



DIFFERENTIALS BETWEEN COLLEGE MEN BASKETBALL AND NETBALL PLAYERS WITH THEIR PHYSIOLOGICAL PARAMETERS

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Abstract:

The purpose of the study was to compare the resting pulse rate and breath holding time between college men basketball and netball players. To achieve this purpose of the study, sixty men players studying in the colleges in and around Bangalore, Karnataka, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the physical fitness components, the following variables namely resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using radial pulse and holding the breath for time. 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. The results of the study showed that there was a significant difference between basketball players and netball players on resting pulse rate and breath holding time.

Key Words: Resting Pulse Rate, Breath Holding Time, College Men Basketball Players, Netball Players

Introduction:

The resting pulse rate and breath-holding time for college men basketball and netball players can vary based on several factors including individual fitness levels, training regimes, and physiological differences. Resting pulse rate typically vary among individuals based on their cardiovascular fitness levels and genetic factors. Athletes who participate in regular cardiovascular training such as basketball and netball tend to have lower resting pulse rates compared to sedentary individuals. A typical resting pulse rate for well-conditioned male athletes can range anywhere from 40 to 60 beats per minute (bpm), although some athletes may have even lower resting pulse rates.

Breath-holding time can be influenced by factors such as lung capacity, respiratory muscle strength, and tolerance to carbon dioxide buildup. Well-conditioned athletes often have greater lung capacity and respiratory muscle strength compared to non-athletes, which can contribute to longer breath-holding times. The average breath-holding time for athletes can vary widely, but it is not uncommon for trained athletes to be able to hold their breath for one to two minutes or even longer with practice and conditioning. It's important to note that these values can vary significantly among individuals, and individual testing may be necessary to determine specific resting pulse rates and breath-holding times for college men basketball and netball players. Additionally, it's advisable for athletes to consult with sports medicine professionals or certified trainers for personalized assessments and recommendations.

Methodology:

The purpose of the study was to compare the resting pulse rate and breath holding time between college men basketball and netball players. To achieve this purpose of the study, sixty men players studying in the colleges in and around Bangalore, Karnataka, India were selected as subjects at random. Among them, thirty basketball players and thirty netball players were selected. Among the physical fitness components, the following variables namely resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using radial pulse and holding the breath for time. 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:

Resting Pulse Rate:

The mean, standard deviation and 't' ratio values on resting pulse rate 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 Resting Pulse Rate

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	71.31	0.09	36.99*
Netball Players	72.08	0.07	

* 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 resting pulse rate for basketball players and netball players were 71.31 and 72.08 respectively. The obtained 't' ratio value on resting pulse rate 36.99 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 resting pulse rate.

Breath Holding Time:

The mean, standard deviation and 't' ratio values on breath holding time 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 Breath Holding Time

Groups	Mean	Standard Deviation	't' Ratio Value
Basketball Players	45.39	1.14	12.68*
Netball Players	41.54	1.21	

* 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 breath holding time for basketball players and netball players were 45.39 and 41.54 respectively. The obtained 't' ratio value on breath holding time 12.68 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 breath holding time.

Conclusions:

- There was a significant difference between basketball players and netball players on resting pulse rate.
- There was a significant difference between basketball players and netball players on breath holding time.

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