



Differentials on Systolic and Diastolic Blood Pressure between Offensive and Defensive Men Volleyball Players

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Received 24th May 2018, Accepted 10th June 2018

Abstract

The purpose of the study was to compare systolic and diastolic blood pressure between offensive and defensive men volleyball players. To achieve this purpose of this study, thirty men volleyball players who studied at Department of Physical Education, Annamalai University, Annamalai Nagar, Chidambaram, Tamil Nadu, India were selected as subjects and among them, fifteen offensive and fifteen defensive Volleyball players were selected. Their age ranged between 18 to 24 years. The following physiological parameters such as systolic blood pressure and diastolic blood pressure were selected as criterion variables for this study. The selected criterion variables such as systolic blood pressure and diastolic blood pressure were tested by using sphygmomanometer. The independent 't' ratio was used to analyse the significant differences between men volleyball players, if any separately for each criterion variable. The .05 level of confidence was fixed to test the level of significance. The results also showed that there was no significant difference between offensive and defensive men volleyball players on systolic blood pressure and diastolic blood pressure.

Keywords: Men Volleyball Players, systolic blood pressure and diastolic blood pressure, Independent "t" ratio.

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Introduction

A sedentary lifestyle has been associated with an increased risk for two major metabolic and endocrine disorders: obesity and diabetes. Although neither disease by itself represents a major cause of death, both are strongly associated with other disease that have high mortality rates, such as hypertension, coronary artery disease, and cancer. Furthermore millions of people have obesity, diabetes, or both. The consequences of these diseases are debilitating, and costs associated with their treatment are high.

At various times throughout human history, obesity has been thought to be caused by basic hormonal imbalances resulting from failure of one or more of the endocrine glands to properly regulate body weight. At other time, it has been believed that gluttony, rather than glandular malfunction, was the primary cause of obesity. In the first case, a person is perceived as having no control over the situation, yet in the second, he or she is held directly responsible! Results of recent medical and physiological research show that obesity can be the result of any one or combination of many factors. Its etiology is not as simple as was once believed.

Objectives

The Objectives of the present study are -

1. To compare the offensive and defensive men volleyball players on selected physiological variables.
2. To discuss about the nature of offensive and defensive volleyball players.

Methodology

The purpose of the study was to compare systolic and diastolic blood pressure between offensive and defensive men volleyball players. To achieve this purpose of this study, thirty men Volleyball players who studied at Department of Physical Education, Annamalai University, Annamalai Nagar, Chidambaram, Tamil Nadu, India were selected as subjects and among them, fifteen offensive and fifteen defensive Volleyball players were selected. Their age ranged between 18 to 24 years. The following physiological parameters such as systolic blood pressure and diastolic blood pressure were selected as criterion variables for this study. The selected criterion variables such as systolic blood pressure and diastolic blood pressure were tested by using sphygmomanometer. The independent 't' ratio was used to analyse the significant differences between men volleyball players, if any separately for each criterion variable. The .05 level of confidence was fixed to test the level of significance.

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Analysis of the data

The analysis of covariance on systolic blood pressure and diastolic blood pressure between men

offensive and defensive Volleyball players have been analyzed and presented in Table I.

Table 1

The mean, standard deviation and 't' ratio values on selected physiological between men offensive and defensive volleyball players

Variables	Groups	Mean	Standard Deviation	The Obtained 't' ratio
Systolic Blood Pressure	Offensive Volleyball Players	119.21	1.78	1.81
	Defensive Volleyball Players	117.11	1.86	
Diastolic Blood Pressure	Offensive Volleyball Players	79.26	0.98	1.63
	Defensive Volleyball Players	80.44	0.99	

(The table value required for significance at .05 level of confidence with df28 was 2.05).

Table I showed that the mean values of offensive and defensive men volleyball players on systolic blood pressure were 119.21 and 117.11 respectively. The obtained 't' ratio value of 1.81 was less than the required table value 2.05 for significance at .05 level of confidence with df28.

And also it showed the mean values of offensive and defensive men volleyball players on diastolic blood pressure were 79.26 and 80.44 respectively. The obtained 't' ratio value of 1.63 was less than the required table value 2.05 for significance at .05 level of confidence with df28.

The results of the study indicated that there was no significant difference between the offensive and defensive men volleyball players on systolic blood pressure and diastolic blood pressure.

Conclusions

1. There was no significant difference between offensive and defensive men volleyball players on systolic blood pressure.
2. There was no significant difference between offensive and defensive men volleyball players on diastolic blood pressure.

References

1. Willmore, J.H. and Costil, D.L. (1999). *Physiology of Sports and Exercise* (2nd edition), Champaign: Human Kinetics Publishers.
2. Leicht, A.S., Allen, G.D. and Hoey, A.J. (2003), "Influence of Age and Moderate Intensity Exercise Training on Heart Rate Variability in Young and Mature Adults Canadian". *Journal of Applied Physiology*, 28(3): 446-461.
3. Birsen Yavuz and Cevdet Tinazci (2009), "The Effect of Altitude on Some Physiological Parameters of Sprinters". *Journal of Sports Science and Medicine*, (Suppl. 11): 1-198.
4. Turkvich, D., Micco, A. and Reeves, J.T. (1988), "Non-Invasive Measurement of the Decrease in Left Ventricular Filling Time During Maximal Exercise in Normal Subjects", *American Journal of Cardiology*, 62: 650-652.
5. Pia Caso and Andra Antronello, D. et al. (2000), "Pulse Doppler Tissue Imaging in Endurance Athletes: Relationship Between Left Ventricular Preload and Myocardial Regional Diastolic Function". *American Journal of Cardiology*, 85: 1131-36.
6. Willmore, J.H. and Stanforth, P.R. et al. (1994), "Endurance Exercise Training has a Minimal Effect on Resting Heart Rate: The Heritage Study", *Medicine and Science in Sports and Exercise*, 28: 829-835.