A COMPARATIVE STUDY OF ENDURANCE CAPACITY BETWEEN FOOTBALL AND BASKETBALL PLAYERS

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ABSTRACT:

The main purpose of the study was to find out the differences of cardio-respiratory and strength endurance between football and basketball players. For this purpose cooper 12 minutes run and walk for cardio-respiratory endurance and bend knee sit up for strength endurance were administered to 15 football boys(age range 16 to 19) and 15 basketball players from Army public school,Jorhat,Assam.India. The data was analyzed by using T-test at 0.05 level of significance. The Analyzed data showed that there were no significant differences in cardio-respiratory endurance and strength between these two groups.

Key words: football, basketball, cardio-respiratory endurance, strength endurance

Introduction

Endurance in sports can be defined as the ability to maintain exercise intensity over a long period of time and resistance to fatigue. It is well documented that during endurance sports, athletes must regulate their rate of work output in order to optimize their overall performance (Abbiss & Laursen, 2008).

Endurance sports are a subset of sports in which the goal is prolonged athletic output over an extended distance or for an extended period of time. They are very aerobic in nature.

To play every games and sports it needs one of the most important motor ability i.e.endurance, Football and basketball are such games where require endurance capacity to sustain or withstand prolonged exercise for minutes to hours. Endurance also referred to an ability to keep going through a tough situation involving hardship, stress etc.

Methodology

The study was based on compared the cardio-respiratory and strength endurance between two groups ,15 football and 15 basketball players from Army public school ,Jorhat.Assam was selected as a subject and the following test were performed to measure endurance variables:

coopers 12 minutes run and walk-To measure cardio-respiratory endurance and bend knee sit up-To measure strength endurance. To determine the significant differences in endurance capacity 't' test statistical analysis was employed at 0.05 level of significance.

Result and analysis

Table I COMPARISON BETWEEN MEAN, STANDARD DEVIATION AND 'T' RATIO VALUE OF CARDIO-RESPIRATORY BETWEEN FOOTBALL AND BASKETBALL PLAYERS.

Groups	Mean	S.D	t-ratio
Football	2470.33	117.38	0.369
Basketball	2495.67	23.97	

Not significant at 0.05 level tabulated value 2.048(df 28)

Table –I shows that the mean and standard deviation values of Football and Basketball players on cardio-respiratory endurance were 2470.33(Mean) and 117.38(S.D) and 2495.67(mean) and 239.97 for Basketball players respectively. The obtained't' ratio value 0.367 was not significant at 0.05 level of confidence with df at 28 which is lesser than require table value of 2.048.

The result of the study revealed the there was no significant difference exists between the Football and Basketball players on cardio-respiratory endurance.

THE COMPARISON OF MEAN OF CARDIO-RESPIRATORY ENDURANCE HAS BEEN GRAPHICALLY SHOWS IN THE FIGURE BELOW.

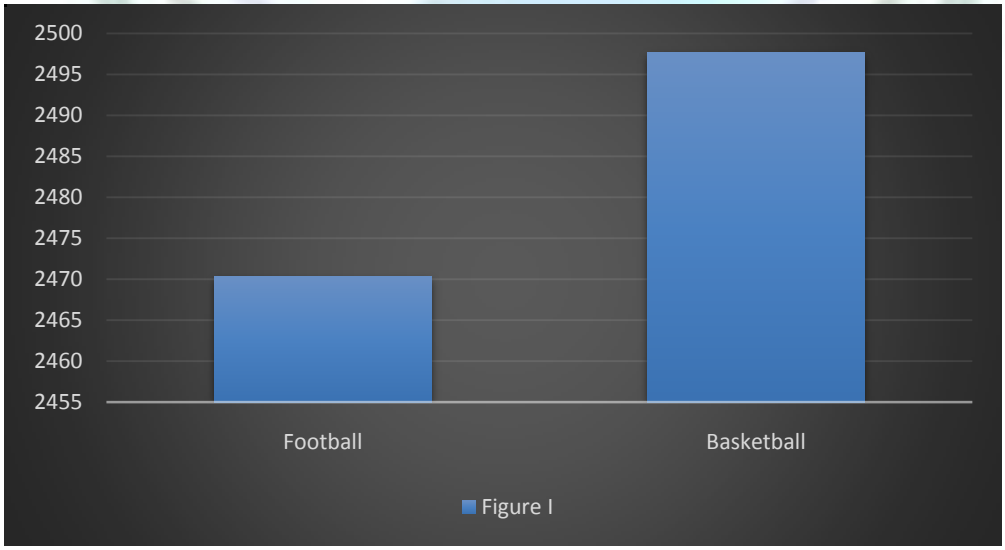


Table II

COMPARISON MEAN,STANDARD DEVIATION OF STRENGTH ENDURANCE BETWEEN FOOTBALL AND BASKETBALL PLAYERS

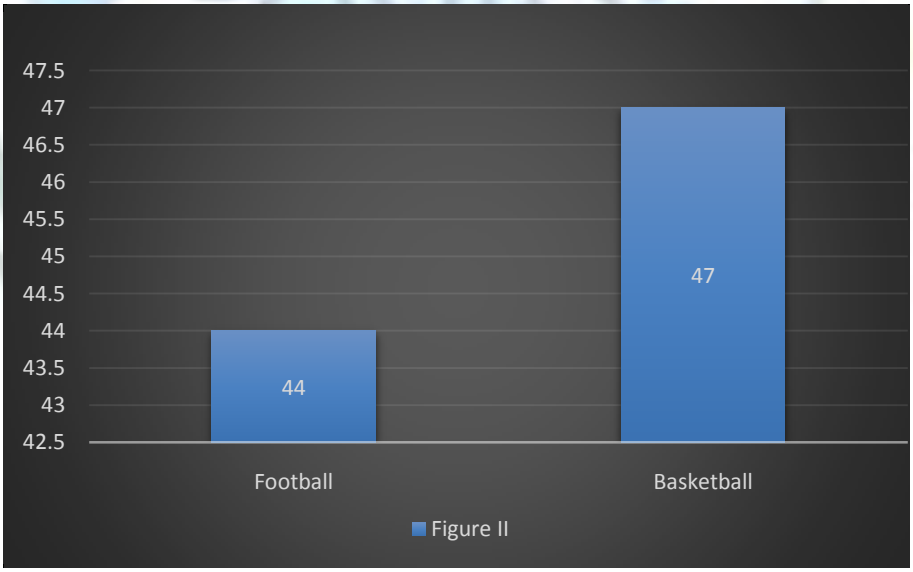
Group	Mean	S.D	't' ratio
Football	44	5.15	1.86
Basketball	47	3.58	

Not significant at 0.05 level Tabulated value 2.048 (df 28)

Table II shows that the Mean and Standard Deviation value of Football and Basketball players on strength endurance were 44 and 5.15 for football and 47 and 3.58 for Basketball players respectively. The obtain't' ratio value 1.86 was not significant at 0.05 level of confidence with df at 28 which is lesser than require table value of 2.08.

It is evident from the above table that there was no significant difference exists between Football and Basketball on Strength endurance.

THE COMPARISON OF MEAN OF STRENGTH ENDURANCE HAS BEEN GRAPHICALLY SHOWN IN THE FIGURE BELOW.



The result of the study indicate that there was no significant differences in cardio-respiratory endurance and strength endurance of Football and Basketball players of Army public school Jorhat.It may be attributed to the fact that the Football and Basketball game are similar in nature and players have to go through similar level of hard work in order to play the same.

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