

Comparison of Vo2 Max between University Levels Basket Ball and Football Players

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Abstract

Harvard step test constructed and standardized by Brouha in 1943 was administered on 20 male basketball players and 20 male football university level players of Lucknow University. The age of subjects range between 20-25 years. The purpose of the study was to compare vo2 max of basketball and football players of Lucknow University. Statistical analysis has been done by mean and standard deviation and there is no significant difference was found in the study.

KEYWORD: - VO2 max football players and basketball players.

INTRODUCTION

In the present days scenario physical fitness is in vogue, and people are becoming more and more health conscious today. It is self evident that the fit citizen are a nation's best assets and weak ones its liabilities. It is therefore the responsibility of every country to promote physical fitness of its citizens because physical fitness is the basic requirement for most of the tasks to be undertaken by an individual in his daily life.

Fitness can be measured by the volume of oxygen we can consume while exercising at our maximum capacity vo2 max is maximum amount in milliliters one can use in one minute per kilogram of body weight. Those who are more fit have higher vo2 max volume and can exercise more intensively than those who are not as well conditioned. Numerous studies show that we increase our vo2 max while working out at an intensity that raises our heart rate to between 65 and 85 percentage of its maximum for at least 20 minutes three to five times a week.

Statement of the problem:-Comparison of vo2 max between university level basketball and football players.

Objective: - The objective of the study to compare vo2 max between basketball and football university level players of Lucknow University.

Sample: - 20 basketball and 20 football players who had represented university level tournaments were selected. The average age of the subjects 20-25 years.

Methodology: - The test was administered in the laboratory of Lucknow Christian Degree College. The Harvard step test was applied with help of experts.

Data analysis and discussion: - the collected data were analyzed statistically computing mean standard deviation and t-ratio to find out significant difference. The results have been depicted in the following table:-

The mean and the standard deviation of basketball and football players in vo2 max (N=40)

GROUP	MEAN	S.D.	D.M.	D.M.*	RATIO
BASKETBALL	3.56	0.45			
FOOTBALL	3.35	0.34	0.21	0.12	1.75

*Degree of freedom

Insignificant at 0.05 level of confidence $t_{0.05(39)} = 2.028$

The above table indicates that the mean of basketball and football player on the variable of vo2 max were 3.56 (S.D. = 0.45) and 3.35 (S.D. = 0.34) respectively. The obtained 't' was 1.75 which was found to be insignificant at 0.05 level of confidence. This indicates the basketball player had higher mean than the football players.

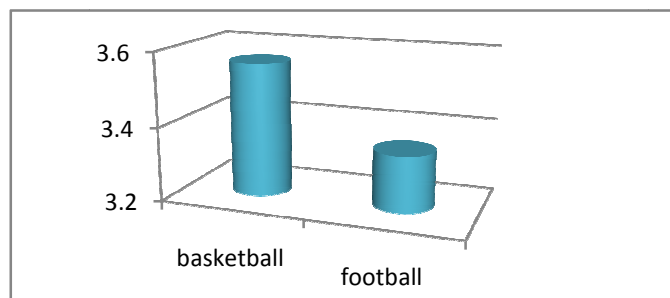


Figure: - vo2 max means of basketball and football players

Discussion of findings and conclusion: - within the limitation of the study the following conclusion may drawn.

- The vo2 max of basketball and football players do not possess significant difference between them.
- Both basketball and football players need approximate equal vo2 max.
- Study will be help full to find out the aerobic power of the football and the basketball players.

Reference

- PaulevPoul Erik, "Respiratory and cardiac responses to exercise in man" journal of applied physiology 30 (February 1971): 167.
- Costill David L, requirements during exercise in water the journal of sports medicine and physical education (June 1971).
- Dixon wrobert and A Faulkner john, cardiac output during maximum Effort running and swimming journal of applied physiology 30 (may) 653.