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A COMPARATIVE STUDY ON CARDIOVASCULAR FITNESS BETWEEN SPORTS PERSONS AND NON-SPORTS PERSONS

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ABSTRACT:

Cardiovascular fitness is a health-related component of physical fitness that is brought about by sustained physical activity. The purpose of the study was to compare cardiovascular fitness between sports persons and non-sports persons. To achieve the purpose 10 sports persons and 10 non-sports persons were selected from Mangalore University campus as subjects. The resting pulse rate and Fitness Index was assessed from the selected subjects. The suitable statistical techniques were applied to analyze the data. The result found that the sports persons were better in cardiovascular fitness than non-sports persons.

KEYWORDS: *Cardiovascular Fitness, Sports Persons, Non-Sports Persons.*

INTRODUCTION:

Cardiovascular wellness alludes to the capacity of your cardiovascular framework to convey oxygen to your muscles, and for your muscles to use oxygen to give energy to supported times of action. Cardiovascular wellness is a wellbeing related part of actual wellness that is achieved by supported active work. An individual's capacity to convey oxygen to the functioning muscles is impacted by numerous physiological boundaries, including pulse, stroke volume, heart yield, and maximal oxygen utilization.

To work with ideal conveyance of oxygen to the functioning muscles, a singular necessities to prepare or partake in exercises that will develop the energy stores required for sport. This is alluded to as metabolic preparation. Metabolic preparation is for the most part separated into two kinds: oxygen consuming and anaerobic. Sport isn't simply a physiological peculiarity yet a complicated exchange of the brain and body. It is currently turning out to be increasingly serious and has likewise turned into a profession with an accentuation on money related gains and the craving to succeed at any expense. Consequently, finding answers for the changing games scene of today is significant. A games individual requirements four essential characteristics: Speed, Expertise, Strength and Endurance. To accomplish these in elite athletics, the day to day existence of a games individual calls for discipline in preparing, a decent eating regimen, a reasonable way of life and an internal concentration and assurance.

OBJECTIVE OF THE STUDY:

The objective of the study was to compare the cardiovascular fitness between sports persons and non-sports persons.

METHODOLOGY:

Selection of Subject:

The subject used to collect the data is 20 post graduate students from Mangalore University campus, 10 subject from physical education department and all are sports persons, and 10 students from various department they are non-sports person.

Selection of Variable:

Resting Pulse Rate, Fitness Index.

Selection of Test:

Harvard Step Test was used to assess the Fitness Index. Radial pulse was manually taken.

ANALYSIS OF DATA AND RESULTS:

Table 1: Showing the Mean, SD, and t values of the Resting Pulse Rate of the Sports person and Non-Sports person.

Harvard Step Test, Resting Pulse Rate Per Min	Mean	S. D	t' value
Sports person	73.6	5.27	0.26
Non-Sports person	76.2	4.80	

Significant at 0.05 level.

The table-1 describes that the Mean, SD, score of Sports persons is 73.6 SD is 5.27 and Non-Sports person Mean 76.2 and SD is 4.80 respectively related to Resting Pulse Rate. And 't' value 0.26 is significant at 0.05 level. Hence it clearly showed that there was a significant difference in Resting Pulse Rate between sports persons and non-sports persons.

Chart 1: Showing the Mean, SD, and t values of the resting pulse rate of the Sports person and Non-Sportsperson

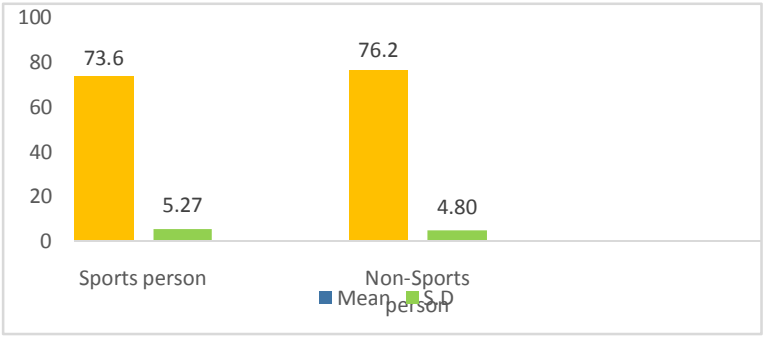


Table 2: Showing the Mean, SD and t values of Fitness Index of Sports person and Non-Sports person

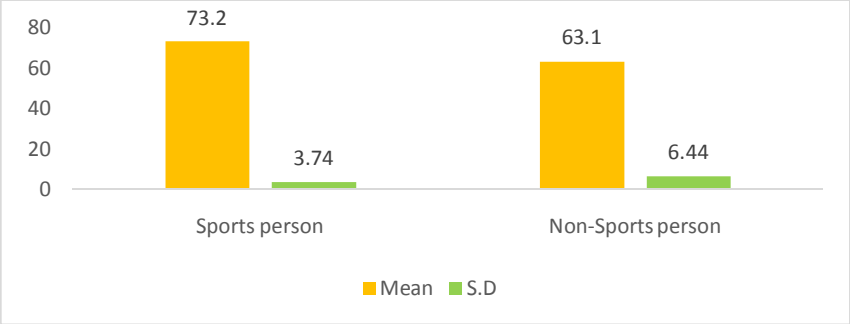
After Harvard Step Test, Total Pulse Rate	**Mean**	**S. D**	**'t' value**
Sports person	73.2	3.74	0.001
Non-Sports person	63.1	6.44	

Significant at 0.05 level.

The table-1 describes that the Mean, SD, score of Sports persons is 73.2 SD is 3.74 and Non-Sports person Mean 63.1 and SD is 6.44 respectively related to Fitness Index. And 't' value 0.001 is

significant at 0.05 level. Hence it clearly showed that there was a significant difference in Fitness Index between sports persons and non-sports persons. Hence, the results showed that the sports persons has better cardiovascular fitness than non-sports persons.

Chart 2: Showing the Mean, SD and t values of Sports person and Non-Sports person after conducting the Harvard step test.



CONCLUSION:

On the basis of the findings the fallowing conclusions were drawn;

1. There was a significant difference between sports persons and non-sports persons with respect to Resting Pulse Rate.
2. The sports persons showed better resting pulse than the non-sports persons.
3. There was a significant difference between sports persons and non-sports persons with respect to Cardiovascular Fitness.
4. The sports persons showed better cardiovascular fitness than the non-sports persons.

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