



A COMPARATIVE STUDY ON REACTION TIME ABILITY BETWEEN HANDBALL AND BASKETBALL PLAYERS

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ABSTRACT

The main purpose of the study was to compare the Reaction time between Handball and Basketball Player. For this purpose, the investigator had selected 20 Handball players and 20 basketball players of Akola city who had participated in state level tournaments. The age of the subjects were ranged from 16 to 19 years. The purposive sampling technique was used to select the subjects. Ruler Drop Test is used to collect the data. Statistical analysis shows that, the mean value of the Reaction Ability of Handball player is 14.822 and Basketball players are 15.576. There is a mean difference of 0.754. The result shows that Handball players are having good Reaction Ability compare to the Basketball players. The obtained t - value is 2.874 and tabulated value is 1.686 at 0.05 level of significance of 38 degree freedom. The Obtained value is greater than tabulated value, so there is a significant difference between the Reaction Ability of Handball and Basketball Players. Hence, Hypothesis was accepted and it is concluded that there is significant difference found in the Reaction Ability of Handball and Basketball Players.

KEYWORDS: Reaction Time, Ruler Drop Test, Handball, Basketball Players.

INTRODUCTION:

Reaction time is the capability to reply quickly to a stimulus and initiate a reaction. This is essential in maximum sports and daily existence also. For example, a handball goalkeeper saving a penalty shot or in athletics a dash begin. Additionally, in different sports activities, there are a few positions that need faster reaction times than others. This makes the potential to reply quick to a stimulus than others. Reaction time is related to overall performance because

it's miles used regularly in diverse carrying situations. Reaction time influence sports activities performance, and the better your response time, the higher you will carry out in positive situations in sports activities. For instance, a basketball player who has a faster reaction time may be capable of reply quicker when his opponent tries to overcome him.

In all sports, the excellent gamers have to fast identify a play and react exactly. But response time capacity is vital in handball and basketball



also, because performs increase quickly. Regardless of your role at the team, the quicker you are capable of react to any conditions, the better your possibilities of creating the play.

Handball & basketball are maximum popular sports in the globe. It is fast, brief and competitive. They are considered as again-breaking games because the games goals a high level of fitness in addition to intelligence and alertness of mind, pace, agility, jumping capability, reaction ability which are the basic qualities for the players.

OBJECTIVES OF THE STUDY:-

The main purpose of the study was to find out and to compare the reaction ability between handball and basketball Players.

SIGNIFICANCE OF THE STUDY:-

- 1.The study may helps to find out and to compare the reaction ability between handball and basketball Players.
- 2.The study may help the coaches, physical education teachers to understand the reaction ability between handball and basketball Players.
- 3.The study may helpful for sportsmen for developing their reaction ability.
- 4.The study may suggest to the coaches to prepare their training schedule as per the need of the game.

HYPOTHESIS:-

It was hypothesized that there would be significant difference between reaction ability among handball and basketball Players.

SAMPLING PROCEDURE:-

The samples for the present study consists of 20 male handball players and 20 male basketball Players of Akola city between the age group of 16 to 19 years who have taken part in the state level sports tournaments.

Tool:-

Ruler Drop Test is used to collect the data.

Collection of Data:-

The facts had been collected on forty male state level players by administrating Ruler Drop Test.

PROCEDURE OF DATA SERIES:-

- The ruler is held by means of the assistant between the outstretched index finger and thumb of the athlete's dominant hand, so that the pinnacle of the athlete's thumb is level with the 0 centimetre line on the ruler.
- The assistant instructs the athlete to trap the ruler as quickly as feasible after it has been released.
- The assistant releases the ruler and the athlete catches the ruler among their index finger and thumb as quick as viable
- The assistant is to file distance between the lowest of the ruler and the pinnacle of the athlete's thumb where the ruler has been stuck.
- The take a look at is repeated 2 greater times and the common cost used in the assessment.

Statistical Analysis:-

The following statistical techniques were used to investigate the received data. To find out whether there has been any good significant difference between reaction ability among handball and basketball Players, the independent 't' ratio turned into used. The degree of significance become set at 0.05 degree.

Data Interpretation:-

The result of the study is presented in the following Table.

Table No. 1
Statistical Analysis of Reaction Ability of Handball and Basketball Players

Sr. No.	Game	Mean	S.D.	S.E.	Mean Difference	t value	P value
1	Handball	14.822	0.799	0.179	0.754	2.874	.003
2	Basketball	15.576	0.858	0.192			
Tabulated 't' ratio=1.686			Degree of freedom=38			Significant Level= 0.05	

Graph-1
Illustration Showing Statistical Analysis of Reaction Ability of Handball and Basketball Players

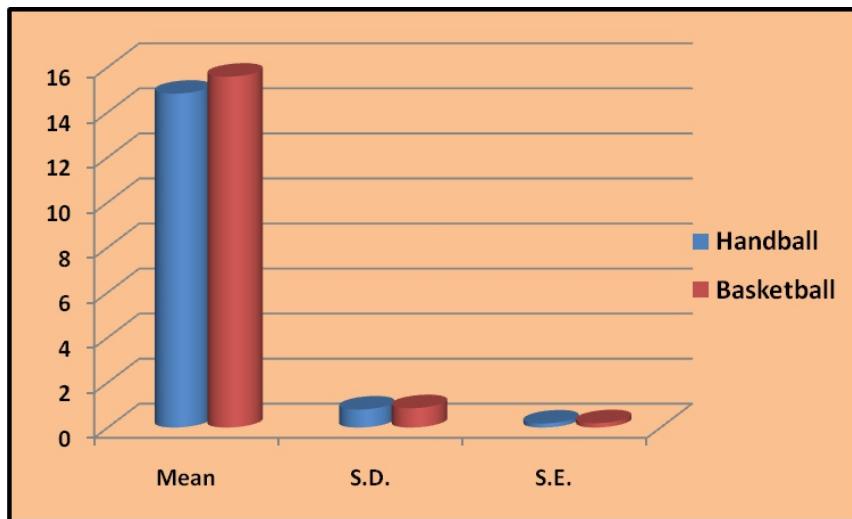
**RESULT AND FINDINGS OF THE STUDY:-**

Table No. 1 indicates that the mean value of the Reaction Ability of Handball player is 14.822 and Basketball players is 15.576. There is a mean difference of 0.754. The result shows that Handball players are having good Reaction Ability compare to the Basketball players. Standard Deviation of Handball and Basketball players is 0.799 and 0.858 respectively, whereas the obtained t - value is 2.874 and tabulated value is 1.686 at 0.05 level of significance of 38 degree freedom. The Obtained value is greater than tabulated value, so there is a significant difference between the Reaction Ability of Handball and Basketball Players.

Hypothesis Testing :

There is a significant difference found in the Reaction Ability of Handball & Basketball Players. So that hypothesis is accepted.

CONCLUSION:-

Therefore, it could be concluded that the Reaction Ability of Handball players was found to be better than the Basketball players.

RECOMMENDATIONS:-

It is recommended that Handball & Basketball players should accept better training for Reaction Ability to enhance the overall performance. Similar research may be governed in exclusive sports and games.

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