Research Paper Physical Education

Comparative Analysis Of Selected Physical Variables Among Football Hockey and Basketball Players

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ABSTRACT

Fitness is the key to enjoy our life. Exercise is an important key for a total fitness, regular exercise is necessary to develop and maintain an optimal health. To achieve this purpose 15 Basketball, 15 fooball and 15 Hockey players from Sri Subramaniya swamy Govt.Arts College, Thiruttani, Tamilnadu how were participated in intramural and extramural tournaments The subject's age ranged between 18 to 24 years. The selected criterion variables are speed and cardio respiratory endurance. The physical variables speed assessed with 50 m dash and cardio respiratory endurance assessed with 12 min run/walk test. The collected data were treated with one way (ANOVA). If obtained 'F' ratio is significant Scheffe's post hoc test was will be used. Level of significant was fixed at 0.05. The result shows that basketball players were better speed comparing than the hockey and Football players. Cardio respiratory endurance was better football players comparing than the basketball and hockey players

KEYWORDS | Football, Hockey, Basketball, Speed, Cardio respiratory endurance

INTRODUCTION

Sports and games in modern times have taken a definite shape in comparison with the immature and unscientific plays of ancient times. Today sports are becoming professional; players are earning a lot through games and sports. Sports in recent times are mainly of a competitive nature through their procreative values cannot be underestimated or denied. Despite the fighting attitude between the competitors, sports bring the different nations closer and establish brotherhood and friendship between the people of different countries.

Physical fitness is the ability to carry out daily tasks vigor and alertness, without undue fatigue, and with ample energy to engage in a leisure time pursuits and to meet the above average physical stresses encountered in emergency situations. Physical fitness is the capacity to carry out reasonably well various forms of physical activities without being unduly tired and includes qualities important to the individual's health and well-being. Sports are essentially that aspect of human activity, which strengthens the integration of the body and the mind. Fitness is important at all levels of the game, whilst being essential for top level players; it is beneficial for beginners who will improve both their effectiveness and enjoyment through good standards of fitness.

Fitness enables a player to cope with the physical demands of the game as well as allowing the efficient use of his various technical and tactical competencies throughout the match. Speed is highly essential in all the ball games, football and handball offensive and defensive player are to possess good speed so that though interchanges of positions are rare. It may be required of them if time demands. Agility is the physical ability that enables a person to rapidly change body position and direction in a precise manner. Agility is the ability to change direction quickly and effectively, while moving as early as possible at full speed. The primitive man may be the very nature of his daily activities, build a strong physique superior to the civilized man in modern civilize machinery world, the change for the physical activities are less because of the invention of computer and so many other devices the participation in the physical activity is to maintained a good health.

The world health organization has defined health as a state of complete physical mental as social well being. Physical education field serves a lot for an individual to be healthy person. Fitness is the key to enjoy our life. Exercise is an important key for a total fitness, regular exercise is necessary to develop and maintain an optimal health. The origin of football can be found in every corner of geography and history. In England football really began to take step. It all started England. The plays of football need highest level of cardio respiratory endurance. Basketball game plays essential quality need for speed and agility. The purpose of study was to find out football, hockey and basketball players of speed and cardio respiratory endurance.

METHODOLOGY

To achieve the purpose 15 Basketball, 15 football and 15 Hockey players from Sri Subramaniya swamy Govt.Arts College, Thiruttani, Tamilnadu how were participated in intramural and extramural tournaments were selected as subjects. The subject's age ranged between 18 to 24 years. The subjects selected purposive sampling method of used in this study. The selected criterion variables are speed and cardio respiratory endurance. The physical variables speed assessed with 50 m dash and cardio respiratory endurance assessed with 12 min run/walk test. The collected data were treated with one way ANOVA to find the significance among the groups. If the obtained 'F' ratio found significant the Scheffe's post hoc test was apply to know the paired mean difference if any. Level of significant was fixed at 0.05.

RESULTS

TABLE-I ANALYSIS OF VARIANCE ON SPEED AMONG MEN UNIVERSITY FOOTBALL HOCKEY AND BASKETBALL PLAYERS

Group	Mean	S.D	Source of Variance	Sum of Squares	Df	Mean Square	' F'
FOOTBALL	7.70	0.29	Between	11.358	2	5.679	52.343*
HOCKEY	8.20	0.31	Within	4.557	42	0.108	
BASKETBALL	7.00	0.37					

*** Significant Level of significant fixed at 0.05. Table value 3.23 with df 2 & 42**

Table – I show that there was a significant difference among football, Hockey and basketball players on speed. Further, the scheffe's post hoc test was applied to know the paired mean difference were presented in table - II

TABLE -II SCHEFFE'S POST HOC TEST DIFFERENCE BETWEEN THE PAIRED MEANS ON SPEED

FOOTBALL	HOCKEY	BASKETBALL	Mean difference	C.I
7.70	8.20	-	0.50	0.51
7.70	-	7.00	0.70*	
-	8.20	7.00	0.80*	

***Significant**

THE BAR DIAGRAM SHOWS THAT SPEED FOOTBALL, HOCKEY AND BASKETBALL PLAYERS Figure-I

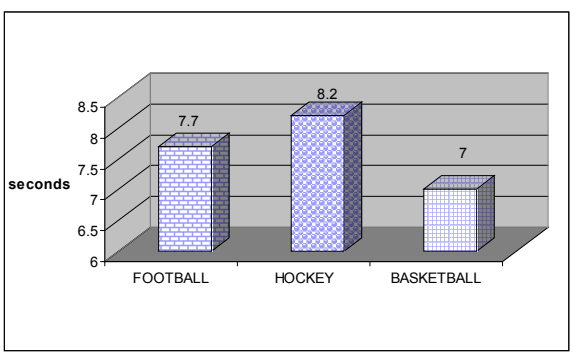


Figure:- I clearly indicates that Basketball players have better speed followed by and football hockey players.

TABLE-III ANALYSIS OF VARIANCE ON CARDIO RESPIRATORY ENDURANCE AMONG MEN UNIVERSITY FOOTBALL HOCKEY AND BASKETBALL PLAYERS

Group	Mean	S.D	Source of Variance	Sum of Squares	Df	Mean Square	'F'
FOOT BALL	2500	356.8	Between	651217.77	2	325608.88	4.072*
HOCKEY	2352	245.3					
			Within	3358546.667	42	79965.397	
BASKET BALL	2206	228.9					

*** Significant Level of significant fixed at 0.05. Table value 3.23 with df 2 & 42**

Table – III show that there was a significant difference among football, Hockey and basketball players on cardio respiratory endurance.. Further, the scheffe's post hoc test was applied to know the paired mean difference were presented in table - IV

TABLE -IV SCHEFFE'S POST HOC TEST DIFFERENCE BETWEEN THE PAIRED MEANS ON CARDIO RESPIRATORY ENDURANCE

FOOTBALL	HOCKEY	BASKETBALL	Mean difference	C.I
2500	2352	-	148*	129.8
2500	-	2206	294*	
-	2352	2206	146*	

***Significant**

THE BAR DIAGRAM SHOWS THAT CARDIO RESPIRATORY ENDURANCE OF FOOTBALL HOCKEY AND BASKETBALL PLAYERS Figure-II

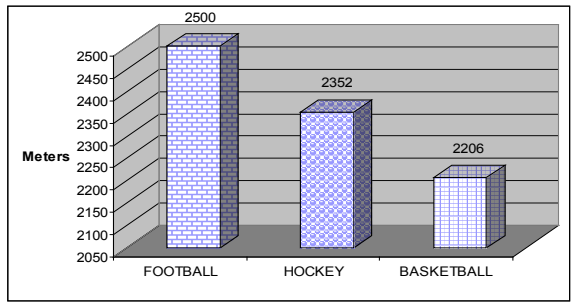


Figure:- II clearly indicates that football players have better cardio respiratory endurance followed by and hockey and basketball players.

DISCUSSION ON FINDINGS

The results of the study basketball players have better speed comparing than football and hockey players. Cardio respiratory endurance football players have better comparing the basketball and hockey players. The above results conformity with that Jakovlijevic (2011), Harrison AJ (2009) and Castagna (2008). (Bhanot JL 1981)It has been found that football and field hockey players (field games) are faster than volleyball and basketball players (court games) Mc Leod TC (2009), The study demonstrates that a neuromuscular-training program can increase the balance and proprioceptive capabilities of female high school basketball players and that clinical balance measures are sensitive to detect these differences.

CONCLUSIONS

The following conclusions are drawn from the analysis of data

- Basketball players have better speed comparing than football and hockey players.
- Football players better cardio respiratory endurance comparing than hockey and basketball players

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