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Comparative Study On Aerobic Fitness Among Kabaddi And Football Players

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ABSTRACT:

The main purpose of the study was to find out the aerobic fitness among kabaddi and football players. 25 kabaddi players and 25 football players' total 50 players from Maharashtra state were selected. The age group of the subjects ranged between 18-25 years and all the samples selected from random basis. To find out the aerobic fitness of selected players, 12 min run & walk, Cooper test was used. This test is highly reliable and valid to assess the aerobic fitness of selected players. The't' test was used to find out the significance difference among kabaddi and football ayers. The results of the study found that football players having better aerobic fitness as compared to kabaddi players.

KEY WORDS: Aerobic fitness, Kabaddi Players, Football Players etc.

INTRODUCTION:

Aerobic fitness is one of the most important components of physical fitness. The other components of physical fitness are muscular strength and endurance, and flexibility and low-back function. Aerobic fitness is measured as the amount of oxygen transported in the blood and pumped by the heart to the working muscles and as the efficiency of the muscles to use that oxygen. Increasing cardiovascular fitness means increasing the capability of the heart and the rest of the cardiovascular system in their most important task, to supply oxygen and energy to your body. Having good cardiovascular fitness has many health benefits. For example, it decreases your risk of cardiovascular diseases, stroke, and high blood pressure, diabetes.

Aerobic fitness is best improved by activities, which employ large muscle groups working dynamically. Such activities include walking, jogging, running, swimming, skating, cycling, stair climbing and cross-country skiing. The cardiac muscle is like any other muscle - it becomes stronger and more efficient after practice. Heart rate is a quantitative measure of heart's work. At rest a healthy heart of an average individual beats approximately 70 beats per minute. A nditioned heart beats much less at rest, only 40 to 50 beats per minute or even less. Heart rate variability is a quality measure of heart's function. The lower the resting heart rate the higher the heart rate variability, and thus the better the quality of heart's functions. Aerobic fitness is related to age, gender, exercise habits, heredity and cardiovascular clinical status. Maximum values occur between ages 15 and 30 years, decreasing progressively with age. At the age of 60, the mean maximal aerobic capacity in men is approximately three fourths of that at the age of 20. With sedentary lifestyle, there is a 10 % reduction in the mean maximal aerobic power per decade, the reduction with an active lifestyle being less than 5 %.

Cooper himself portray high-impact practice as the capacity to use the greatest measure of oxygen amid comprehensive work. Cooper portrays a portion of the real medical advantages of oxygen consuming activity, for example, increasing more productive lungs by boosting breathing limit, along these lines expanding capacity to ventilate more air in a shorter timeframe. As breathing limit expands, one can supply oxygen all the more rapidly into the circulation system, expanding

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disposal of carbon dioxide. With vigorous exercise the heart turns out to be more productive in working, and blood volume, hemoglobin and red platelets increment, upgrading the capacity of the body to transport oxygen from the lungs into the blood and muscles. Digestion will change and enhance utilization of more calories without putting on weight. Oxygen consuming activity can postpone osteoporosis as there is an expansion in bulk, lost fat and an increment in bone thickness. With these factors expanding, there is a diminishing in probability of diabetes as muscles utilize sugars superior to fat. One of the significant advantages of high-impact practice is that body weight may diminish gradually; it will just reduction at a quick pace if there is a calorie confinement, in this way decreasing corpulence rates. How much oxygen consuming limit can be enhanced by exercise fluctuates change generally in the human populace: while the normal reaction to preparing is a roughly 17% expansion in VO2 max, in any populace there are "high responders" who may as much as twofold their ability, and "low responders" who will see practically zero profit by preparing. Studies demonstrate that roughly 10% of generally solid people can't enhance their oxygen consuming limit with exercise by any means. The level of a person's responsiveness is exceedingly heritable, recommending that this characteristic is hereditarily decided.

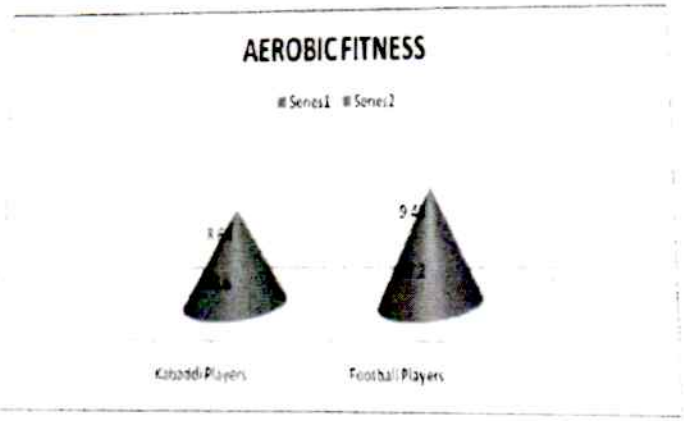
METHODOLOGY:

The sample for this study consists of total 50 players in which 25 kabaddi players and 25 football players. The age group of the subjects ranged between 18-25 years and all the samples selected from random basis. To find the aerobic fitness of selected players, 12 min run & walk, Cooper test was used. This test is highly reliable and valid to assess the aerobic fitness of selected players. The't' test was used to find out the significance difference among kabaddi and football players. The purpose of this test to assess the aerobic fitness of selected players and this test required such equipments: running track, stop watch, recording sheet and cones etc. First of all measuring the completed distance, participants run for 12 min and the total distance covered is recorded, walking is allowed and to encourage the participants to cover the maximum distance.

ANALYSIS OF DATA:

The collected data from the subjects was analyzed by using statistical technique't' test and the results are given in the following table:

Table No.1



Showing comparison between kabaddi players and football players on Aerobic Fitness

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Group	N	Mean	SD	MD	't' ratio
Kabaddi Players	25	53.6	8.68	13.6	2.87*
Football Players	25	67.2	9.48		

Significant at 0.05 level.

Fig No.1

In table no.1, results show that football players have better aerobic fitness (M=67.2, SD=9.48) as compare to kabaddi players (M=53.6, SD=8.68). The calculated't' value is 2.87, which is greater than the tabulated value, so there is significant difference at 0.05 level.

CONCLUSION

It is concluded that football players having better aerobic fitness as compare to kabaddi players.

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