



## Comparative Study on Explosive Power and Speed between Basketball and Handball Players

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### Abstract

*The purpose of the study was to compare the explosive power and speed between basketball and handball players. For the purpose of the study, twelve players from each game namely basketball and handball players from St. Johns Hr. Sec.School, Palayamkottai, were purposely selected as subjects and their age ranged from 15 to 18 years. Players who represented interschool level tournaments were selected for this study. The explosive power and speed were selected as criterion variables. The data were collected on two consecutive days by using standardized test items. The data collected through the administration of the tests from the subjects were analyzed statistically through independent 't' test technique at .05 level of confidence. On the basis of the findings of the study the following conclusions were drawn. There is no significant difference in Explosive power for Basketball and Handball players. There is no significant difference in Speed for Basketball and Handball players.*

*Keywords: Explosive power, Speed, basketball, handball*

### Introduction

#### Purpose of the Study

The purpose of the study is to compare the explosive power and speed between Basketball and Handball players.

## Selection of Subjects

The purpose of the study was to compare the explosive power and speed between school level Basketball and Handball. To achieve the purpose of the study, 12 Basketball and 12 Handball players were selected from P R William Higher Secondary School Kattakada, were purposely selected as subjects. Their age ranged from 15 to 18 years.

## Selection of Variables

Into consideration of the feasibility criteria of the availability of the instrument and relevance of the variable to the present study.

The following variables were selected

### Independent variables

1. Explosive power
2. Speed

### Dependent variables

1. Basketball
2. Handball

**Table I Test Items and Measuring Variables**

S.No.	Criterion Variables	Test Items	Unit of Measurement
1	Explosive power	Standing broad jump	In meter
2	Speed	50 Meters Run	In Seconds

## Statistical Technique

To compare the explosive power and speed between Basketball and Handball players, independent t'. In all cases, 0.05 level of significance was used to test the hypothesis.

## Analysis of Data

### Explosive Power

The analysis of independent 't'-test on the data obtained for strength of Basketball and Handball players have been analyzed and presented in Table II.

**Table II Summary of Mean and Independent ‘T’ Test For the Basketball and Handball Players on Explosive Power**

Group	Number	Mean	Standard Deviation	‘t’ –Value
Basketball	12	1.76	.158	1.055
Handball	12	1.84	.192	

(Explosive power scores in Meters)

(Table value required for significance at .05 level for ‘t’-test with df 22 is 2.07).

From the table mean values obtained for the basketball and handball players were 1.76 and 1.84 respectively and the ‘t’ test value between the means was 1.055. Since the obtained’ test value of 1.055 was lesser than the table value of 2.07 with df 22 at .05 level of confidence, it was concluded that the basketball and handball players had no significant difference in the performance of Explosive power. However, the basketball players were found no difference in Explosive power when compared to handball players.

### Speed

The analysis of independent ‘t’-test on the data obtained for speed of Basketball and Handball players have been analyzed and presented in Table III.

**Table III Summary of Mean and Independent ‘T’ Test For the Basketball and Handball Players on Speed**

Group	Number	Mean	Standard Deviation	‘t’ –Value
Basketball	12	7.22	.442	1.785
Handball	12	6.90	.158	

(Speed scores in Seconds)

(Table value required for significance at .05 level for ‘t’-test with df 22 is 2.07).

The table IV the mean values obtained for the basketball and handball players were 7.22 and 6.90 respectively and the 't' test value between the means was 1.785. Since the obtained 't' test value of 1.785 was lesser than the table value of 2.07 with df 22 at .05 level of confidence, it was concluded that the basketball and handball players had no significant difference in the performance of speed. However, the basketball players were found no difference in speed when compared to handball players.

## Conclusion

On the basis of the findings of the study the following conclusion were drawn.

1. There is no significant difference in Explosive power for Basketball and Handball players.
2. There is no significant difference in Speed for Basketball and Handball players.

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