



## COMPARISON OF SELECTED ANTHROPOMETRICAL VARIABLES BETWEEN COLLEGE MEN BASKETBALL AND NETBALL PLAYERS

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### **Abstract:**

The purpose of the study was to compare the height and weight between college men basketball and netball players. To achieve this purpose of the study, sixty college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the anthropometrical variables, the following variables namely height and weight were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using stadiometer and weighing machine separately. The independent 't' ratio was used to analyze the significant difference if any between groups. The .05 level of confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered appropriate. The results of the study showed that there was a significant difference between basketball players and netball players on height and weight.

**Key Words:** Height, Weight, College Men Basketball Players, Netball Players

### **Introduction:**

The physiological demands and physical attributes required for optimal performance in sports vary significantly across different disciplines. Basketball and netball, while sharing some similarities, are distinct sports with unique requirements that may influence the height and weight of their athletes. Understanding these differences can provide valuable insights into the specific physical profiles beneficial for each sport, aiding in the development of targeted training and recruitment strategies.

Basketball is a high-intensity, dynamic sport that demands a combination of speed, agility, strength, and endurance. The nature of the game, with its emphasis on vertical leaps for rebounding and shooting, as well as the need for rapid directional changes, often favors players who are taller and possess a robust physical build. This physicality is crucial for both offensive and defensive plays, where height and reach can significantly impact a player's effectiveness on the court.

In contrast, netball, although sharing some commonalities with basketball, such as court structure and team dynamics, has different rules and gameplay that influence the ideal physique for its players. Netball places a premium on agility, quick reflexes, and precise hand-eye coordination. The sport's rule against dribbling and the requirement for players to stay within designated areas means that agility and speed are often more critical than sheer height. Nevertheless, height remains an advantageous trait for positions such as goal shooter and goal keeper.

Comparing the height and weight variables between college men basketball and netball players can reveal how these physical attributes align with the specific demands of each sport. Such a comparison can highlight the distinct athletic profiles and inform coaches and trainers about the optimal physical characteristics to develop in their athletes. Moreover, it can guide sports science research towards understanding how training regimens and nutritional plans can be tailored to enhance performance in these sports.

This study aims to analyze and compare the height and weight of college men basketball and netball players to identify significant differences and trends. By examining these variables, we can better understand the physical demands of each sport and the typical athlete profile that best suits these demands. The findings of this study will not only contribute to the academic literature on sports physiology but also have practical implications for athlete development and sports performance enhancement.

### **Methodology:**

The purpose of the study was to compare the height and weight between college men basketball and netball players. To achieve this purpose of the study, sixty college men students from Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamilnadu, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the anthropometrical variables, the following variables namely height and weight were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using stadiometer and weighing machine separately. The independent 't' ratio was used to analyze the significant difference, if any between groups. The .05 level of

confidence was fixed as the level of significance to test the 't' ratio obtained, which was considered as an appropriate.

**Analysis of the Data:**

**Height:**

The mean, standard deviation and 't' ratio values on height of basketball players and netball players have been analyzed and presented in table 1.

Table 1: The Mean, Standard Deviation and 't' Ratio Values Between Basketball and Netball Players on Height

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	184.11	1.16	6.16*
Netball Players	185.93	1.13	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table 1 shows that the mean values on height for basketball players and netball players were 184.11 and 185.93 respectively. The obtained 't' ratio value on height 6.16 which was greater than the table value required for significance with df 58 was 2.002.

The results of the study showed that there was a significant difference between college men basketball players and netball players on height.

**Weight:**

The mean, standard deviation and 't' ratio values on weight of basketball players and netball players have been analyzed and presented in table 2.

Table 2: The Mean, Standard Deviation and 't' Ratio Values Between Basketball and Netball Players on Weight

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	85.03	0.98	12.77*
Netball Players	88.07	0.86	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 58 was 2.002).

The table 2 shows that the mean values on weight for basketball players and netball players were 85.03 and 88.07 respectively. The obtained 't' ratio value on weight 12.77 which was greater than the table value required for significance with df 58 was 2.002.

The results of the study showed that there was a significant difference between college men basketball players and netball players on weight.

**Conclusions:**

- There was a significant difference between basketball players and netball players in height.
- There was a significant difference between basketball players and netball players in weight.

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