



## Comparison of Selected Anthropometrical Variables between Men Basketball and Handball Players

**Dr.K.S.Shanmugasundaram**

Associate Professor, Department of Physical Education, G.T.N Arts College, Dindigul, Tamilnadu, India.

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### Abstract

*The purpose of the present study was to compare the selected physical variables between men basketball and handball players. To achieve this purpose of the study fifty players from Dindigul region, Tamilnadu were randomly selected as subjects. Among them 25 men basketball players and 25 men handball players were selected. The age of the subjects were ranged from 18 to 25 years. The following variables such as arm length and leg length were assessed by small sliding caliper were selected as criterion variables. The data was statistically analysed by using independent 't' test. In all cases, the 0.05 level of confidence was fixed to test the level of significance. The result reveals that there was significant mean difference on arm length and leg length between basketball and handball players.*

**Keywords:** Basketball, Handball, Anthropometric variables.

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### Introduction

Anthropometry such is a pardon because of evaluation about physical reputation was predicted pretty naturally after consist of deliberation over body sorts then rapport concerning bodily after one's health, discharge from disease, positives physical performance then personality qualities. Presently anthropometry considers singular differences, appraises every concern supporter to his structural distinction yet determines his potentialities between the mild regarding it structural characteristics. The Handball has bought a variety of essential capabilities as player's stance then ability holding, passing, dribbling, shooting, rebounding, pivoting, screening and individual defense. Basketball is one regarding the most famous team sports activities within the world. In basketball, the appreciation over body quantity yet body proportions, especially regarding stature, arm span, or leg length, is well documented (Apostolidis et al. 2004).

### Methodology

The purpose of the present study was to compare the selected physical variables between men basketball and handball players. To achieve this purpose of the study fifty players from Dindigul region, Tamilnadu were randomly selected as subjects. Among them 25 men basketball players and 25 men handball players were selected. The age of the subjects were ranged from 18 to 25 years. The following variables such as arm length and leg length were assessed by small sliding caliper were selected as criterion variables. The data was statistically analysed by using independent 't' test. In all cases, the 0.05 level of confidence was fixed to test the level of significance.

### Results

The mean, standard deviation and 't' test values on arm length of men basketball and handball players have been analyzed and presented in Table I.

### Correspondence

**Dr.K.S.Shanmugasundaram**

shangin2004@gmail.com

Table 1. The mean, standard deviation and 't' test values between men basketball players and handball players on arm length

| Groups             | Mean   | Standard Deviation | Mean Difference | Standard Error Difference | 't' test value |
|--------------------|--------|--------------------|-----------------|---------------------------|----------------|
| Basketball Players | 108.46 | 1.93               | 4.65            | 0.55                      | 8.51*          |
| Handball Players   | 113.11 | 1.92               |                 |                           |                |

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 48 was 2.01).

The table 1 shows that the mean and standard deviation values on arm length for men basketball players and handball players were 108.46 and 113.11 & 1.93 and 1.92 respectively. The obtained 't' test value on arm length 8.51 which was greater than the table value

required for significance with df 48 was 2.01. The results of the study showed that there was a significant difference between men basketball and handball players on arm length.

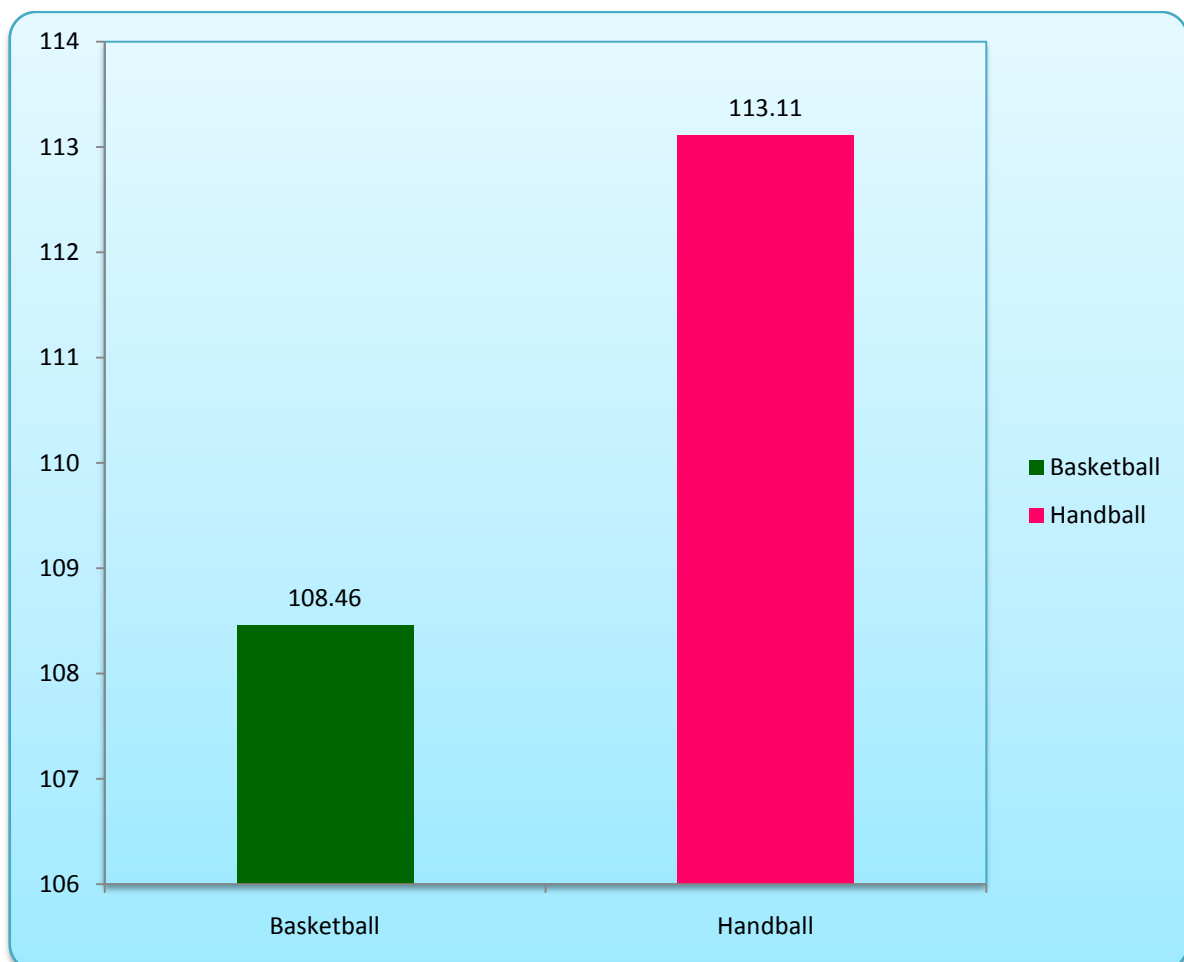


Figure I. Bar diagram showing the mean values of men basketball and handball players on arm length

Table 2. The mean, standard deviation and 't' test values between men basketball players and handball players on leg length

| Groups             | Mean   | Standard Deviation | Mean Difference | Standard Error Difference | 't' test value |
|--------------------|--------|--------------------|-----------------|---------------------------|----------------|
| basketball Players | 116.16 | 2.18               | 1.16            | 0.56                      | 2.05*          |
| handball Players   | 117.32 | 1.79               |                 |                           |                |

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 48 was 2.01).

The table 2 shows that the mean and standard deviation values on leg length for men basketball players and handball players were 116.16 and 117.32 & 2.18 and 1.79 respectively. The obtained 't' test value on leg length 2.05 which was greater than the table value

required for significance with df 48 was 2.01. The results of the study showed that there was a significant difference between men basketball and handball players on leg length.

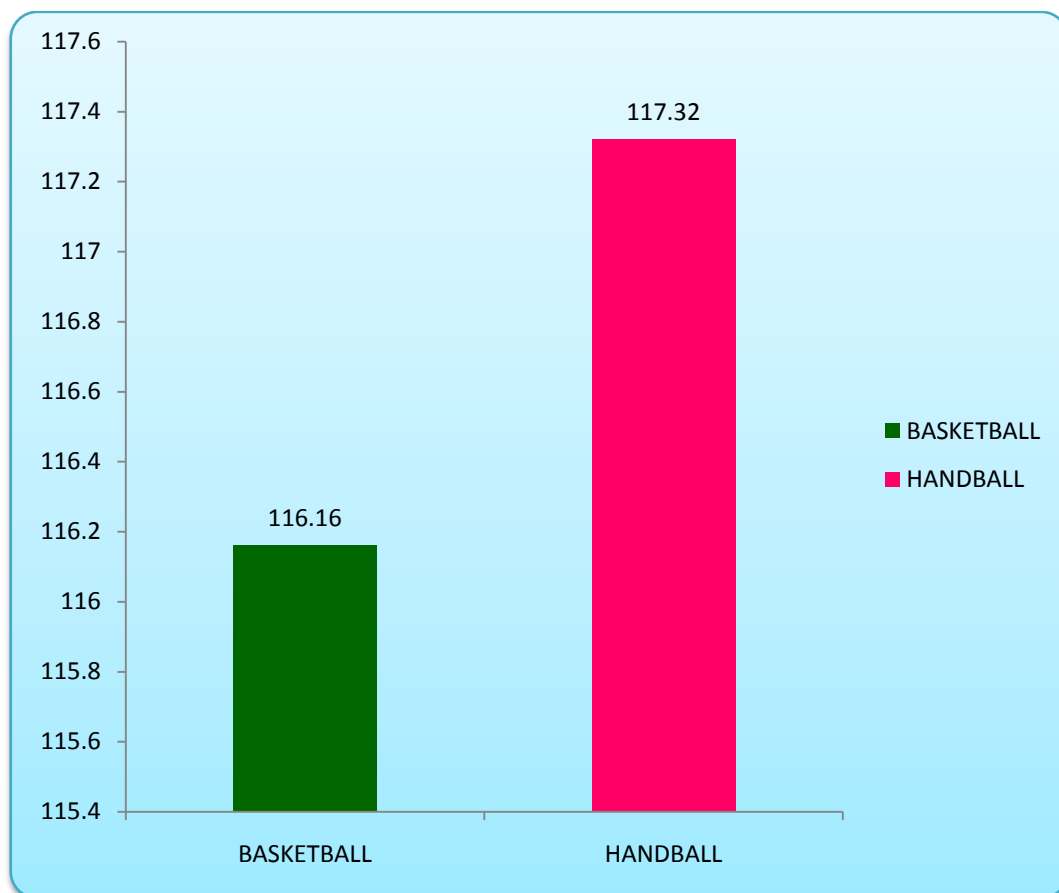


Figure II. Bar diagram showing the mean values of men basketball and handball players on leg length

### Conclusion

Based on the results of the study, the following conclusions were drawn,

1. The result reveals that there was insignificant mean difference among of men basketball and handball players on arm length.

2. The result reveals that there was significant mean difference among of men basketball and handball players on leg length.

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