



## ANTHROPOMETRICAL DIFFERENTIALS BETWEEN WOMEN BADMINTON AND BALL BADMINTON PLAYERS

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### Abstract

The purpose of the study was to compare the selected anthropometrical variables between women badminton and ball badminton players. To achieve this purpose of the study, sixty women players were randomly selected as subjects. Among them, thirty women badminton players and thirty women ball badminton players with an age between 20 to 24 years were selected. Among the anthropometrical variables, the following variables namely height and arm length were selected as dependent variables. All the subjects were tested on selected criterion variables such as height and arm length by using stadiometer and measuring tape 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 no significant difference exist between women badminton and ball badminton players on selected anthropometrical variables namely height and arm length.

**Keywords:** Badminton, Ball Badminton, Anthropometrical Variables, Height and Arm Length

### INTRODUCTION

Education is the manifestation of perfection in man. physical education is, no doubt an integral part of general education. It is an education connected with over all development of an individual, but mainly views on the development of physical fitness and participating in sports and games. Anthropometry refers to the measurement of the human individual. An early tool of physical anthropology, it has been used for identification, for the purposes of understanding human physical variation. It is the science that deals with the measurement of the size, weight, and proportions of the human body.

### METHODOLOGY

The purpose of the study was to compare the selected anthropometrical variables between women badminton and ball badminton players. To achieve this purpose of the study, sixty women players were randomly selected as subjects. Among them, thirty women badminton players and thirty women ball badminton players with an age between 20 to 24 years were selected. Among the anthropometrical variables,

the following variables namely height and arm length were selected as dependent variables. All the subjects were tested on selected criterion variables such as height and arm length by using stadiometer and measuring tape 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 anthropometrical variables between women badminton and ball badminton players have been analysed separately and presented below.

### HEIGHT

The mean, standard deviation and 't' ratio values on height between women badminton and ball badminton players have been analysed and presented in Table I.

**TABLE I**  
**THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES ON HEIGHT OF WOMEN BADMINTON AND BALL BADMINTON PLAYERS**

Groups	Mean	Standard Deviation	't' ratio
Badminton Players	157.10	1.11	1.63
Ball Badminton Players	158.06	1.13	

\*Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 58 was 2.00)

The table I shows that the mean values on height for women badminton and ball badminton players are 157.10 and 158.06 respectively. The obtained 't' ratio value on height 1.63 which was less than the table value required for significance with df 58 was 2.00. The results of the study showed that there was no significant difference between women badminton and ball

badminton players on height.

#### **ARM LENGTH**

The mean, standard deviation and 't' ratio values on arm length between women badminton and ball badminton players have been analysed and presented in Table II.

**TABLE II**  
**THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES ON ARM LENGTH OF WOMEN BADMINTON AND BALL BADMINTON PLAYERS**

Groups	Mean	Standard Deviation	't' ratio
Badminton Players	43.11	0.79	1.09
Ball Badminton Players	44.03	0.71	

\*Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 58 was 2.00)

The table II shows that the mean values on arm length for women badminton and ball badminton players are 43.11 and 44.03 respectively. The obtained 't' ratio value on arm length 1.09 which was lesser than the table value required for significance with df 58 was 2.00. The results of the study showed that there was no significant difference between women badminton and ball badminton players on arm length.

#### **CONCLUSIONS**

1. There was no significant difference between women badminton and ball badminton players on height.
2. There was no significant difference between women badminton and ball badminton players on arm length.

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