



A Comparative Analysis on Physical Fitness of Rural and Urban High School Students

KEYWORDS

Physical Fitness, Rural School, Urban High School.

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ABSTRACT

The word "Physical Education", Refers to various bodily characters such as physical strength physical development physical health and physical appearance. Primitive man recognized physical fitness as necessary to his survival but modern man. In this mechanical age tends to become compliment and forgets its importance not only to his efficiency and happiness. Robson et.al., administered the simple physical fitness test battery for study of physical fitness of elementary school children of defence and –non-deference personal 150 boys and girls from garden one through five of Kendriya Vidyalaya Gwalior were selected at Random as subjects for the study to asses the physical fitness the subjects were administered the simple physical fitness test battery for at Laxmibhai national college of physical education Gwalior in the year 1977. The researcher has used experimental method to compare the physical fitness between rural and urban high school students of Shri Netaji Subhaschandra Bose-Government High school, Neeralakeri and Basaveshwar High Scool Bagalkot respectively for this experimental method (AAPHER) test of physical fitness is applied to high school boys to collect the data. Within the limitation of this study the following conclusions justified as per the results obtained. of the five Physical variables Speed, Endurance, Agility, Strength and Flexibility were found to be the sportsman boys of high school have higher strength and flexibility where as Non sportsman have higher in speed Endurance and Agility.

Introduction

The word "Physical Education", Refers to various bodily characters such as physical strength physical development physical health and physical appearance.

It refers to the body as a contrsted to mind physical education should aim to improve the mass of students and give them as much health struggle and stamina as possible to unable physical education is the process by which changes on the individual or brought about through his movement experience physical education is the some of the changes in the individual caused by experience centred in motor ability.

Primitive man recognized physical fitness as necessary to his survival but modern man. In this mechanical age tends to become compliment and forgets its importance not only to his efficiency and happiness. But also to the survival of his way of life. The right kind and right amount of physical exercise develops organic and muscular power stamina. Vigour and the activity skills related to his, development. There is a direct relationship between physical exercise and physical fitness (1955) 1956. [N. N. Mall and V. P. Pal 1978]

Robson et.al., administered the simple physical fitness test battery for study of physical fitness of elementary school children of defence and –non-deference personal 150 boys and girls from garden one through five of Kendriya Vidyalaya Gwalior were selected at Random as subjects for the study to asses the physical fitness the subjects were administered the simple physical fitness test battery for at Laxmibhai national college of physical education Gwalior in the year 1977. The test battery composed of six items (50 mts dash) 1 x 10 meters shuttle Run sit ups modified push ups vertical jump 600 mts Run/walk) was administered to both boys and girls. It is ovident from the analysis of data

that boys and girls belonging to deference personal and shown statistically significant higher performance in physical fitness test as compared to boys and girls of non-deference personal.

[M. Robson et.al. 1978]

Ray in his study compared the physical fitness of tribal and urban students in tripura the administered the (AAHPER) test to 60 tribal and 60 urban students studying at M.B.B College Agartala their ages ranging from 16-22 years. The mean differences between the physical fitness of urban and tribal significant at 0.05 level of confidence. It was found that urban students were better in pull-ups and soft-ball throw for distance and their superiority was statistically significant at 0.05 level of confidence but in the remaining five items i.e., 50 mts dash 600 mts run/walk sit ups shuttle run and standing broad jump. The difference in performance of neither or confidences.

[Bijay Krishna Ray 1979]

Serenson made a comparison of physical fitness improvement for students assigned in two classes of varying module time blocks of the two module tested one was of frequent every two weeks combined mean perectile scores to both boys and girls in the 7th and 9th grades were computed on their initial tests. The rests and difference between the two tests frequent physical education classes are evidently of more value to the fitness of students that those of more distant time intervals even thought yearly time spent in the class is the same. The difference in improvement significantly favored the more frequent performance.

Statement of the Problem

The purpose of the study is find out the A Comparative Analysis on Physical Fitness of Rural and Urban High School Students.

Objectives

To study the significant difference between sportsman and non-sportsman with respect to speed, endurance, agility, strength and flexibility.

Hypotheses

1. There is no significant difference between sportsman and non-sportsman with respect to speed, endurance, agility, strength and flexibility.

METHODOLOGY

The researcher has used experimental method to compare the physical fitness between rural and urban high school students of Shri Netaji Subhaschandra Bose-Government High school, Neeralakeri and Basaveshwar High School Bagalkot respectively for this experimental method (AAPER) test of physical fitness is applied to high school boys to collect the data.

Procedure: In this chapter the procedure adopted for selection of subjects criterion measures. Collection of data procedure for administering test at the statistical technique used for analysis of data have been presented.

Selection of the Subjects

40 Male students from Shri Netaji Subhaschandra Bose, Govt. High School, Neeralakeri are considered as rural students and 40 male students from B.V.V.S High School, Bagalkot are considered as urban area student were selected for the study out of forty twenty students are sports man and twenty students are non sportsman.

Criterion Measures

The performance of the subjects (AAPER) test 50 meter run, shuttle run 10 x 4 m, sit and rich, standing broad jump 1500 mtr run, were taken as criterion measure for the study.

AAPER TEST

- 50 Meter Run : To measure the speed capacity of the student.
- Endurance 1500 mtr Run : To measure the endurance capacity of the student.
- 4 x 10 Meter Shuttle Run : To measure the agility of the student.
- Standing Broad Jump : Purpose : To measure the strength of the student.
- Sit and Rich (Flexibility): To measure the flexibility of students

DATA ANALYSIS AND RESULTS

Differential statistics

The differences between the group (sportsman and non-sportsman) and location (urban and rural) with respect to speed 50 meters run, endurance 1500 meters run, agility 4x10 meters shuttle run, strength broad jump standing and flexibility sit and rich from sportsman and non-sportsman boys of high schools were compared by u unpaired t-test and the results were discussed in the preceding section.

Hypothesis-1: There is no significant difference between sportsman and non-sportsman with respect to speed, endurance, agility, strength and flexibility

To achieve this hypothesis, the t test was applied and the results are presented in the following table.

Table-4.1: Results of t test between sportsman and non-sportsman with respect to speed, endurance, agility, strength and flexibility

Vari-ables	Groups	Mean	SD	t-value	p-value	Sig-ni.
Speed 50 meters run	Sportsman	7.0995	0.2385	-10.6247	0.0000	S
	Non-sportsman	7.8983	0.4113			
Endurance 1500 meters run	Sportsman	7.0490	0.4731	-8.1157	0.0000	S
	Non-sportsman	7.7877	0.3280			
Agility 4x10 meters shuttle run	Sportsman	9.0405	0.1247	-35.9808	0.0000	S
	Non-sportsman	10.8840	0.2991			
Strength broad jump standing	Sportsman	1.9678	0.1570	3.1999	0.0020	S
	Non-sportsman	1.8168	0.2538			
Flexibility sit and rich	Sportsman	11.7000	3.6459	5.5323	0.0000	S
	Non-sportsman	7.9000	2.3621			

From the results of the above table, we had seen that,

The sportsman and non-sportsman of high school boys differ statistically significant with respect to speed 50 meters run ($t=-10.6247$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the non-sportsman boys of high schools have higher speed of 50 meters run as compared to sportsman boys of high schools.

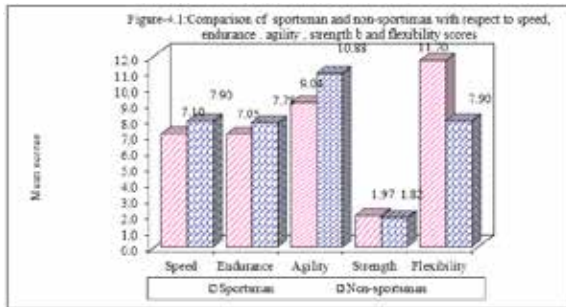
The sportsman and non-sportsman of high school boys differ statistically significant with respect to endurance 1500 meters run ($t=-8.1157$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the non-sportsman boys of high schools have higher endurance of 1500 meters run as compared to sportsman boys of high schools.

The sportsman and non-sportsman of high school boys differ statistically significant with respect to agility 4x10 meters shuttle run ($t=-35.9808$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the non-sportsman boys of high schools have higher agility of 4x10 meters shuttle run as compared to sportsman boys of high schools.

The sportsman and non-sportsman of high school boys differ statistically significant with respect to strength broad jump standing ($t=3.1999$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the sportsman boys of high schools have higher strength broad jump standing as compared to non-sportsman boys of high schools.

The sportsman and non-sportsman of high school boys differ statistically significant with respect to flexibility sit and rich ($t=5.5323$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the sportsman boys of high schools have higher flexibility sit and rich as compared to

non-sportsman boys of high schools. The mean scores are also presented in the following figure.



Conclusion

With in the limitation of this study the following conclusions justified as per the results obtained.

Of the five Physical variables Speed, Endurance, Agility, Strength and Flexibility were found to be the sportsman boys of high school have higher strength and flexibility where as Non sportsman have higher in speed Endurance and Agility.

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