

# Comparative Study of cardio vascular Respiratory fitness of Cricket, Handball and Basketball players.

Ajay singh chandel

Dr. Kiran singh

Physical education teacher

Physical education teacher

R.R.S.V. Inter college Raebareli

G.G.I.C.Bachharawan Raebareli

## Abstract

The objective of the study was to find out the 'Comparative study of cardio Respiratory fitness of cricket , handball , basketball players.

### Method

For the purpose of study 300 Boys were selected to Different sports. Their age range from 17-22 years, cardio vascular fitness was selected as a variable the cardio respiratory fitness was measured by 20 minute Study State Boy. To find out the significant difference of cardio Respiratory fitness among different sports. Descriptive Statistics and analysis of variance (Anova) was used. The level of significance was set at .05 level.

### Result

The result reveals that the there is insignificant difference found among Cricket Player. Basket ball Player, Handball Player at 0.05 level it indicates that player of Cricket, Basketball, Handball do not differ significantly on their cardio-respiratory fitness.

Conclusion:- There is significance on cardio respiratory fitness among cricket Player, basket ball player and Handball Player.

### Introduction

The cardio vascular System is responsible forecast set of adaptation in the body throughout exercise. It must immediately respond to change in cardio output is defend. As the product non heart rate and stroke volume which represents the volume of Blood being pumped by the heart each minute. Cardio output increase during physical activity due to an increase in both the heart rate and stroke volume value. At the beginning of exercises the cardio-vascular adaptations are very rapid "within a second often Muscular contraction, there is a withdrawals of vagal out flow to the heart which is followed by an increase in sympathetic stimulation of the heart. This result is an increase in cardio output to ensure that blood flow to the muscle in matched to the metabolic needs" Both heart rate and stroke volume vary directly the intensity of the exercise Performed and many improvement can be made though continuous training.

Cardio is one of most important things you can do for your body. Whether you want to lose weight burn fat or improve your health. The great things. Is there are plenty of choices for cardio exercise.

Cardio respiratory fitness refers to the ability of the body to perform prolonged Large muscle. Dynamic exercise at moderate to high levels an important part of overall Physical fitness.

### Objective of Study

The Objective of the study was to compare respiratory fitness among players belonging to cricket , handball , basketball .

### Methodology:-

Selection of Subjects:- For the purpose of this study (100 cricket, 100 basketball, 100 handball) players. Their age range form 17-22 years.

### Selection of variables

Cardio Respiratory fitness was Selected as a variables.

### Criterion Measure

The cardio respiratory fitness was measured by 20 Minutes steady start jog. The Maximum distance covered by the subject was recorded to nearest meter.

**Administration of test:-** Instruct player to jog in 400 m tracks a steady rate the rough out the test. The should be seen on the signal” Ready start” and Jog continuous Discourage. Walking although if player have to walk they should continue moving throughout the 20 min period. It a Player the criterion referenced standard by walking rapidly by a combination of walking and running that is acceptable.

**Statistical Analysis:-** To compare the means of cardio respiratory fitness belonging to different player descriptive analysis and one way analysis of variance (Anova) was used.

Finding – The data were analysis using descriptive analysis and further in order to find out the significant difference among different player ANOVA was applied .LSD post Hoc mean comparison was applied for variable having significant F-value.

**Table-1**

Descriptive Analysis of cardio Respiratory Fitness of Cricket , Basketball, Handball players.

Variables	Group	N	Mean	Standard Deviation	Standard Error
Cardio	Cricket	100	2914.23	399.95	39.97
Respiratory	Basketball	100	2944.13	406.36	40.65
Fitness	Handball	100	2996.24	397.23	38.98

**Table-2**

One way Analysis of variance of cardio Respiratory fitness of Cricket Basketball, handball player.

Source of variance	D.P	Sum of Sqaure	Mean Sqaure
Beetwan Group	2	59600.667	29800.333
Within group	298	4.8027	161678.421

Significant at Top fu.05 (2.298)-4.70

Discussion of Finding:- The statistical analysis of data pertaining to the cardio respiratory fitness among play cricket, basketball and handball revealed that there is insignificant difference found. This could be attributed to the fact the subject of this present study are of similar class of age group their growth and development patterns are of similar nature cardio respiratory fitness basically depends on genetically related frame work and training could not be significantly differentiated involving retreat physical activities.

**Conclusion:-** Based on Statistical finding results of the study conclusion have been drawn and presented below.

There is insignificance difference on cardio respiratory fitness among cricket, Basketball, Handball players.

Reference:-

1. Introduction to Measurement in Physical education and exercise Science (Mirror marphy college publication 1990).
2. Hastad Duglas Nard Lacy Alen C Measurement and valuation in physical Education and Exercise Science 2<sup>nd</sup> Edition (Arizor. Garsuch 1994).
3. Andarssion C.L, School Health Practice 4<sup>th</sup> Edition (Saint Louis 1988)
4. Harman Bear. "A Comparative of the Physical fitness Level of Urban and rural Boys." Completed Research in health, Physical Education and Recreation, Val 46 (1967)
5. Hart Maxicia E. "Relationship physical fitness and Academic success" Research Quarterly 34(1987).

