

## COMPARATIVE STUDY OF SELECTED AGILITY AND BALANCE BETWEEN SCHOOL LEVEL FOOTBALL AND HANDBALL PLAYERS



## PHYSICAL EDUCATION

Keywords : Agility and Balance

**G. KUMAR**

Lecturer, Sri Venkateswara B.P.Ed College , Dubbaka, Siddipet Dist, Telangana

### ABSTRACT

Aim of the Study find out the assess Comparative Study of selected Agility and Balance 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 Siddipet district that participated in school games federation of India, state level competitions.during the year 2017. 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

The human body is designed for movement and strenuous physical activities, exercise is not typically a part of average like style. One can not expect the human body to function optimally and to remain healthy for extended periods if it is abused or not used as intended. Thus physical inactivity regularly is at greater risk of developing hypo-kinetic diseases such as coronary heart disease, hypertension, obesity and muscular skeletal disorders. The best defense against the developing risk is to put the muscles bones, joints, heart, lungs and internal organs to work on a regular basis through a systematic programme of exercises. Primitive man recognized physical fitness as an absolute necessity for his survival. But modern man. In these electronic and computer age tends to become complacent and forget the importance of physical fitness not only for his efficiency and happiness, but also for the survival of future generation. The right kind an amount of physical exercises would develop organic and muscular power, stamina vigor and the skills involved other factors such as heredity, environment, rest diet and the influence, physical fitness. However physical activity is the sole source of the body. Power is the only known means of acquiring the ability to engage in tasks demanding sustained physical effort. There is a direct relationship between physical exercise and physical fitness<sup>1</sup>. Now a day more and more individuals particularly boys and girls are attracted by sports activities and increasing the number of nations that are represented in sports arena. As prevention and curative health measures have become more successful throughout the third world war, millions of teenagers should have a chance to enjoy sports

#### Handball

The sport of handball is a thrilling and exciting indoor game that can be Handball originated in Germany at the end of the nineteenth century. It was introduced to the world by a gymnastic master KONARD KODI. In 1928 eleven handball

nations meet in Amsterdam. In 1928 was included in the programme of the game by International Olympic Committee. Handball was included in the Olympic Games in Berlin in 1936. After the second World war several handball nations met at an international congress in Copenhagen to re-establish the spirit. The result of this was desolation of I.A.M.F. and the birth of international handball federation in India handball played first in the year 1970. Handball is no contact game, played either out of doors [Field Hand Ball] or indoor, it is played by two opposing teams. There are twelve players in one team, 10 of them are court players and two are goal keepers. But at one time players not more than seven do not enter the court. Six of them are court players and one is goal keeper. The remaining five are substitutes. A player may be included in a game or a substitute may be allowed for him. There shall be none in the goal area except the goal keeper. The playing field for field handball is similar to that of soccer, the indoor version requiring a much more limited playing area. A match is started from the centre point, the ball being passed with short or long throws from one player of a team to the other and in this way attacks are built up which culminate in attempts at scoring. 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 Agility and Balance between handball and football players at school level".

**Delimitations**

1. The present study was delimited to school boys who represented 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 Siddipet districts in Telangana.
5. The variables tested were agility and balances.

**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****Agility:**

Agility is the ability to move quickly and change directions while maintaining control and balance. Agility is a combination of speed, balance, power and co-ordination.

**Balance:**

Balance is the ability to maintain a position. Balance depend on the interaction of multiple body organs and systems including the eyes, ears, brain and nervous system, cardiovascular system, and muscles. Tests or examination of any or all of these organs or systems may be necessary to determine the cause of loss of balance, dizziness, or the inability to coordinate movement or activities.

**III. METHODOLOGY**

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.

**Selection of Subjects**

The purpose of the study was to compare the Agility and Balance 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 Siddipet district that participated in school games federation of India, state level competitions. During the year 2017. 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, agility and balance performance 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	Agility	Hexagonal Jump Test
2	Balance	Balance Beam Walk Test

**Reliability of Tests**

The test used to assess the motor performance, balance beam walk test are all standard tests. 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-II: Intra Class Co-efficient Correlation Values on Selected Criterion Variables

Sl. No.	Tests	'r' Value
1	Agility	0.93*
2	Balance	0.90*

**Hexagonal Jump Test**

**Purpose** – To assess ability

**Equipment** – Stop watch

**Marking** – A 26 inch per side hexagon on the firm floor. The borders of the hexagon are marked with distinct color and the six sides were name A to F.

**Procedure**

The subject stands in the middle of the hexagon facing side 'F' on the command 'go' the subject begin jumping with both feet over side 'A' and immediately back into the Hexagon. Then continuing to face side 'F' jumping over 'B' and back into the hexagon, side 'C' and back into hexagon side 'D' and back in, side 'E' and back in one side 'F' and back in for one completed revaluations. Similarly continuously the subject jumps for three revolutions. The elapsed time between the command go and when the feet enter hexagon after jumping side 'F' for the third time was recorded as the score of the subject.

**Scoring** – Best of the three trails in second was recorded as the performance

**Beam Walk Balance Test**

**Purpose** – To assess active balance

**Equipment**

A slightly elevated beam approximately 4 inches wide and 20 feet long stop watch

**Procedure**

The subject steps up onto the beam at one side. With caution 'ready' 'clap' start walking on the beam to and from, for 20 seconds. The subject make 180° after reaching the other end walks back to the other end. If the fall of the beam, he is allowed to continue. After reaching his position on the beam.

Two trails were recorded as performance.

### Scoring

The distance the subject walks on the beam in 20 seconds was recorded as the score.

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

Category	Mean Sec	Standard Deviation Sec	Mean Difference	Standard error	't' ratio
Handball	17.6	3.96	2.3	0.82	2.80
Foot ball	15.3	3.14			

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

Table -III shows that the mean of handball and Football players in agility 17.6, 15.3 respectively. The standard deviation of the handball players is 3.96 and that of Football players is 3.14. The 't' ratio is 2.80, 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 handball players are better in agility when compare to the football players.

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

Category	Mean Sec	Standard Deviation Sec	Mean Difference	Standard error	't' ratio
Handball	40.16	7.36	6.5	1.0	6.5
Foot ball	33.66	6.36			

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

Table -IV Shows that the mean of handball and Football players in Balance 40.16, 33.66 respectively. The standard deviation of the handball players is 7.63 and that of Football players is 6.36. The 't' ratio is 6.5, 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 handball players are better in balance when compare to the football players.

### CONCLUSION

The analysis of the data facilitated the following conclusions;

- Football players were significantly better than the handball players in agility.
- Handball players were better than the football players in balance.

### 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 normsest be described as a mixture of soccer and basket ball. The ball is passed in quick fine succession up the field until, near the goal then striker through it at the back of the net. The current games were evolved from several different various sports played around the world especially in Eastern Europe. Handball was first played in 1895 in Germany. It was introduced into the Olympic Games at Berlin in 1936 as an 11 aside outdoor games with Germany wining but when but when- introduced in 1972 it was an indoor game with seven a side, the standard size of the team

since 1952. The international hand ball federation was formed in 1946. The first international match was held on 3<sup>rd</sup> September, 1925 it did not have its own governing body and it came under the jurisdiction of the international amateur athletic federation[IAAF].

### REFERENCES

- [1] Bhume. R>a> 1991 A comparative study of the driving effects of dextroamphrtsmine snf yogic mediation on musculue control for the performance of balance on balance board. Indian Journal of Physiology and pharmacology.
- [2] BJ. Craths and Roberts Hution, "Experiment in movement Behaviour and Motor Learning" ( Philadelphia: lea and Pabiger, 1969), P-25
- [3] Chaplin.H.Ellis, "Physical Education and Good Life" Spring Field College Bulletin
- [4] Clarke. H. Harrison, "Historical Orientation" Physical Fitness News Letter. P-3:8:9:11
- [5] Dr. Robert Arnot and Charles Gains, sports Talent, penguinbooks, 1986.
- [6] Frank dick, Carl Johnson and W.H. Paish "Strength Training For Athletics" (London: british Amateur Athletic Board, 1976) P.5
- [7] Hasrani, S.S., "An Analysis of skill Motor Abilities and Psychological Components as predictive Factors of Basket Ball playing ability at Difference levels of Achievements", unpublished doctoral thesis, jiwaji university, Gwalior, 1987. I bid p- 12