

## A Comparative Study of the Speed, Agility, Flexibility, and Explosive Power in Basketball, and Handball players

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**Abstract:** The objective of the study was to know Gujarat Vidyapith - Ahmedabad University's Intermediate Vidyalaya Level Basketball and handball players of the game To make comparisons of aspects such as speed, , Agility, flexibility, and Explosive power For the study of this research Mahadev Desai College of Physical Education, Sadarana Out of basketball and handball games, 24 subjects of 12-12m were selected. Selected subject characters were chosen only brothers' in the age group of 20 to 24 years And all the players were selected at inter-university level For this study hypothesis test Runs 50 yards for speed measurements, Shuttle to measure Agility, Reach for measuring vertical capacity Sit and Reach tests were used to measure Flexibility The 't' test applied to compare these passages and the significance was level at 0.05 The results showed that Than basketball players Speed of player in handball game And jumped into the reach of the study which can be known by the results of this study While handball players Agility of basketball players Flexibility and adaptability Looked up in aspects.

### 1. INTRODUCTION :

Looking at the history of mankind's development will appear Adinmanav, who lived in wild dungeons in Yesterday's cave Where is the success of today and the development of several projects, In space Universe diff isolation Civilized human With the fast march of today's technology The common man's own The body and mind have been found to be incompetent in keeping the co-ordination. He hates himself and Failure to keep free from worry It has become difficult for him to live a life of certainty .Today, the need for physical fitness is high. Physical fitness leads to a person's action And measured by the criteria to cope with the situation. So that she can lead a better life. In today's modern era, the person does not perform more physical lobar, But other activities are done to keep the body healthy. On this basis, we are asked what is the eligibility? And how much is needed. Physical health is not required for individual physical fitness But along with that There are also mental, emotional, social and spiritual matters. Physical theorists say. That is, all these things are intimate with physical fitness. Physical fitness of high-level In all types of sports Strong fit body is a primary necessity for high performance work. It is understandable from general intellect. That's when all the factors being helped are controlled and when the athlete participates in any activity The improvement in its physical fitness level will definitely improve its working standards. Important aspects such as speed, power, agility, tenderness and endurance are incorporated into the physical fitness.

### 2. Objective of The Study:

The objective of the study was to know Comparative Study of the Speed, Agility, Flexibility, and Explosive Power in Basketball, and Handball players

### 3. Selection of the Subjects :

For the purpose of this study, total 24 male student 12 Basket ball and 12 student Handball game from inter-university level of Gujarat Vidyapith, sadra was conducted to compare the speed, Egility, flexibility, and Explosive power fitness components, students from the age group of 20 to 24 years of subject matter were selected

### 4. Collection of Data :

In this study, 50 yard race for speed measurement, test for the purpose of test, Shuttle an for measuring Agility, Vertical jump to the measurement of the power of the bouncing of the foot and Seat and Reach for measuring flexibility The test was used. In this study, players of basketball and handball game group For speed, Agility, AAHPERD Youth Fitness Test and Sergeant for measuring jump and Wellness and Dellon's methodology were taken according to the test



for flexibility.

To compare each aspect of the different mediums of both groups The 't' test was applied And its quality was tested at level of 0.05 The following results have been found.

### 5. Statistical Technique :

Table – 1

Mean, Mean difference and 't' value of Speed male players of Basketball, and Handball games

Test	Group	Mean	Mean difference	' t '
Speed	Basketball	4.17	0.96	2.46*
	Handball	5.13		

The table 1 indicated that mean value of of Basketball was 417, Students of Handball was 5.13, Mean difference was 0.96 and t- value was 2.46 whereas tabulated -value is 2.07 at 0.05 level. It means there was significant difference between Speed of Basketball and Handball students of Inter university level

Table – 2

Mean, Mean difference and 't' value of Agility male players of Basketball, and Handball games

Test	Group	Mean	Mean difference	' t '
Agility	Basketball	60.00	16.67	3.88*
	Handball	43.33		

The table 2 indicated that mean value of of Basketball was 60.00, Students of Handball was 43.33, Mean difference was 16.67 and t- value was 3.88 whereas tabulated -value is 2.07 at 0.05 level. It means there was significant difference between Agility of Basketball and Handball students of Inter university level

Table – 3

Mean, Mean difference and 't' value of vertical jump male players of Basketball, and Handball games

Test	Group	Mean	Mean difference	' t '
vertical jump	Basketball	46.5	13.46	4.20*
	Handball	59.96		

The table 3 indicated that mean value of of Basketball was 46.5, Students of Handball was 59.96, Mean difference was 13.46 and t- value was 4.20 whereas tabulated -value is 2.07 at 0.05 level. It means there was significant difference between vertical jump of Basketball and Handball students of Inter university level

Table – 4

Mean, Mean difference and 't' value of flexibility male players of Basketball, and Handball games

Test	Group	Mean	Mean difference	' t '
flexibility	Basketball	56.08	13.91	3.03*
	Handball	42.17		

The table 4 indicated that mean value of of Basketball was 56.08, Students of Handball was 42.17, Mean difference was 13.91 and t- value was 3.03 whereas tabulated -value is 2.07 at 0.05 level. It means there was significant difference between flexibility of Basketball and Handball students of Inter university level

### 6. Discussion :

The information made possible by the evidence obtained from the analysis and analysis of the data In terms of agility and flexibility, the players in the basketball team performed better and at a higher level than the handball team.

While the subjects of the handball sports group performed a higher level of meaning than the basketball sports group in jumping reach and 50 times faster running. In terms of general health benefits in terms of physical fitness Basketball players were more alert and attentive than handball players. Basketball players and handball players worked hard as part of their daily routine. Included in the basic components of physical fitness that are naturally different. In which handball players jump and play the game with speed. Which is more common in handball? In basketball, the ball has to be played with a dribble Agility is more common.

## **7. Conclusion :**

With the expanding horizons of science and the development of electronics, today's people are living a very simple and sedentary life. The daily routine of human beings contributes to their natural physical fitness. At that time, the importance of physical education and sports has increased a lot. Games can be developed using research done in other sports, using research done in other sports. Today, due to the use of computer, internet, audio audio-visual tools in research, a lot of research is being done to shed light on effective education in the society.

Today physical fitness is a part of the whole fitness. Overall fitness includes physical fitness, social fitness and regularity fitness. We believe that a person who has more physical fitness is more powerful to do more work. Thus Russian pundit Powell Alexander states that first sport and then science (Fist Sport and Then Science) In today's age of machines, if exercise activities are banned, the health of the people will deteriorate. Disruption of body health, mental health, regularity, vision of life shaping future people - All these standards come down and people experience serious obstacles in personality development. Thus, physical education was adopted as a compulsory subject in Soviet schools.

In this study, 12 players from the basketball and handball sports group of Gujarat Vidyapith Ahmedabad were selected as subject matter and their age ranged from 17 to 25 years as per the college list. Basketball and handball sports group activity such as 50 yard fast running, Agility flexibility and jump reach were converted from raw scores to standard scores. In this study, the "t" test scale was used to compare the four aspects and its level of meaning was chosen to be 0.05.

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