is healthy and strong, that hard spirits and though minds usually inhabits sound bodies. He further stated that only physically fit individuals

can develop both intelligence and skills. Intelligence can only function at the peak of their capacity when the body is healthy and strong’.

Physical Education deals with the education of individual in terms of his body how he moves in relation to his immediate environment and how he appears to other.

Achieving and maintaining of physical fitness helps prevent premature occurrence of numerous illness and diseases. It also helps in rehabilitation after the illness of diseases⁹

REVIEW OF RELATED LITERATURE

Sincere efforts have been made by the Research Scholar to locate literature related to this study. The relevant studies found from various sources which the **investigator has come across** are enumerated below.

The literature in any field forms the foundation upon which all future work will be built’.

A study of relevant literature is an essential step to get a full picture of what has been done with regard to the present problem under study. Such review brings about a deep and clear perspective of the overall field.

The investigator has made an honest and scholarly attempt to locate a number of researches of the similar nature by various scholars. The investigator took great pains to collect the relevant and critical literatures supporting his studies have been presented in this chapter.

Several excellent research reviews on various aspects of physical education and sports have been published. If one or more can be found in the area of the students research, they can be an excellent starting point for a literature search.

Such reviews, of course, a secondary sources are given in the reviews so they are easily located.

Raju' administered AAHPER Fitness test for rural school boys showed that they had better physical fitness than urban school boys. The rural boys excelled than urban school boys in arm strength, running, throwing, jumping, and walking endurance, muscular strength and flexibility.

Hence the hypothesis of the study was that rural school boys could have a better physical fitness compared to that of urban school is upheld and hence the hypothesis is accepted.

Hasrani ³ conducted a test to determine the relationship of selected physical fitness variables (speed, power, cardiovascular endurance and agility) on performance in basketball. The test was conducted on twenty five basketball players from the professional college of physical education as subjects and administered the AAHPER physical fitness test to collect the data pertaining to the selected physical fitness variables.

The result of the study revealed that the agility, cardio-vascular endurance and power correlated significantly, obtained values of 0.7, 0.55 and 0.52 respectively whereas speed did not show relationship to performance (obtained value is 0.08).

Sidhu etal⁴ studied the effect of age and altitude on physical performance. The sample consists of 1080 boys ranging in age from 10 to 18 years inhabiting two different altitudes in the Himalayas namely, Bilaspur (610 metres) and Shimla (2147 metres). Anthropometric measurements which included stature, body mass and skin folds were taken using standard techniques. The physical performance was assessed by employing the AAHPER test which includes 50 metres dash, standing broad jump, flexed arm hang, bent knee sit-up, shuttle run (4X 10 metres), forward bend and reach and 600 metres walk/run. The differences of 1555 metres in altitude up to 2147 metres did not significantly affect the growth pattern

from 10 to 18 year old males as far as height, weight and body fat was concerned. The Shimla boys were found to be slightly taller than their Bilaspur counter parts up to 15 years of age. After this period, the differences narrow down to the extent that at the end of this study no differences were noticeable. In body weight, this difference was more prominent in later part of the study. In the performance of fitness tests, it was observed that altitudinal differences of 1555 metres has played a role indicating considerably better performances of Shimla population in standing broad jump, 50 metres sprint and 4 X 10 metres shuttle run. Among these tests, the performance was statistically significant at 14, 15, 17 and 18 years of age in standing broad jump and at 15 and 18 years of age 4 X 10 metres shuttle run. No significant difference was observed in 50 meters sprint. But in 600 metres run/walk tests, the Bilaspur subjects has shown considerably better performance in all age groups as compared to their counter parts who live at 2165 metres above sea level. The socio-economic difference has clearly indicated that the boys belonging to affluent families ranging from 10 to 18 years of age living at 2165 metres above sea level were significantly heavier and taller than those compared to their counter parts who live at the same altitude but belonged to non - affluent families. The boys from affluent class possess greater amount of fat also. In the performance of fitness tests it was observed that the non- affluent have shown considerably better result in the majority of the tests as compared to the affluent. It was only in 50 metres sprinting at 18 years of age that the affluent group have shown performance significantly better than non - affluent.

METHODOLOGY

The procedure adopted for the selection of subjects, selection of variables, orientation of tests, reliability of tools, orientation of subjects and statistical technique employed in analyzing the data have been described in this chapter.

3.1 SELECTION OF SUBJECTS

For the purpose of this study hundred boys from four schools in rural areas and hundred boys from four schools of the urban areas in Cuddapah District were selected randomly. The age ranged between fourteen years to sixteen years. The subjects were selected from the schools as noted below.

3.1.1. RURAL AREAS: BMS Pehru Anantnag.

1. BPS Checki Pehru Anantnag.
2. PS Peerepora School Anantnag.
3. Paradise valley School Anantnag

3.1.2s URBAN AREAS

1. Radiant Public School Anantnag.
2. Baba Naseeb Ud Din Memorial Public School Anantnag.
3. Baba Yousuf Public School Anantnag.
4. Hista Higher Secondary School Anantnag.

3.2 SELECTION OF VARIABLES

The investigator has selected the following independent variables as follows. A number of studies being conducted on physical fitness in India and Westren countries but there paucity of studies on the comparison of physical fitness between rural & urban. Therefore the Investigator has a keen interest to select these variables in this study.

3.3 PHYSICAL FITNESS VARIABLESSpeed

- a. EnsduranGe
- b. Power
- c. Agility

ANALYSIS OF THE DATA AND RESULT OF THE STUDY

The data was collected as per methods mentioned in the previous chapter, were analysed and interpreted in the following means. The analysis of Speed, Agility, Power and Endurance between Rural and Urban School boys found out by means of 't' ratio test of analysis for the significance. To calculate 't' ratio the following formula was used.

$$t = \frac{\text{DM}}{\text{SE DM}}$$

The means, standard deviation and standard error of mean were used to calculate 't' ratio

TABLE - I Table of 50 Metres dash Scores for Rural School Boys

S.N	(x)	(X-M)	x ²	x	=						
1.	7.2	-0.096	0.009								
2.	7.3	0.004	0.0000								
3.	7.0	-0.296	0.089								
4.	7.3	0.004	0.0000								
5.	7.5	0.204	0.042								
6.	7.6	0.304	0.092416								
7.	7.5	0.204	0.041616								
8.	7.4	0.104	0.010816								
9.	7.7	0.104	0.163216								
10.	7.4	0.104	0.010816								
11.	7.2	-0.096	0.009216								
12.	7.2	-0.096	0.009216								
13.	7.4	0.104	0.010816								
14.	7.4	0.104	0.010816								
15.	7.5	0.204	0.041616								
16.	7.6	0.304	0.92416	17.	7.3	0.004	0.000016	18.	7.0	-0.296	0.087616
19.	7.2	-0.096	0.009216								
20.	7.3	0.004	0.000016								
21.	7.4	0.104	0.010816								

2z.	7.5	0.204	0.04616
23.	7.0 -0.296	0.087616	
24.	7. i 0.196	0.038416	
25.	7.4 0.104	0.010816	
26.	7.2 -0.096	0.009216	
27.	7.3 0.004	0.000016	
28.	7.5 0.204	0.041616	
29.	7.4 0.104	0.010816	
30.	7.1 -0.196	0.038416	
31.	7.4 0.104	0.010816	
32.	7.2 -0.096	0.009216	
33.	7.4 0.104	0.010816	
34.	7.6 0.304	0.092416	
35.	7.1 -0.196	0.038416	
36.	7.2 -0.096	0.009216	
37.	7.0 -0.296	0.087616	
38.	7.2 -0.096	0.009216	
39.	7.5 0.204	0.041616	
40.	7.6 0.304	0.092416	
41.	7.4 0.104	0.010816	
42.	7.4 0.104	0.010816	
43.	7.2 -0.096	0.009216	
44.	7.3 0.004	0.000016	
45.	7.1 -0.196	0.038416	
46.	7.0 -0.296	0.087616	
47.	7.4 0.104	0.010816	
48.	7.3 0.004	0.000016	
49.	7.1 -0.196	0.038416	
50.	7.1	-0.196	0.038416

S.No.	(x)	x — (X-M)	x ²
51.	7.5 0.204	0.041616	
52.	7.6 0.304	0.092416	
53.	7.4 0.104	0.010816	
54.	7.7 0.404	0.163216	
55.	7.4 0.104	0.010816	
56.	7.2 -0.096	0.009216	
57.	7.2 -0.096	0.009216	
58.	7.4 0.104	0.010816	
59.	7.5 0.204	0.041616	
60.	7.6 0.304	0.092416	

61.		7.3	0.004	0.000016			
62.		7.0	-0.296		0.087616		
63.		7.2	-0.096		0.009216		
64.		7.3	0.004	0.00016	65.	7.5	0.204 0.041616
66.	7.4	0.104	0.010816				
67.	7.1	-0.196		0.038416			
68.	7.4	0.104	0.010816				
69.	7.2	-0.96	0.009216				
70.	7.4	0.104	0.010816				
71.	7.6	0.304	0.092416				
72.	7.1	-0.196		0.038416			
73.	7.2	-0.096		0.009216			
74.	7.0	-0.296		0.087616			
75.	7.2	-0.096		0.009216			
76.	7.1	-0.196		0.038416			
77.	7.1	-0.196		0.038416			
78.	7.3	0.004	0.000016				
79.	7.4	0.104	0.010816				
80.	7.0	-0.296		0.087616			
81.	7.1	-0.196		0.038416			
82.	7.3	0.004	0.000016				
83.	7.2	-0.096	0.009216	84.	7.4	0.104	0.011816
85.	7.6	0.304	0.029216				
86.	7.5	0.204	0.041616	87.	7.0	-0.296	0.087616
88.	7.2	-0.96	0.009216				
89.	7.3	0.004	0.000016				
90.	7.5	0.204	0.041616				
91.	7.1	0.196	0.087616				
92.	7.0	-0.296		0.087616			
93.	7.4	0.104	0.010816				
94.	7.2	-0.096		0.009216			
95.	7.3	0.004	0.000016	96.	7.0	-0.296	0.087616
97.	7.2	-0.096		0.009216			
98.	7.1	-0.196		0.038416			
99.	7.1	-0.196		0.038416			
100.	7.5	0.204	0.041616				

MX = 729.6

Zx°=3.46

TABLE - II

Table of 50 Metres dash Scores for Urban School Boys

S.No.	(X)	x = (X-M)	x'
1.	6.8	-0.23	0.053
2.	6.9	-0.13	0.017
3.	7.1	-0.03	0.001
4.	7.1	0.07	0.005
5.	6.7	-0.33	0.109
6.	6.9	-0.13	0.017
7.	6.2	-0.83	0.689
8.	7.2	0.67	0.449
9.	6.6	-0.43	0.185
10.	6.8	-0.23	0.053
11.	6.9	-0.13	0.017
12.	7.0	-0.03	0.001
13.	7.0	-0.03	0.001
14.	7.2	-0.17	0.029
15.	6.8	0.23	0.053
16.	6.9	0.13	0.017
17.	6.8	-0.23	0.053
18.	6.7	-0.33	0.109
19.	7.2	2.17	0.029
20.	7.5	-0.47	0.221
21.	6.9	-0.13	0.017
22.	6.7	-0.33	0.109
23.	9.2	-0.17	4.0709
24.	6.8	0.23	0.053
25.	6.7	-0.33	0.109
26.	6.7	-0.33	0.109
27.	6.8	0.23	0.053
28.	9.2	0.17	4.709
29.	6.7	-0.33	0.109
30.	6.9	-0.13	0.017
31.	7.5	0.47	0.221
32.	7.2	0.17	0.029
33.	6.7	-0.33	0.109
34.	6.8	-0.23	0.053
35.	6.9	-0.13	0.017
36.	6.8	-0.23	0.053
37.	7.2	0.17	0.029
38.	7.0	-0.03	0.001
39.	7.1	0.07	0.005
40.	6.9	-0.13	0.017
41.	6.6	-0.43	0.185
42.	6.8	-0.23	0.053
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44.	7.2	0.17	0.029
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46.	6.7	-0.33	0.109
47.	7.1	0.07	0.005
48.	7.0	-0.03	0.001
49.	6.8	-0.23	0.053
50.	6.7	-0.33	0.109

SNo.	(X)	x — (X-M)	x'
51	7.2	0.17	0.029
52.	7.4	0.37	0.221
53.	6.9	-0.13	0.017
54.	6.8	-0.23	0.053
55.	7.0	-0.03	0.001
56.	7.2	0.17	0.029
57.	7.5	0.47	0.221
58.	7.4	0.37	0.137
59.	6.8	-0.23	0.053
60.	6.7	-0.33	0.109
61.	7.0	-0.03	0.001
62.	7.2	0.17	0.029
63.	7.4	0.37	0.137
64.		-0.23	0.053
65.	6.86.9	-0.13	0.017
66.		-0.33	0.109
67.	6.7	-0.53	0.281
68.	6.5	-0.43 -0.13	0.1859
69.	6.6 70.	0.17	0.017
6.9		0.37	0.029
71.	7.2	0.17	0.137
72.	7.4	-0.63	0.029
73.	7.2	-0.23	0.397
74.	6.4	-0.43	0.053
75.	6.8	0.17	0.185
76.	6.6	0.27	0.029
77.	7.2	0.37	0.073
78.	7.3	0.47	0.137
79.	7.4	0.03	0.221
80.	7.5	-0.23	0.001
81.	7.0	0.17	0.053
82.	6.8	0.47	0.029
83.	7.2	0.07	0.221
84.	7.5	0.47	0.137
85.	7.4	0.03	0.221
86.	7.5	-0.13	0.001
87.	7.0 88.	-0.43	0.017
6.9 89.	6.6	-0.23	0.185
90.	6.8	0.17	0.053
91.	7.2	-0.23	0.029
92.	6.8	-0.13	0.53
93.	6.9	0.37	0.017
94.	7.4	-0.33	0.137
		-0.03	0.109
		0.07	

95.	6.7 96.	-0.23	0.001
7.0		-0.13	0.005
97.	7.1	0.17	0.053
98.	6.8	0.37	0.017
99.	6.9 100.		0.137
7.2			0.137
7.4			



Z_x° —
18.049

Calculation of Mean, Standard Deviation and Standard Error of the Mean for Test of 50 Metres Dash of Urban Boys.

Mean

$$M = \frac{\sum X}{N}$$

$$= \frac{729.6}{100}$$

= 7.296

Standard Deviation

$$S = \sqrt{\frac{\sum X^2}{N}}$$

$$= \sqrt{\frac{3.47}{100}}$$

0.035

= 0.19

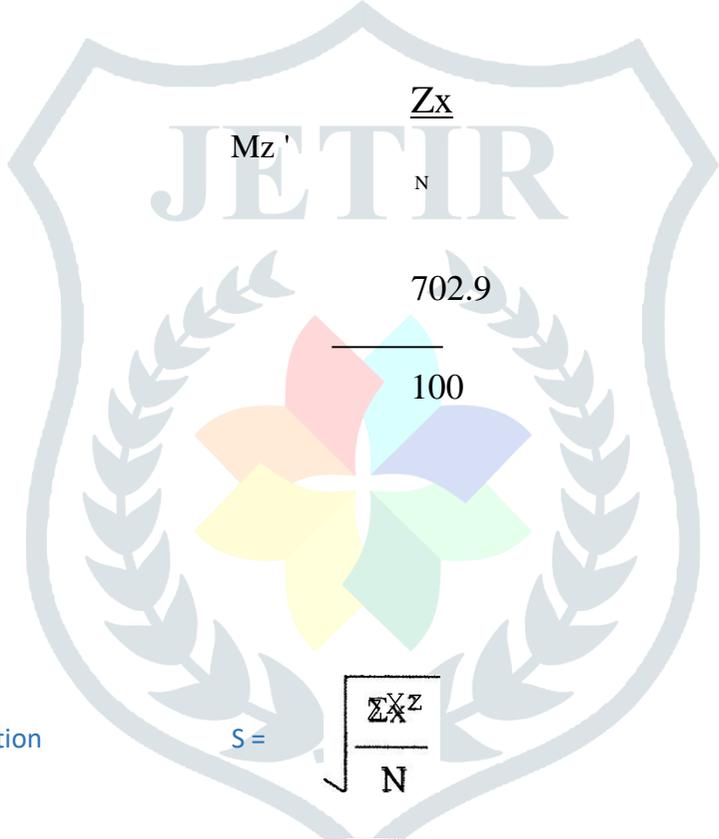
Standard Error

$$n M \frac{S}{\sqrt{n}}$$

0.19

00
 0.19
 10
 = 0.02

Calculation of Mean, Standard Deviation and Standard Error of the Mean for Test of 50 Metres Dash of Urban Boys.



Mean

$$M_z = \frac{\sum X}{N}$$

702.9
 100

= 7.03

Standard Deviation

$$S = \sqrt{\frac{\sum X^2}{N}}$$

18.05
 100

= 0.42

S

Standard Error o $M_2 =$ _____

0.42

$$\frac{0.42}{10} = 0.04$$

= 0.04

Calculation of Standard Error of the Difference between the Means and t - Ratio

$$DM = M_1 - M_2$$

$$= 7.3 - 7.03$$

$$= 0.27$$

CDM

$$= \sqrt{M_1^2 + M_2^2}$$

$$= \sqrt{(0.02)^2 + (0.04)^2}$$

$$= \sqrt{0.0004 + 0.0016}$$

$$= \sqrt{0.0020}$$

$$= 0.049$$

$$t = \frac{DM}{\sigma_{DM}}$$

$$\frac{0.27}{0.049}$$

$$= 5.51$$

- 5.51

Degrees of freedom

$$\begin{aligned} df &= N_1 + N_2 - 2 \\ &= 100 + 100 - 2 \\ &= 200 - 2 \\ &= 198 \end{aligned}$$

't' ratio required for significance at 0.05 level = 1.97

The mean value of Rural boys was more than the Urban boys. So the Rural boys had lesser performance in speed than Urban boys. The result shows that the obtained value 5.51 'as greater than the table value 1.97 in 0.05 level. So the study was significant and the performance in speed of Rural boys was less than the Urban boys.

DISCUSSIONS AND FINDINGS

The data collected as explained in the previous chapter were analysed and interpreted. The 't' ratio for "50 metres dash, Shuttle run, standing broad jump and Endurance were calculated to find out whether there is any significant changes between Rural and Urban School boys. The difference between means of 50 metres dash of Rural and Urban School boys was 0.27 seconds. And the standard error of the difference between means was 0.049 seconds. The 't' ratio calculated from this mean difference was 5.51 seconds. The 't' ratio obtained was found to be significant at 0.05 level of confidence.

The obtained 't' value was greater than the required table value of 1.97 at 0.05 level of confidence for 1.98 degrees of freedom.

The difference between the means of Shuttle run of Rural and Urban School boys was 0.01 seconds. And the standard error of the difference between means was 0.072 seconds. The 't' ratio calculated from this mean differences was 0.097 seconds. The 't' ratio obtained was found to be insignificant at 0.05 level of confidence.

The obtained 't' value was lesser than the required table value of 1.97 at 0.05 level of confidence for 198 degrees of freedom.

The difference between the means of standing broad jump of Rural and Urban

school boys was 0.02 metres. And the standard error of the difference between means was 0.018 metres was 0.94 metres. The 't' ratio obtained was found to be insignificant at 0.05 level of confidence.

The obtained 't' value was lesser than the required table value of 1.97 at 0.05 level of confidence for 198 degrees of freedom.

The difference between the means of 600yards run of Rural and Urban School boys was 0.31 seconds. And the standard error of the difference between means were 0.042. The t-ratio calculated from this mean difference was -7.38 seconds. The 't' - ratio obtained was found to be insignificant at 0.05 level of confidence.

Hence the Null Hypothesis was rejected at 0.05 level of significance in 50 metres dash and accepted in shuttle run, standing broad jump and 600 yards mn .

The Hypothesis of the investigation of 50 metres dash, shuttle run, standing broad jump and 600 yards run was held true at 0.05 level of confidence.

BAR DIAGRAMS

A comparative bar diagrams for the performance of selected physical fitness components separately for 50 metres dash, shuttle run, standing broad jump and 600 yards run. In these tests, Rural school boys in standing broad jump 600 yards run, have better performance than Urban school boys, and Urban school boys in 50 metres dash, shuttle run have better performance than Rural school boys.

Comparative Bardigram showing the means of 50mts dash of Rural and Urban School Boys.

10 -

9

8

7 -

6 -

5 -

4 -

3 -

2

1 -



Rural

Urban

-Comparative Bardigram showing the means of Shuttle Run of Rural and Urban School Boys.

10 -

9.92

9.91

9 -

8

7 -

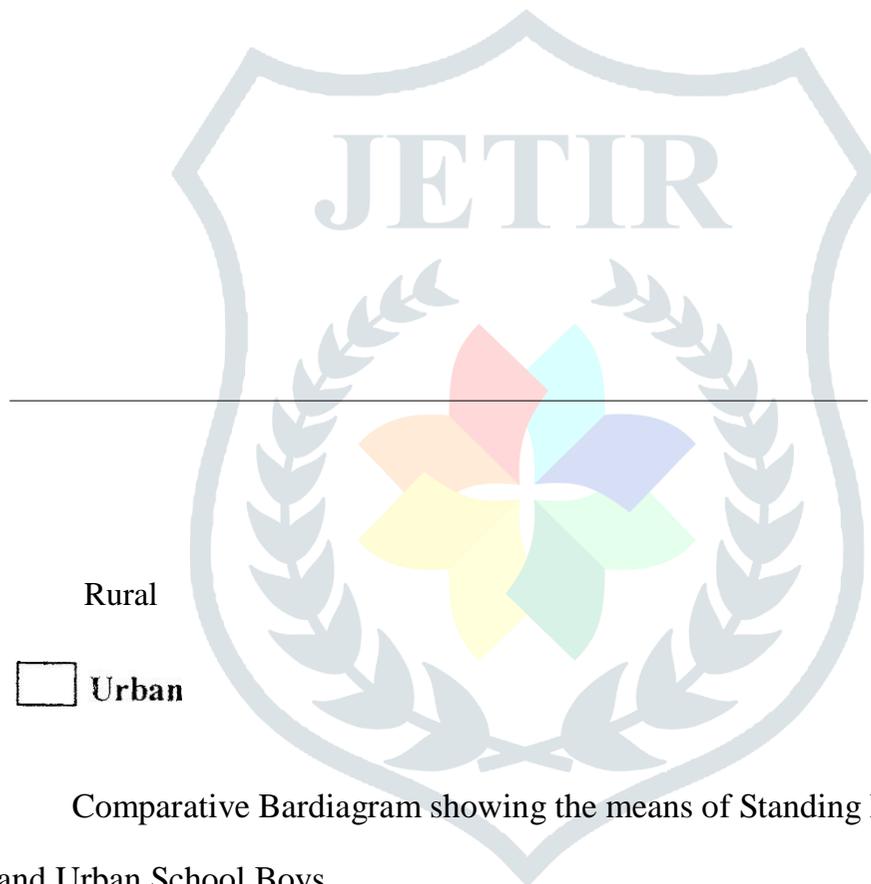
6 -

4 -

3

2

1 -



Comparative Bar diagram showing the means of Standing Broad Jump of Rural and Urban School Boys.

3 -

2.11

2.09

2 -

1 -

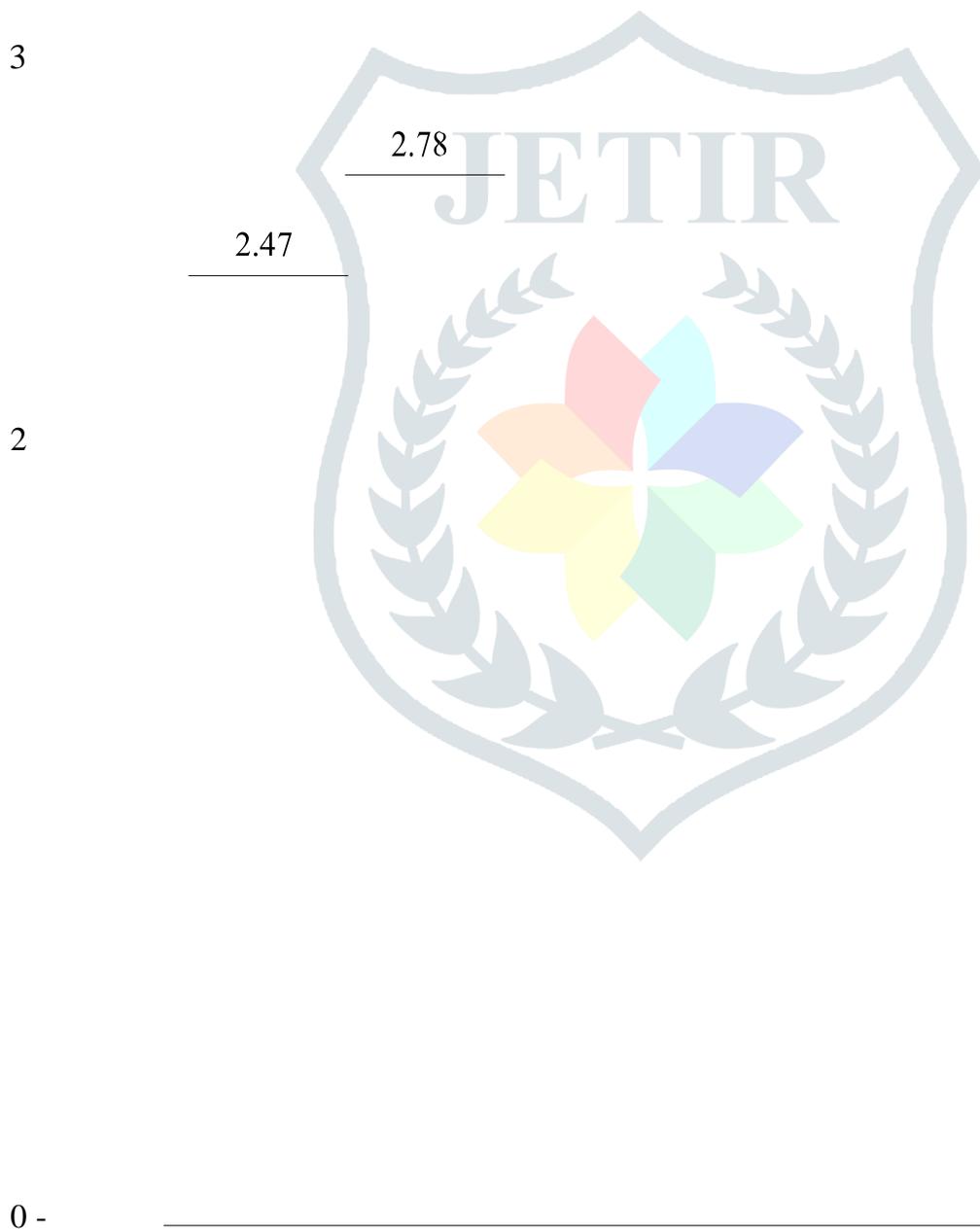
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Rural

Urban



Comparative Bar Diagram showing the means of 600 Yards Run of Rural and Urban School Boys. cula



Rural

Urban

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

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5.1 SUMMARY

The purpose of the study was to compare the selected physical fitness components among rural and urban boys of Cuddapah District. For this purpose of **the study** 100 **subject** for rural and 100 subjects for **urban** have been selected. To measure physical fitness the four test items (Viz.) 50 meter dash, shuttle run, standing broad jump and 600 yards run were administered.

Reliability was established by the test and retest methods 25 subjects were tested on selected variables. The reliability co-efficients obtained for test and retest data were given in the third chapter. All the tests used were standard test and their reliability were already accepted.

The survey of literature was limited to the reference materials available in the YMCA College of Physical Education Library, Chennai, Annamalai University Library, Department of Physical Education Library, S.K. University and Zion College of Physical Education Library, Cuddapah, Andhra Pradesh.

The investigator used 50 metres dash to measure speed, shuttle run to measure agility, standing broad jump to measure power and 600 yards run to measure Endurance. The **subjects** were oriented before they were asked to perform.

To verify the hypothesis the investigator used mean, standard deviation, standard error, standard error of the difference between mean. To find out the significance level 't' ratio was used. With the help of above data 't' value of Speed agility, Power and Endurance was calculated and was found to be 5.51, 0.097, 0.94 and -7.38 respectively.

5.2 CONCLUSIONS :

1. The conclusion arrived clearly states that the Rural school boys had better performance in cula standing broad jump and 600 yard run than Urban school boys.
2. The conclusion arrived clearly states that the Urban school boys had better performance in 50 metres dash and shuttle run than rural school boys.

5.3 RECOMMENDATIONS

1. Based on the finding of study, the District authorities concerned may take necessary steps to improve the specific components of physical fitness in which the students are weak.
2. Physical training may be given separately for the rural and urban students to develop their physical fitness.
3. Proper physical fitness programme may be designed and implemented for the Rural and urban students to improve their physical capabilities.
4. Similar studies may be undertaken for women students belongs to rural and Urban areas.
5. Similar studies may be conducted at various age level with different variable like biomechanical, psycho-physical, psycho-social etc., between rural and urban areas.

BIBLIOGRAPHY

- Author's Guide, *The Little Flower Company* (4th Ed). (Madras : Little Flower Co., 1956), P. 303.
- AGGARWAL I.C. *Research in Physical Education* (New Delhi : Arya Book Depot, 1975), P. 109.
- AAHPERD *Annual Fitness Test Manual* Washington D.C. American Alliance for Health Physical Education, Recreation and Dance. (1976), 7
- BOSCO S. JAMES AND GUSTAFSON F. WILLIAM, *Measurement and Evaluation in Physical Education, Fitness and Sports*, (Englewood Cliffs, New Jersey : Prentice hall, Inc., 1983), P. 12.
- BARRY L. JOHNSON AND JACK NELSON, *Practical Measurement for Education* *Physical Education* (3rd edn) (Englewood Cliffs, New Jersey : Prentice Hall Inc., 1982), P. 150.
- CLAYNE R. JENSEN AND GARTH FISHER A, *Scientific basis of athletic conditioning* (Philadelphia : Lea and Febiger, 1972), P. 192.
- CAYNE R. JOHNSON AND GARDEN W. SCHULTS, *Applied Kinesiology* (New York : McGraw Hill Company. 1974) P. 146.
- CHARLES A. BUCHER, *Administration of School Health and Physical Education Programs* (2nd Ed.) (Saint Louis : The C.V. Mosby Co., 1958), P. 196.
- CARBIN LINDSEY, *Concepts of Physical Fitness with laboratories*, (Dubuque, IOWA : W.M.C. Brown Publisher, 1985), P. 4.
- DONALD K. MATHEWS, *Measurement in Physical Education* (5th Edition), (Philadelphia W.B. Saunders Company, 1978), P.5
- DAVID KIRK. "Daily Physical Education Research", A Review and a Critique University of Queensland, physical education review, 12: I Spring 1989), P. 29
- DONNA MAC MILLER, *Coaching the female of etc* (Philadelphia : Lea and Febiger 1974), P. 116.
- DAVID H. CLARKE AND H. HARRISON CLARKE, *Research Processes in Physical Education*, 2nd edition. (Englewood Cliffs, New Jersey : Prentice Hall, Inc., 1984), P. 157.
- ELIZABETH HALSEY AND PARTHER, *Physical Education Guide* (New York : Parker Publishing Company, 1947). P. 146.

FRANK VITALE, *individualized Fitness Programme* (Englewood Cliffs, New Jersey Prentice Hall Inc. 1973). P. 30.

HAROLD M. BARROW, *Man and His Movement*, (Philadelphia; Lea and Febiger, 1977), P. 151 - 152.

HARRISON H. CLARKE, *Applications of Measurement to Health and Physical Education*

(Englewood Cliffs, New Jersey: Prentice Hall Inc., 1963), P. 14

APP• acli ta MeasurementCal*

HAROLD M. BARROW AND MCGEE ROSEMARY, *A practical*

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in Physical Education (3rd ed) (Philadelphia : Lea and Febiger, 1979), P. 215.

Hand Books of Sports Authority of India (New Delhi : SNIPES Publication, 1995), P. 7

JERROLD S. GREENBERG, *Physical Fitness - A Wellness Approach* (Englewood Cliffs, New Jersey : David Durgan Prentice Hall, 1958), P. 221.

MARGARET J. SABRIT, *Introduction to Measurement in Physical Education aim Exercise Science*

(Saint Louis : Times Mirror / Mosby College Publishing, 1986), P. 229.

MARGARET J. SAFRIT, *Evaluation - Physical Education*. (Englewood Cliffs, New Jersey Prentice hall Inc., 1973), P. 241.

President's Council on Youth Fitness, cited by ROUBEN B. FROST *in Psychological Concepts Applied to Physical Education to physical Education and Coaching* (New York : Addison Wesley Publishing Company, 1971), P. 70.

SUKHIA S.P. *Educational Administration* (Agra : Vinod Pustak Mandir, 1986), P. 312-318. UPPAL,

Physical Fitness - How to Develop (New Delhi : Friends Publications, 1980), P. 10

SIDHU L.S.S.S. DHALIWAL AND S.P. SINGH. "Age changes in Growth and Physical Performance at Different Altitudes". *Humanbiol*, 25 (1994), P. 185-191.

STREET WILLIAM, *Relationship between different Levels of ATHLETIC Achievement and*

Nerve Condition Velocity", Completed Research 2.5 (1969), P. 52.

THOMAS J. SHEEHAN, *An Introduction to the Evaluation of Measurement Data in Physical Education*.

(Philadelphia : Addison Wesley publishing Company Inc., 1971), P. 232.

WILY PAISH *Track and Field Athletics* Mercy side, Lepus Book, (1976), P. 7