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"THE STUDY OF THE CARDIOVASCULAR FITNESS AMONG THE URBAN AND TRIBAL PLAYERS OF THE AGE BETWEEN 13-14 YEARS"

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INTRODUCTION:

Cardiovascular condition means the ability of the circulatory and the respiratory systems to adjust to and recover from the effect of the exercise or work. It is one of the key component of the physical fitness. The most accurate measure of this quality is generally considered to be the maximal oxygen uptake, which measures the amount of oxygen consumed per kilogram of body weight per minute of the exercise.

Heart rate increases with exercise. The rate if the increase is proportional to the work load. The fitness of an individual is reflected by the rate of increase. Generally speaking the physically fir individual will have a lower heart rate for a specified work load. The present study is intended to study the cardiovascular fitness among the urban and tribal players of the age between 13-14 years.

Statement of The Problem:

"The study of the cardiovascular fitness among the urban and tribal players of the age between 13-14 years."

Objective of the Study :

To study the cardiovascular fitness among the urban and tribal players of the age between 13-14 years.

Hypothesis:

There will be no significant difference in the cardiovascular fitness among the urban and tribal players.

Area/ Scope of the Study:

The present study is conducted on the boys players residing at urban areas of Aurabgabad city and tribal areas of Nasik district.

Significance of the research:

The present study may reveal the cardiovascular fitnes of the urban and tribal players residing at Aurangabad city and tribal areas of Nasik district respectively.

Limitations of the Study:

1. The present study is conducted on the boys of the age ranging between 13-14 years.
2. The present study id conducted on the players of Aurangabad city and tribal areas of Nasik district only.

Methodology:

Sr.No	Area	Total No. of Samples
1	Urban	25
2	Tribal	25
Total		50

Variables :

Dependent Variable: Cardiovascular fitness

Tools of the collection of the data:

1. Twelve minute run and walk test.

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2. Stop watch.
3. Whistles.
4. Distance markers.

Design of the research:

For the present study post test only design is employed.

Procedure :

Every runner is assigned to one spotter. The runners are instructed to start behind the line. They are further directed to start running only after the starting signal. The runners have to run and walk for 12 minutes around the ground. The spotter maintain the count of the each lap and when the signal to stop is given, spotter will immediately run to the spot at which their runner were at the instance the whistle or command to stop was given.

Scoring:

The scores in yards is determined by multiplying the number of complete laps times and distance of each lap plus the number of segments of an incomplete lap, plus the number of yards stepped off between a particular segment.

Statistical Methods:

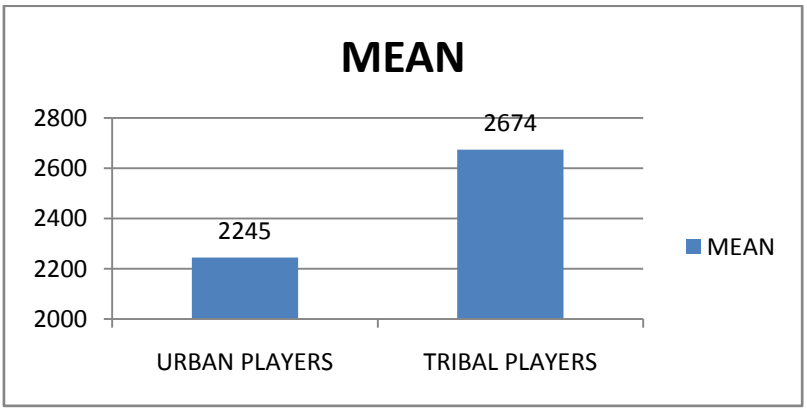
1. Mean, Standard deviation is employed for descriptive statistical analysis.
2. T-test is employed for inferential statistical analysis.

Analysis and Interpretation of the data:

Table showing the difference in the cardiovascular fitness among the boys players of the urban and tribal areas of the Aurangabd city and tribal regions of the Nasik district.

Sr.No	Dependent Variable	Region	N	Mean	Standard Deviation	Standard error mean	degree of freedom	t-value
1	cardiovascular fitness	Urban	25	2245 meters	0.973	0.562	48	9.185
2		Tribal	25	2674 meters	0.634	0.238		

Graph showing the difference in the cardiovascular fitness among the boys players of the urban and tribal areas of the Aurangabd city and tribal regions of the Nasik district.



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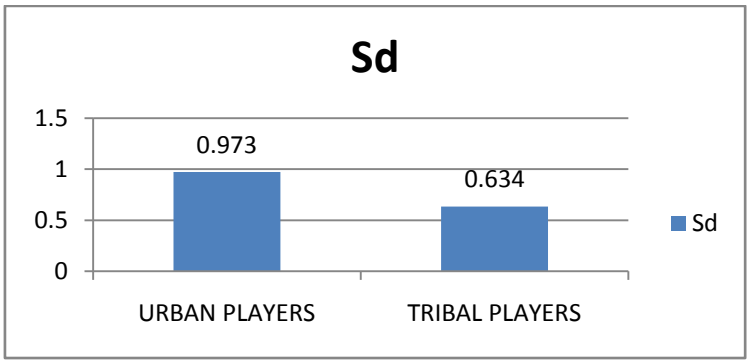

Interpretation :

The mean score of the urban and tribal players for the 12 minute run and walk is 2245 meters and 2674 meters respectively. The standard deviation of the urban players is 0.973. The standard deviation of the tribal players is 0.634. To study whether the observed difference in the mean scores of the said test is significant or not, t-test is used at 0.05 level of significance. The obtained t- value 9.185 at 48 degree of freedom is significant at 0.05 level of significance. this confirms that the mean difference differs significantly. Hence it is evident from the above table that the significant difference exists between the mean scores of the urban and tribal players for cardiovascular fitness level.

Test of the Hypothesis:

It was hypothesized that there is no difference in the cardiovascular fitness among the urban and tribal players. As per the results drawn after the statistical treatment, there exists significant difference between the urban and tribal players in the cardiovascular fitness. **Hence the hypothesis is rejected on the basis of the statistical findings.**

Conclusion:

The cardiovascular fitness of the tribal is far better than the urban players.

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