

A COMPARATIVE STUDY OF SELECTED PHYSIOLOGICAL VARIABLES BETWEEN MEN NETBALL AND HANDBALL PLAYERS

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ABSTRACT

The purpose of the study was to compare the selected physiological variables between men netball and handball players. To achieve this purpose of the study, sixty players were randomly selected as subjects. Among them, thirty men netball players and thirty men handball players with an age between 18 to 24 years were selected. Among the physiological variables, the following variables namely resting pulse rate and breath holding time were selected as dependent variables. All the subjects were tested on selected criterion variables such as resting pulse rate and breath holding time by taking radial pulse and holding the breath for time 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 a significant difference exist between men netball and handball players on selected physiological variables namely resting pulse rate and breath holding time.

Netball Players, Handball Players, Physiological Variables, Resting Pulse Rate, Breath Holding Time, Independent "T" Ratio.

INTRODUCTION

The great historical influence on contemporary physical education was the progressive education movement of the early twentieth century, integral to the education of children and youth. Progressive education was the first to recognize and to understand the vital role that physical activity. Another major influence was the growth of sport and its acceptance into the school and university curriculum. Sports participation was defined as having potentially strong educational values. Physical education also changed, moving quickly from the strong emphasis on gymnastics and fitness to one that included individual and team sports. Education through the physical was the dominant curricular philosophy for the twentieth century, and fourfold objectives of physical development such as physical, motor, mental and social development had dominated thinking in physical education.

METHODOLOGY

The purpose of the study was to compare the selected physiological variables between men netball and handball players. To achieve this purpose of the study, sixty players were randomly selected as subjects. Among them, thirty men netball players and thirty men handball players with an age between 18 to 24 years were

selected. Among the physiological variables, the following variables namely resting pulse rate and breath holding time were selected as dependent variables. All the subjects were tested on selected criterion variables such as resting pulse rate and breath holding time by taking radial pulse and holding the breath for time 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 physiological variables between men netball and handball players have been analyzed separately and presented below.

RESTING PULSE RATE

The mean, standard deviation and 't' ratio values on resting pulse rate between men netball and handball players have been analyzed and presented in Table I.

TABLE I

THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES ON RESTING PULSE RATE MEN NETBALL AND HANDBALL PLAYERS

Groups	Mean	Standard Deviation	't' ratio
Netball Players	71.25	1.12	6.54*
Handball Players	69.28	1.21	

*Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 58 was 2.05)

The table I shows that the mean values on resting pulse rate for men netball and handball players are 71.25 and 69.28 respectively. The obtained 't' ratio value on resting pulse rate 6.54 which was greater than the table value required for significance with df 28 was 2.05. The results of the study showed that there was a significant difference between men netball and handball

on resting pulse rate.

BREATH HOLDING TIME

The mean, standard deviation and 't' ratio values on breath holding time between men netball and handball players have been analyzed and presented in Table II.

TABLE II

THE MEAN, STANDARD DEVIATION AND 't' RATIO VALUES ON BREATH HOLDING TIME MEN NETBALL AND HANDBALL PLAYERS

Groups	Mean	Standard Deviation	't' ratio
Netball Players	38.29	1.23	8.23*
Handball Players	40.68	1.01	

*Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 58 was 2.05)

The table II shows that the mean values on breath holding time for men netball and handball players are 38.29 and 40.68 respectively. The obtained 't' ratio value on breath holding time 8.23 which was greater than the table value required for significance with df 28 was 2.05. The results of the study showed that there was a significant difference between men netball and handball on breath holding time.

CONCLUSIONS

1. There was a significant difference between men netball and handball on resting pulse rate.
2. There was a significant difference between men netball and handball on breath holding time.
3. Among them, men handball players have dominated in all physiological variables such as resting pulse rate and breath holding time than men netball players.

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