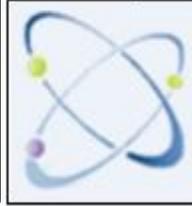


COMPARATIVE STUDY OF SELECTED SPEED AND ENDURANCE BETWEEN SCHOOL LEVEL FOOTBALL AND HANDBALL PLAYERS



PHYSICAL EDUCATION

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ABSTRACT

Aim of the Study find out the assess Comparative Study of selected speed and endurance between school level football and hand ball players. For this purpose the subjects, 30 from each category football and handball Players were selected from the teams [including stand byes] of Kadapa and Kurnool district that participated in the inter district tournament under 16 years held during the year 2016. The subject's average age, height and weight were 15 years 7 months 156 Cms and 42 Kgs respectively. The subjects tested on Speed and Agility . To identify the significant difference among the football and handball players .

I. INTRODUCTION

Regular physical activity is associated with a healthier and longer life. Physically active people have a lower risk of heart disease, high blood pressure, diabetes, obesity, and some type of cancer. Despite all the benefits of physical activity, most people in this country are a sedentary. Given that regular physical activity helps people enjoy better health. Advances in our modern society have greatly diminished necessity for physical activity to survive in our daily lives. In addition, technological advances provided numerous sedentary forms of entertainment such as television, movies and video games that are popular in public. Human body is a great computer. Combination of various parts of computer is gives well out put. Proper using of various parts of our body can keep our body fit and healthy. Walking brisk walk, running etc. a physical activity requires rapid breathings. Muscles take more oxygen and relieve carbon dioxide in the above activities. Walking, a readily available form of exercise is advocated by many health authorities as a beneficial activity that can be incorporated in to every lifestyle

Acquired Qualities Through Handball

If children play handball it improves physical and physiological abilities as given below. The physical components of the games involve, power, agility speed and balance. The physiological components such as speed endurance, explosive strength and strength endurance.

Football

Football is one of the most popular and simple games in the world. The game began in England in the 12th century. The contemporary history of football spans more than 100 years. It all began in 1863 in England, when Rugby Football and association Football branched off on their different courses and the world's first foot ball association was founded. The football association in England both forms of foot ball stemmed from a common rot and both have a long and intricately branched ancestral tree. Their early history reveals at least half of a dozen different games, varying to different

degrees and to which the historical development of foot ball is related and has actually been tracked back, whether this can be justified in some instances is disputable. Nevertheless, the fact remains that playing a ball with the feet has been going on far thousands of years and there is absolutely no reasons to believe that it is an aloe ration of the more "Nato" form of playing ball with the hands.

This game remained popular for 700 or 800 years, but although the Romans took it to England with them, it is doubtful whether it can be considered as a fore roomer of contemporary foot ball. The story of the organized foot ball in India is connected with the history of this organization. It is till today the governing body of the game in the state of West Bengal. Th4e first foot ball league to be run in India was in Calcutta where some of the clubs such as the Mohan Bagan club gave great imputes to the game. Two important foot ball tournaments were organized one was the Durand foot ball Tournament and the other the trader cup which is now known as the "IFA" shield. The Durand cup tournament is the oldest foot ball competition in India and only second in the world in seniority, next to the famous FA cup of England. The All India Foot ball Federation came into existence in 1937. Now a day this is the governing body of the game in India. India entered the international field as an independent nation in 1948, when the Indian team participated in the London Olympics. Football is a team sport in which players attempt to score goals by passing and dribbling. The ball down the field past opposing defenders and kicking or heading the ball into the goal net out witting the defending goal keepers.

II .ACQUIRED QUALITIES THROUGH FOOTBALL

Physical components of the game were athleticism, strength, quickness, agility, balance and power. The physiological components were speed abilities, explosive strength, speed endurance and strength endurance increasing steadily. In addition to Olympic Games indigenous sports have also become popular in each country. Sports have become an important social and cultural activity of the modern world

which is being given the right place it deserves by the nation and societies.

Statement of the problem

The present investigation is intended to explore on the “differences in Speed and Endurance between handball and football players at school level”.

Delimitations

1. The present study was delimited to school boys who represented kadapa and Kurnool district school games federation of India, state level competitions.
2. The investigation was delimited to football and handball only.
3. The age of the subjects was 14 to 16 years.
4. For the purpose of the study 30 football and 30 handball players were selected from different schools in Kadapa and Kurnool districts in Andhra Pradesh.
5. The variables tested were speed, endurance,

Limitations

The study was limited in the following factors.

1. Heredity, day to day activities, rest period, food habits, life style and family factors could not be controlled.
2. The general mood of the subjects while have affected the performance and was recognized as a limitation.
3. All efforts made by the research scholar to motivate the students to put up their optimal performances in various test items. But there were no objective measures available to make sure that each performed their optimum.

It was assumed that these limitations would not have significant effect on the result of the study as such variations normally has a nullifying effect.

Definition of the terms

Speed:

It is the ability to perform a particular movement very rapidly it is the function of distance on time. Speed is defined as “The capacity of individual to perform successive movements of the same pattern at a faster rate”.¹

Cardio-vascular Endurance:

Cardio-vascular Endurance is the ability of the heart, lungs and circulatory system to supply oxygen and nutrients to work muscles efficiently.² Cardio vascular endurance is defined “As the capacity to persist in strenuous tasks for some length of time. In this chapter, selection of the subjects, selection of variables, reliability of the data and the statistical technique for the data has been explain in detail.

III. SELECTION OF SUBJECTS

The purpose of the study was to compare the Speed and Endurance of district level school football and Handball players. For this purpose the subjects, 30 from each category were selected from the teams [including stand byes] of Kadapa and Kurnool district that participated in the inter district

tournament under 16 years held during the year 2016. The subject’s average age, height and weight were 15 years 7 months 156 Cms and 42 Kgs respectively.

Selection of Variables

The speed, endurance, of the subjects were measured as the dependent variables.

Selection of Tests

The selected criterion variables were tested by using the standardized tests and are presented in Table -1.

Table-1: Tests Selection

Sl. No.	Variables	Test/Tools
1.	Speed	30 Mtrs flying start
2.	Endurance	Cooper’s 12 min run/walk

Reliability of Tests

The test used to assess the motor performance, 30 mtrs flying start, cooper’s 12 minutes run/walk, However to established the reliability test-retest was conducted and calculated co-efficient of correlations between the test and retest of the selected variables were higher than the table value for significance at .05 level. The co-efficient of correlations for the selected variables have been presented in table-II.

Table-2: Intra Class Co-efficient Correlation Values on Selected Criterion Variables

Sl. No.	Tests	‘r’ Value
1.	30 mts flying star	0.92*
2.	Cooper’s 12 min run/walk	0.91*

Test Administration

Speed [30 Mtrs]

Purpose

To assess the speed.

Facilities/ Equipment

1. Stop watch & measuring tape

Procedure

A 30 Mtrs distance was marked on the field. The subjects took crouch start on the command ‘set’. Two flags one each at starting and finishing were placed. A mark was made at 30 Mtrs both starting line and finishing points. The timer operators the watch from this mark. The subject starts away from the starting line so as to accelerate to the peak when he reaches the starting line and runs through the 30 Mtrs. The lapsed between the 30 Mtrs was recorded. The better of two trials were recorded to the nearest 1/10th of a second as the score of the subject.

Cooper’s 12 Minutes Run/Walk

Purpose -To assess the endurance

Facilities/ Equipment

Stop watches, a whistle and score sheets were used and the test was conducted on 400 Mtrs standard track.

Procedure

The 400 Mtrs track was kept with marking at every fifty metres. The subjects were divided into two groups when one group was running, the designated partners from other group acted as lap scorers. The subjects were instructed to run, jog or walk according to their capacity without stopping for 12 minutes. The subjects of the first group started running on the

whistle and continues to run, jog or walk and covered as much as possible distance during 12 minutes period, on expiry of 12 minutes the whistle was blown to stop and then the subjects were stopped, progressing forward but they should stand on the spot where they stopped on whistle. The partners helping as laps scores kept the record of the number of laps completed. It was counted to total distance³. The statistical analysis of data collected on speed of handball and football players of Kadapa and Kurnool district under 17 teams were presented in Table-III.

Table -III: 't' Test for the Data on Speed of Hand Ball and Foot Ball Players

Category	Mean Sec	Standard Deviation Sec	Mean Difference	Standard error	't' ratio
Handball	4.38	0.256	0.28	0.06	4.47*
Foot ball	4.10	0.223			

* significance at .05 level , 't' ratio for significance at .05 level with df 0.58 is 2.00

Table -3 shows that the mean of Handball and Football players are 4.38 sec and 4.10 sec respectively and the standard deviations are 0.256 sec and 0.223 sec. the obtained 't' ratio is 4.47 is greater than the table value required. It indicates that there is significant difference between the means of handball and football players in speed. Further the examination of the means states that the football players in speed. Further the examination of the means states the football players were better in speed when compared to handball players. The mean values of handball and football players on speed are graphically depicted in figure-1. The statistical analysis of data collected on strength endurance of hand ball and football players were presented in Table-4.

Table-IV : 't' Test for the Data on 12 Minutes Run/Walk of Hand Ball and Foot Ball Players

Category	Mean Sec	Standard Deviation Sec	Mean Difference	Standard error	't' ratio
Handball	2413.7	148.3	245	47.51	5.16
Foot ball	2658.7	213.8			

* significance at .05 level , table value for significance at .05 level with df 0.58 is 2.00

Table -5 shows that the mean of handball and Football players in 12 minutes run 2413.7 Mtrs respectively. The standard deviation of the handball players is 148.3 Mtrs and that of Football players is 213.8 Mtrs. The 't' ratio is 5.16, which is higher than the table value required for significance. It shows that the means of Handball players and Football players differ significantly. Further the observation of the means states that Football players are better in endurance when compare to the handball players.

CONCLUSION

The analysis of the data facilitated the following conclusions;

Football players were significantly better than the handball players in speed. Football players were significantly better than the handball players in endurance .

RECOMMENDATION

The results of the study facilitated to make the following recommendation

Similar study may be planned with different games and sex

The result of the study may be compared with state and national level norms

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