

# STATUS OF HEALTH RELATED PHYSICAL FITNESS ELEMENTS BETWEEN PRIVATE AND GOVERNMENT ADULT SCHOOL BOYS IN COIMBATORE DISTRICT

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## ABSTRACT

To achieve the purpose of the study to find out the status of health related physical fitness elements between private and government adult school boys in Coimbatore district, 100 students from government school and 100 students from private school selected to evaluate in the study from Coimbatore, district, Tamil Nadu. Their age ranged from 13 to 17 years. The investigator and two qualified physical educationists conducted all of the testing procedures. To test the significance of changes made on both the groups, independent's' test was applied. The significance of the means of the obtained test results was tested at 0.05 level of confidence. The analysis of the data revealed that there is a significant difference between muscular strength and flexibility of students with government school boys and private school boys.

**Keywords:** Physical fitness, Muscular Endurance, Muscular Strength, Body Composition, and Flexibility.

## INTRODUCTION

Physical fitness refers to the entire self-motivated physiological condition of the human being from optimum human performance to serve treatment and death. The difficulty arise because physical fitness is made up of series of components, for example, speed agility, strength endurance, flexibility and coordination each one of which makes some independent, contribution to whole state as some of these component are related to health related fitness. It is possible for an athlete to have a great deal of one component and very little of another. Although it is usually decided that physical health is a vital element of the usual development and growth of an adolescent, general explanation about the particular nature of physical fitness has not been generally established. Thought study and intellectual inquiry, if each clear that the multidimensional characteristics of physical fitness be able to be divided into two areas: health related physical fitness and skill related physical fitness (AAHPERD, 1980., Corbin and Lindsey, 1988).

Skill related fitness components consist of agility, balance, coordination, reaction time, speed, and power. These components are related primarily to successful sports and motor skill performance and may not be as crucial to better health. Physiologic fitness is a term used primarily in the field of medicine in reference to

biological systems that are affected by physical activity and the role the latter plays in preventing disease. The components of physiologic fitness are metabolic fitness, morphologic fitness, and bone integrity. In terms of general health promotion and wellness, the main emphasis of physical fitness programs should be on the health related components. (Williams, 2006)

**METHODOLOGY**

To achieve the purpose of the study to find out the status of health related physical fitness elements between private and government adult school boys in Coimbatore district, 100 students from government school and 100 students from private school selected to evaluate in the study from Coimbatore, district, Tamil Nadu. Their age ranged from 13 to 17 years. The investigator and two qualified physical educationists conducted all of the testing procedures. To test the significance of changes made on both the groups, independent’s’ test was applied. The significance of the means of the obtained test results was tested at 0.05 level of confidence. The analysis of the data revealed that there is a significant difference between muscular strength and flexibility of students with government school boys and private school boys.

**SELECTION OF VARIABLES AND CRITERION MEASURES**

S. NO	VARIABLES	TESTS	UNIT OF MEASUREMENTS
<b>HEALTH RELATED FITNESS VARIABLES</b>			
1	Muscular Endurance	Sit ups	Maximum, repetition in 60sec in number
2	Muscular Strength	Push up	Maximum, repetition in 60sec in number
3	Body composition	Skin fold caliper	In centimeter
4	Flexibility	Sit & Reach Test	In centimeter

**COMPUTATION WITH ‘t’ TEST BETWEEN THE GOVERNMENT SCHOOL AND PRIVATE SCHOOL ON MUSCULAR ENDURANCE**

Variable	Group	Mean	S.D	D.M	Σ DM	‘t’	‘table’ Value
MUSCULAR ENDURANCE	GOVERNMENT SCHOOL	42.68	14.71	7.6	1.82	4.13*	1.97
	PRIVATE SCHOOL	35.13	10.86	7.6	1.82		

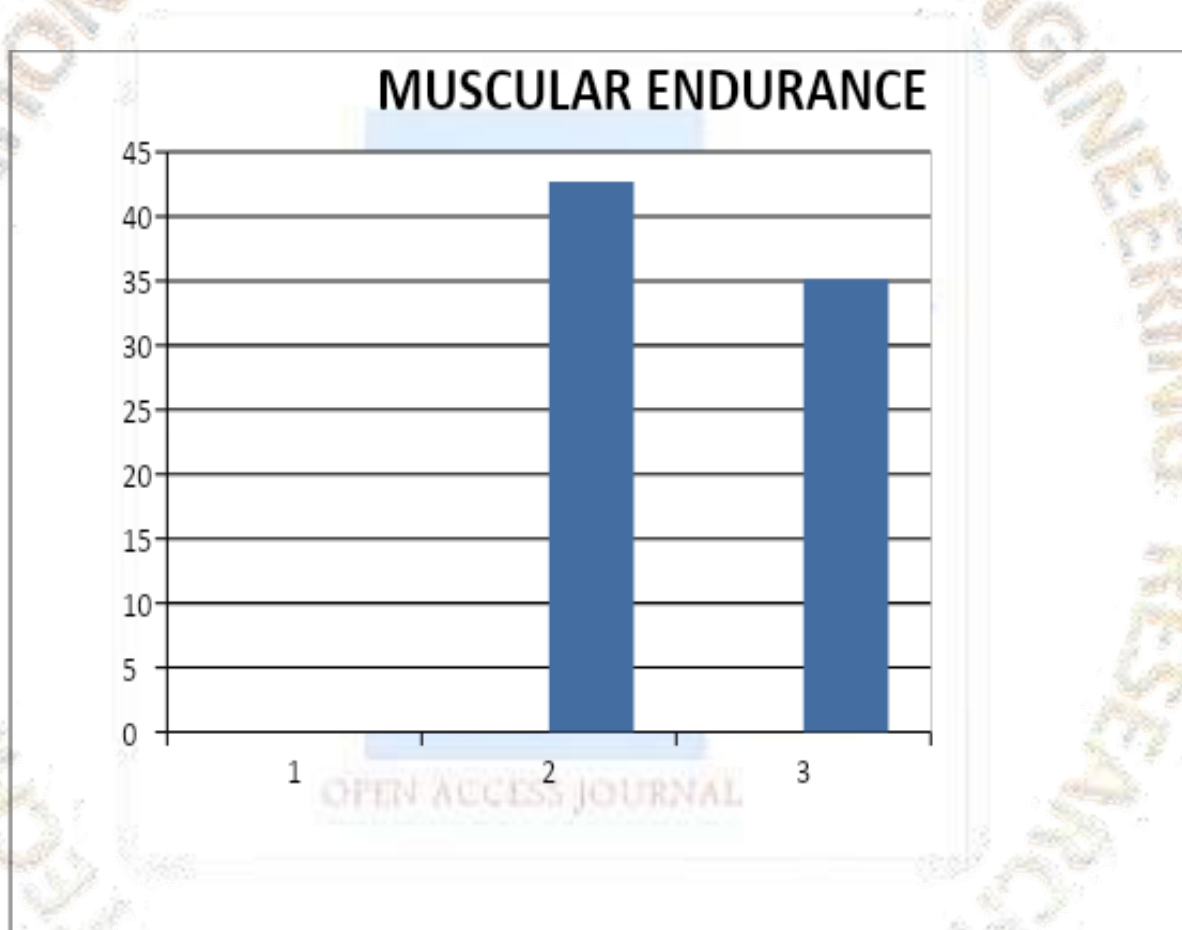
\* Level of significant was fixed at 0.05

Table-2 shows the mean values of government school and private school boys on muscular endurance. The government and private school boys muscular endurance mean values were 42.68 and 35.13 respectively.

The obtained t value of 4.13 was greater than the table value of 1.97; hence it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant difference between the government and private school boys on muscular endurance. The government school boys have better muscular endurance compared with private school boys.

The mean values of government and private school boys on muscular endurance were graphically represented in figure – 1.

### BAR DIAGRAM SHOWING THE MEAN VALUE OF GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS ON MUSCULAR ENDURANCE



**Figure: 1** It clearly indicates that the government school boys compared with private school boys; there is a significant difference on muscular endurance.

**COMPUTATION WITH ‘t’ TEST BETWEEN THE GOVERNMENT SCHOOL AND PRIVATE SCHOOL ON MUSCULAR STRENGTH**

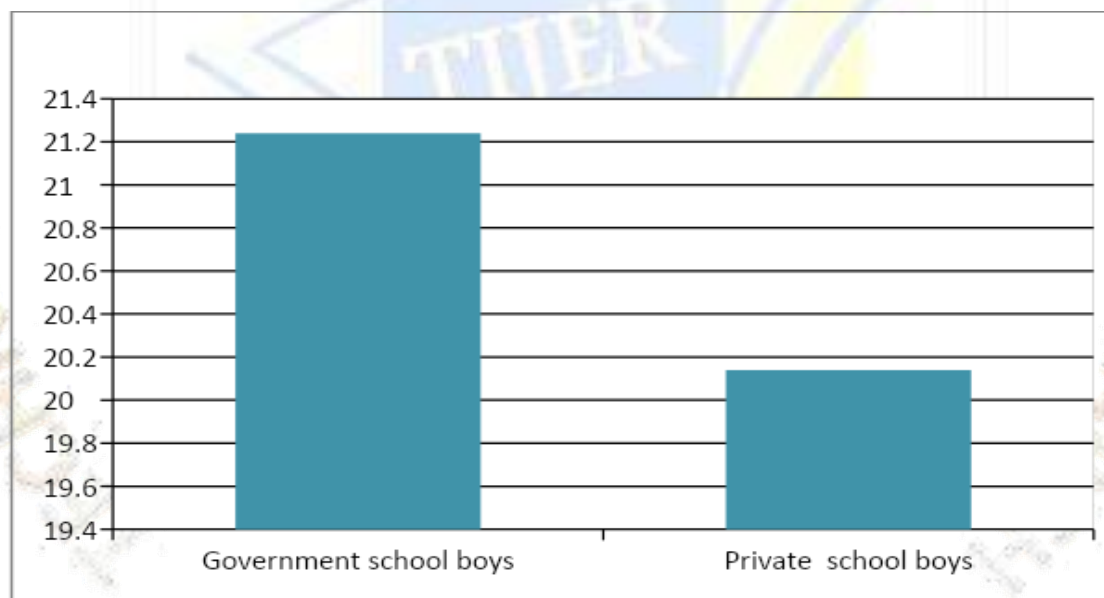
Variable	Group	Mean	S.D	D.M	$\sigma$ DM	‘t’	‘table’ Value
MUSCULAR STRENGTH	GOVERNMENT SCHOOL	21.24	7.92	1.1	1.04	1.05	1.97
	PRIVATE SCHOOL	20.14	6.82	1.1	1.04		

\* Level of significant was fixed at 0.05

Table-3 shows the mean values of government school and private school boys on muscular strength. The government and private school boys muscular strength mean values were 21.24 and 20.14 respectively. The obtained t value of 1.05 was less than the table value of 1.97, hence it was insignificant at 0.05 level of confidence. The results of the study indicated that there was no significant difference between the government and private school boys on muscular strength.

The mean values of government and private school boys on muscular strength were graphically represented in figure – 2.

**BAR DIAGRAM SHOWING THE MEAN VALUE OF GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS ON MUSCULAR STRENGTH**



**Figure: 2** Its clearly indicates that the government school boys compared with private school boys there is a significant difference on muscular strength.



**COMPUTATION WITH ‘t’ TEST BETWEEN THE GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS ON BODY COMPOSITION**

Variable	Group	Mean	S.D	D.M	Σ DM	‘t’	‘table’ Value
BODY COMPOSITION	GOVERNMENT SCHOOL	0.63	1.69	0.11	0.20	0.58	1.97
	PRIVATE SCHOOL	0.52	1.19	0.11	0.20		

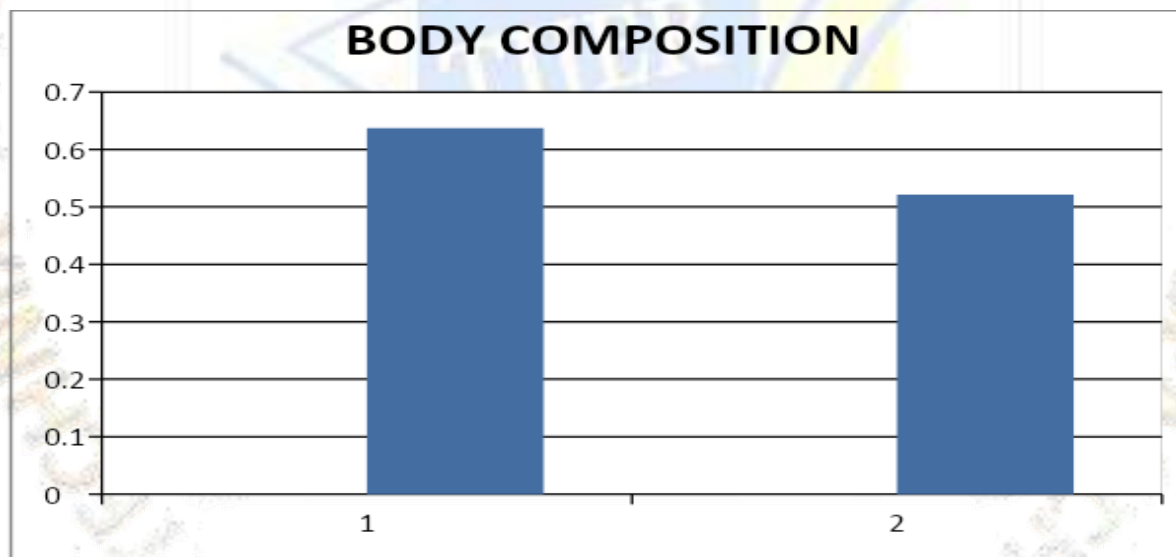
\*Significant Level of significant was fixed at 0.05

Table-3 shows the mean values of government school and private school boys on body composition. The government and private school boys body composition mean values were 0.6374 and 0.5216 respectively.

The obtained t value of 0.58 was less than the table value of 1.97; hence it was insignificant at 0.05 level of confidence. The results of the study indicated that there was no significant difference between the government and private school boys on body composition.

The mean values of government and private school boys on muscular strength were graphically represented in figure – 3

**BAR DIAGRAM SHOWING THE MEAN VALUE OF GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS ON BODY COMPOSITION**



**Figure: 3** Its clearly indicates that the government school boys compared with private school boys there is a significant difference on body composition

**COMPUTATION WITH ‘t’ TEST BETWEEN THE GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS ON FLEXIBILITY**

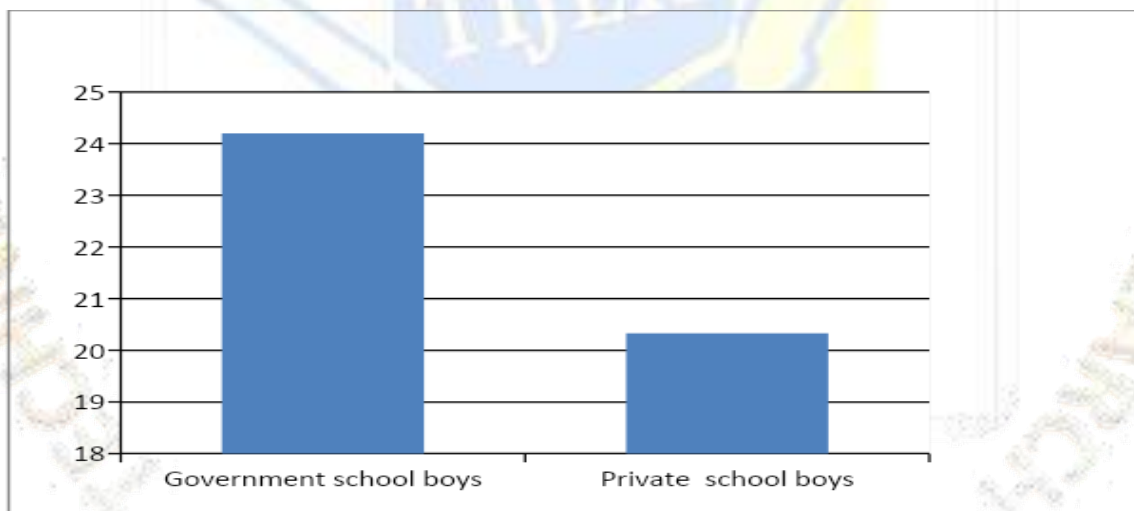
Variable	Group	Mean	S.D	D.M	$\sigma$ DM	‘t’	‘table’ Value
FLEXIBILITY	GOVERNMENT SCHOOL	24.19	7.45	3.87	0.94	4.08*	1.97
	PRIVATE SCHOOL	20.32	5.83	3.87	0.94		

\*Significant Level of significant was fixed at 0.05

Table-5 shows the mean values of government school and private school boys on flexibility. The government and private school boys flexibility mean values were 24.19 and 20.326 respectively. The obtained t value of 4.08 was greater than the table value of 1.97, hence it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant difference between the government and private school boys on flexibility. The government school boys have better flexibility compared with private school boys.

The mean values of government and private school boys on flexibility were graphically represented in figure – 4.

**BAR DIAGRAM SHOWING THE MEAN VALUE OF THE GOVERNMENT SCHOOL BOYS AND PRIVATE SCHOOL BOYS SCORES ON FLEXIBILITY**



**Figure: 4** It clearly indicates that the government school boys compared with private school boys there is a significant difference on flexibility

**DISCUSSION ON FINDINGS**

The result of the study indicated that there was a significant difference between government school boys and private school boys selected variables muscular endurance ,muscular strength ,body composition ,flexibility.

The finding of the study show that there is significant difference between school students fitness. The result of the study is in consonance with research done by the Gagandeep Singh (2017) on the topic

Physical fitness differentials between boys of government and private schools International Journal of Physical Education, Sports and Health .

## CONCLUSIONS

From the statistical analysis of the data with the limitations imposed by the experimental conditions the following conclusions were drawn.

1. The government school boys are better muscular endurance, muscular strength and flexibility compared with private school boys in Coimbatore district.
2. The body composition has no significant difference between private and government school boys in Coimbatore district.

## RECOMMENDATIONS

1. The similar study may be conducted by a large number of students.
2. The similar study may be conducted anthropometrics, psychological, variables are better.
3. The similar study may be conducted by rural and urban standard boys.

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