



## A COMPARATIVE ANALYSIS OF SELECTED PHYSICAL FITNESS VARIABLES BETWEEN UNIVERSITY MEN BASKETBALL AND HANDBALL PLAYERS

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### Abstract

*The purpose of the study was to compare the selected physical fitness variables between university men Basketball and Handball players. To achieve this purpose of the study, only sixty men players were selected. Among them, thirty men Basketball players and thirty men Handball players studying in the Department of Physical Education and sports sciences, Annamalai University, Chidambaram, Cuddalore District, Tamil Nadu and India with an age group of 18 to 24 years were selected at random. The following physical fitness variables such as speed and agility were selected as criterion variables. The data were collected from men Basketball and Handball players on speed and agility by using 50 mts run and shuttle run respectively. The independent 't' ratio was used to analyze the significant difference, if any between the groups. The .05 level of confidence was fixed to test the level of significance which was considered as an appropriate. The results of the study showed that there was a significant difference exist between university men Basketball and Handball players on selected criterion variables namely speed and agility.*

**Keywords:** Physical Fitness Variables, Basketball, Handball speed, agility, 't' ratio.

### INTRODUCTION

In the few decades, sports gained tremendous popularity all over the globe. The popularity of sports is still increasing at a factor pace. Sports have become an important social and culture activity of the modern world, which is being given the right place it deserve by the nations and societies of the world. Sports contribute towards the all-round development of personality, and enhance the horizons of awareness among competing sportsmen.

### METHODOLOGY

The purpose of the study was to compare the selected physical fitness variables between university men Basketball and Handball players. To achieve this purpose of the study, only sixty men players were selected. Among them, thirty men Basketball players and thirty men Handball players studying in the Department of Physical Education and sports sciences, Annamalai University, Chidambaram, Cuddalore District, Tamil Nadu and India with an age group of 18 to 24 years were selected at random. The following physical fitness

variables such as speed and agility were selected as criterion variables. The data were collected from men Basketball and Handball players on speed and agility by using 50 mts run and shuttle run respectively. The independent 't' ratio was used to analyze the significant difference, if any between the groups. The .05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

### ANALYSIS OF THE DATA

The mean, standard deviation and 't' ratio values on selected physical fitness variables between university men Basketball and Handball players have been analysed and presented below.

### SPEED

The mean, standard deviation and 't' ratio values on speed between university men Basketball and Handball players have been analysed and presented in Table I.

**TABLE I**  
**THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES BETWEEN UNIVERSITY MEN**  
**BASKETBALL AND HANDBALL PLAYERS ON SPEED**

Groups/Games	Mean	Standard Deviation	Obtained 't' ratio
University men Basketball Players	7.76	0.99	7.03*
University men Handball players	7.38	0.78	

\*Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 28 was 2.002)

The table I shows that the mean values on speed for university men Basketball and Handball players are 7.76 and 7.38 respectively. The obtained 't' ratio value on speed 7.03 which was greater than the table value required for significance with df 28 was 2.002. The results of the study showed that there was a significant difference between university men Basketball and

Handball players on speed.

#### **AGILITY**

The mean, standard deviation and 't' ratio values on agility between university men Basketball and Handball players have been analysed and presented in Table II.

**TABLE II**  
**THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES BETWEEN UNIVERSITY MEN**  
**BASKETBALL AND HANDBALL PLAYERS ON AGILITY**

Groups/Games	Mean	Standard Deviation	Obtained 't' ratio
University men Basketball Players	7.68	0.12	7.48*
University men Handball players	7.41	0.16	

\*Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 28 was 2.002)

The table I shows that the mean values on agility for university men Basketball and Handball players are 7.68 and 7.41 respectively. The obtained 't' ratio value on speed 7.48 which was greater than the table value required for significance with df 28 was 7.75. The results of the study showed that there was a significant difference between university men Basketball

and Handball players on agility.

#### **CONCLUSIONS**

1. There was significant difference between men Basketball and Handball players on speed.
2. There was significant difference between men Basketball and Handball players on agility.