# Effect Of Endurance Training On Cardio-Respiratory Fitness Of Football Players

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#### Abstract:

The main purpose of this study is to find out the effect of endurance training on cardio-respiratory fitness of football players. The scope of study was to 20 students Yavatmal Public School. The age of students varied from 12-15 years. The study was delimited to cardio-respiratory fitness and endurance training exercises to six (6) weeks training programme only. Subjects were administered nine minute (9) run and walk test to measure the Cardio-respiratory Endurance before and after the endurance training programme of six weeks. Cardio-respiratory Endurance will be tested and measured through standard procedure with the help of expert. The present study were examined by employing 't' test to find out whether any significance difference between the means of pre and post test score of the two groups before and after the period of six weeks training programme. The collected data of this study were tabulated in different tables for the statistical treatment. To see any significant difference 0.05 level of confidence was used. Conclusions 1. This might be due to the fact that endurance training might be helped to increases the working capacity of heart and lung.

2. Finally researcher concluded that endurance training have more significant effect on cardio-respiratory fitness of football players.

Keyword: Effect, Endurance, Cardio-Respiratory, Fitness

### Introducation:

Physical fitness involves the performance of the

heart and lungs and the muscular system of the body. As you undertake your fitness program, it's important to remember that fitness is an individual quality that differs from person to person. It is influenced by age, sex, heredity, personal habits, diet, and attitude towards life, anxiety, tension and stress, values of physical fitness.

*Physical fitness*: Physical fitness is a combination of qualities that enable a person to perform well in vigorous physical activities. These qualities include agility, endurance, flexibility, and strength. Physical fitness and good health are not the same though each influences the other. Healthy people may be physically unfit because they do not exercise regularly.

Physically fit people perform their usual tasks easily without tiring. Rather physical performance is only one benefit of physical fitness. Regular vagarious exercise also increases the efficiency and capacity of the heart and lungs and helps people to maintain their proper weight. Individual who are physically fit tend to be slimmer than those who are unfit. They have greater resistance to disease and recover faster if they will become ill. Physically fit people may be happier and more alert and relaxed. They also may be able to resist the affect of aging better than those who are physically unfit.

#### **Study & Material**

**Purpose** : The main purpose of this study is to find out the effect of endurance training on cardiorespiratory fitness of football players. Objectives: i) To find out the any effect of endurance training on cardio-respiratory fitness of football players. ii) To find out effect of endurance training on cardiorespiratory function of football players. iii) To find out the cardio-respiratory fitness of football players. Significance: i) The study might be helpful to know the cardio-respiratory function of football players. ii) This study might be helpful to the coaches, physical education teacher to adapt this type of training for the development of cardio-respiratory level. iii) The Study might be helpful in improving the healthy physiological functions of the Students. iv) The study might be helpful the students for selecting various games and Sports, which requires cardio-respiratory Endurance. v) The findings of this study might be helpful in preparing endurance training programme for the development of cardio-respiratory.

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**Hypothesis:** (i) It is hypothesized that endurance training will be effect on cardio-respiratory fitness of football players. (ii) It is hypothesized that effect of endurance training on cardio-respiratory fitness of boys are more significant students. *Scope:* i) The study was delimited to the 20 students Yavatmal Public School. ii) The age of students varied from 12-15 years. iii) The study was delimited to cardio-respiratory fitness only. iv) The study was delimited to six (6) weeks training programme only. vi) The study was delimited to 20 boys subjects only.

### Methodology

Sources: The study was conducted to find out the Effect of endurance training on cardio-respiratory fitness of football players in secondary school. For this present study selected subjects from Yavatmal Public School Yavatmal. Selection: For the present study Twenty (20) subjects boys were selected randomly from Yavatmal Public School Yavatmal of (Maharashtra). Their age ranges varied from 12 to 15 years. Administration of test: After the selection of the subjects from administered nine minute (9) run and walk test to measure the Cardio-respiratory Endurance before and after the endurance training weeks. programme of six Cardio-respiratory Endurance will be tested and measured through standard procedure with the help of expert.

**Experimental Design:** For the present study Twenty (20) subjects boys were selected in simple random sampling method from yavatmal public school, Yavatmal. Their age varied from 12 to 15 years. The Twenty (20) students were divided into two equal groups of Ten (10) boys. Again these two groups were subdivided into 2-2 groups, of 10-10 boys. One group from both subdivide groups (10 boys) was treated as experimental group and another (10 boys) as control group. The experimental group underwent six weeks endurance training, for 5 (five) days in a week, for 60 (sixty) minutes each day, for the period of six weeks under direct supervision of the experimenter. The control group does not undergo any specific training during the period of six weeks apart from the physical education program.

**Collection of Data:** To find out the effect of endurance training on cardio-respiratory function the data were collected through administration of nine

minute (9) run and walk test before and after the six weeks training programme. After the collection of data scores were calculated by employed 't' test statistical technique to see the significant differences.

## Statistical Analysis And Interpretation Of Data

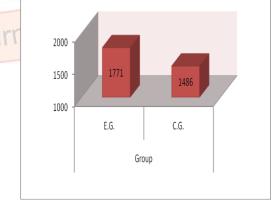
*Interpretation:* All the data pertaining to the present study were examined by employing 't' test to find out whether any significance difference between the means of pre and post test score of the two groups before and after the period of six weeks training programme. The collected data of this study were tabulated in different tables for the statistical treatment. To see any significant difference 0.05 level of confidence was used.

Mean differences between the post test scores of experimental and control group on Cardiorespiratory fitness of Football players.

Post Test Group						
Group	N	Mean	S.D.	M.D.	df	't' value
E.G.	10	1771	163.06	_		
C.G.	10	1486	103.09	285	18	4.67*

\*Significant at .05 level of confidence. Table value .05(18) df= 2.10

Above Table :shows that Boys Experimental Group and Control Group post test mean difference and calculated 't' value is 285 and 4.67\*, The Boys Groups mean difference and 't' value are 285 and 4.67\*. Therefore, it is also indicated that endurance training effects on cardio-respiratory fitness of Boys are having more significant students.



### **Summary:**

For the present study twenty (20) subjects were selected in simple random sampling method from the all students were divided into two equal groups of ten (10) football players. Again these two

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groups were subdivided into 2-2 groups, of 10-10 players. One group from both subdivide groups was treated as experimental group and another (10 &10 boys) as control group. The experimental group was given six (6) weeks endurance training; no training was given to the control group. The data was and collected before after 6-week training programme on both groups by administered 9-minute run and walk tests. Mean Difference and, 't' test was applied between Pre-Test and Post-Test scores of Experimental and Control groups. The level of significance was set at 0.05 level of confidence.

**The findings** of this study showed significant effect on cardio-respiratory fitness of football players after 6-week endurance training programme.

#### Conclusions.

The present study shows that there exist significant effects on cardio-respiratory fitness of football players in secondary school after the endurance training of six weeks on the experimental group. The researcher found that cardio-respiratory fitness was improved after giving the 6 weeks of endurance training programme.1. This might be due to the fact that endurance training might be helped to increases the working capacity of heart and lung. 2. Finally researcher concluded that endurance training have more significant effect on cardio-respiratory fitness of football players.

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