



**A STUDY OF SELECTED PHYSICAL FITNESS VARIABLES OF BASKETBALL AND HANDBALL PLAYERS**

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**ABSTRACT**

*The purpose of the present study was to compare the selected physical fitness variables of Basketball and handball players. Total fifty subjects were randomly selected (Basketball players: N=25 and handball players: N=25) from Lucknow District were taken as a sample. Their age ranged between 14-18 years. Physical fitness tests were utilized to measure the selected physical fitness variables of players. For analysis of the data Mean & SD were calculated and to examine the significance difference between the group mean of different physical fitness variables, independent samples 't' test was applied, and level of confidence was set at 0.05 level. Study concluded that significant difference found between the means of selected physical fitness variables such as speed and not significant found in relation to flexibility of Basketball and handball players.*

**Keywords:** Speed, Flexibility, Basketball, Handball.

**INTRODUCTION**

Physical fitness refers to the organic capacity of the individual to perform the normal task of daily living without undue tiredness or fatigue having reserve of strength and energy available to meet satisfactorily any emergency demands suddenly placed upon him. Physical fitness is a state of well-being that comprises skill related and health-related components. Skill related physical fitness refers to an individual's athletic ability in sports such as tennis and encompasses skill-related attributes like dynamic balance, power, speed and agility; the health-related aspect is a measure of cardiovascular endurance, muscle strength, endurance, and flexibility, and body composition (Hopkins & Walker, 1988).

Physical fitness is general state of good physical health. Physical fitness is the ability to endure, beat with stand stress and carry on in circumstances where an unfit person could not continue. In order for one to be considered physically fit, heart, Lungs and muscles have to perform at a normal level for the Individual to continue feeling capable of performing an activity.

**Purpose of the study**

Purpose of this study was to compare the selected physical fitness of Basketball and Handball players.

**Subjects**

Total fifty subjects were randomly selected (basketball players: N=25 and handball players: N=25) from District of Lucknow were taken as a sample. Their age ranged between 14-18 years.

**Methodology**

For the purpose of the present study 50 players (25 Basketball and 25 Handball) from Lucknow District Prior consent from the subject as well as permission from the concerned authorities of the District was obtained. The purpose of the study was explained to the

District authorities and the subjects who in turn agreed voluntarily to undergo the testing programme.

**Criterion Measures**

The following criterion measures were under taken for the purpose of the study:

- Speed was measured with the help of 50 meter Run test.
- Flexibility was measured with the help of sit-and-reach test.

**Statistical analyses**

Values are presented as mean values and SD. Independent samples t tests were used to test if population means estimated by two independent samples differed significantly. Data was analyzed using SPSS Version 21 (Statistical Package for the Social Sciences, version 21, SPSS).

**RESULTS:**

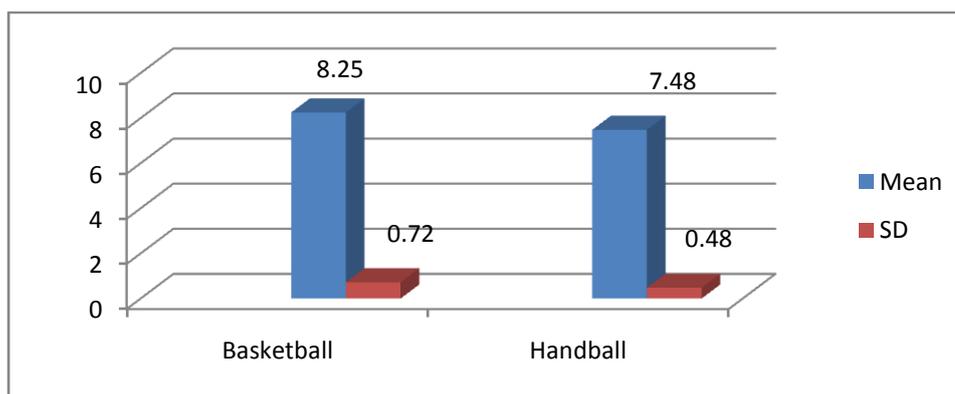
**Table-1**  
**Show the comparison of Speed of Basketball and Handball players.**

Players	N	Mean	SD	t-value
Basketball	25	8.25	.72	4.44*
Handball	25	7.48	.48	

Level of Significance .05 level, t .05 (2, 58) =2.00

The results of speed of school level Basketball and handball players are presented in table-1. Analysis of data revealed significant group differences were found for speed (4.44\*). Thus it may be concluded that the speed of Basketball and Handball players were found to be statistically significant. The graphical representation of mean Values of speed of basketball and handball player has been presented in figure 1.

**Figure-1**



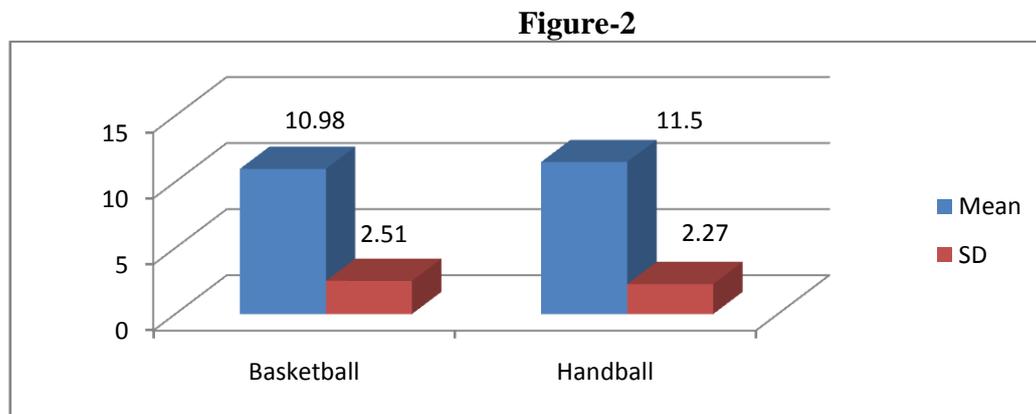
**Table-2**  
**Show the comparison of Flexibility of Basketball and handball players.**

Players	N	Mean	SD	t-value
Basketball	25	10.98	2.51	0.76
Handball	25	11.50	2.27	

Level of Significance .05 level, t .05 (2, 58) =2.00



The results of flexibility of Basketball and Handball players are presented in table-2. Analysis of data revealed no significant group difference was found for flexibility (0.96). Thus it may be concluded that flexibility of basketball and handball players were found to be statistically not significant. The graphical representation of mean Values of Flexibility of basketball and handball player has been presented in figure 2.



## DISCUSSION

Physical fitness variables are very important in both athletes and form a condition for higher performance. In the present study there was significant difference observed between the Basketball and Handball players in speed and not significant found in relation with flexibility. Different training program of both games players made these differences. The data presented in the present study carry immense practical application and should be useful in future investigations on player's selection.

## CONCLUSION

In conclusion, the present study suggests that speed of Basketball and handball players found to be statistically significant. Different training program of both games players made these differences.

## References:

- AAPHER (1965) AAPHER youth fitness test manual. Washington, DC. *American Alliance for Physical Education and Recreation*.
- Chia M (2007) Fit to play: enabling play and physical activity in children. In: *The power of movement- enhancing children's cognitive, social & emotional and physical development through movement*. Nonis K & Daswani S (eds) Pearson Education Asia, Singapore. pp: 112-128
- Kumar A and Singh N (2012) "Comparative Study of Physical Fitness of Government and Non-Government School Boys" *International Journal of Behavioural Social and Movement Sciences*. Vol.01
- Morris. (1953) "Coronary Heart Disease and Physical Activity of Work" *Canadian Journal of applied sports science* 11, 31.