# A COMPARATIVE STUDY OF CARDIOVASCULAR ENDURANCE BETWEEN GOVERNMENT AND PRIVATE HIGH SCHOOL BOYS OF UJJAIN DIVISION MADHYA PRADESH

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## ABSTRACT

The purpose of this study was to compare the cardiovascular fitness between government and private high school of Ujjain division. The present study was conducted on a sample of sixty (N=60) students, which includes thirty each, government (N1 = 30, mean  $\pm$  SD) and private school (N2 = 30, mean  $\pm$  SD) selected from different schools affiliated to Madhya Pradesh Board, India. The 12 minute run/walk test was used to assess cardiovascular fitness of subjects. The independent samples t-test was applied to assess the differences between government and private high school. Age ranging from 14 to 16 years was selected as the subject. The results of present study indicated that government school students had significantly greater cardiovascular fitness (p<0.05) than non-athletes. It was also observed that the Government High School going boys have better Cardiovascular Endurance than Private High School going boys.

Keywords: government, private school boys, cardiovascular fitness.

## **1. INTRODUCTION:**

The importance of cardiovascular fitness to health and wealth for all individuals has been well balance. To achieve high performance in all sports there required five motor qualities- Strength, Speed, Co-ordination, flexibility and Endurance. Aerobic capacity is related to heart. Capacity of heart mean cardio input and output of blood from heart, which increase the VO2 max in the working muscles. The muscle of the heart and blood vessels must be strong enough to send the required amount of oxygen and nutrition, through the blood. So, it can be said that cardiovascular fitness represents one's whole health. Physical fitness is the capability of heart, blood vessels, lungs and muscles, to function at operative efficiency. Cardiovascular Endurance and Muscular Endurance. Cardiovascular Endurance is the ability of the heart to provide oxygen to muscles during physical activity for a prolong period of time. Cardiovascular system is input and output of the blood from the heart to flow to the working muscles. due to regular exercise, athletes tend to have an increase in fitness level when compared to non exercising individuals exercise and physical activity impact on fitness. low levels of physical activity and cardio endurance are both risk of all disease and heart attack.

## 2. MATERIALS AND METHODS:

The present study was conducted on a sample of sixty which include 30 each school, government (mean+SD) and private school. all the participate were informed about aim and method of the study. Purposive sampling method was used to select the subjects for the present study.

## 3. METHODOLGY:

Cardiovascular fitness was assessed using 12 minutes run/walk test. place point at set intervals around the track and in measuring the complete distance. Subjects were ruined for 12 minutes and total distance covered was note in meters (cooper, 1972).

#### 4. STATISTICAL ANALYSES:

Values are presented as mean values and SD.independent samples T test were used to test if population means average by two independent samples differed significantly. Data was analyzed using new version.

**TABLE-1** Comparison of cardiovascular fitness by 12 minutes run /walk test of government and private school boys.

Variables	Government school (N-30)		Private school (N-30)		Mean Difference	SEDM	T- value
	Mean	SD	Mean	SD			
12 min.Run/Walk Test (mtr)	1869	65.45	1821	38.65	48.7	0.45	3.507*

\*Significnat at 0.05 Level

## **5. DISCUSSION**

In the present study cardiovascular fitness of government and private school boys have been compared with each other. this study indicates the existence government school in cardiovascular fitness. due to regular exercise government school boys tend to have an increase in respiratory capacity and also beneficial impact on locomotor and fitness level.

#### 6. Conclusion:

On the basis result of the study it was conclude that there is insignificant difference in the means of cardiovascular endurance of Government and Private High Schools boys. It was also conclude that the Govt. High School boys have the better cardiovascular endurance than Private High Schools boys (62.66>61.32). The outcomes of the study demonstrates the existence of significant difference between government and private on cardiovascular fitness thereby it implies that the sports has a helpful for wellness.

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