

Correlation between selected anthropometric measurement and interuniversity volleyball men Players volleyball playing ability

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Abstract

The performance divergence has confined the researcher to reveal the basic performance traits. The total make up of athletes does not rely on one or two components. There may be many factors that collectively contribute to the performance standard. Purpose: The purpose of the study was to know the co relation of selected anthropometric measurements in inter university men volleyball players volleyball playing ability. Methodology: To achieve the purpose of the study data was collected from 80 volleyball players who have represented their university volleyball teams in the inter University tournament. Variables considered for this study was height, weight, Leg length, Arm length, Fore arm length, and Performance Variables such as Service accuracy, Spiking, Over Head pass, and Under hand pass . Data was collected by using standardized method. Results: Data collected was treated with the product moment correlation statistical technique, the results showed that there is a significant relationship between the selected anthropometric measurements and the volleyball playing ability.

Keywords :Volleyball, Playing Ability, Anthropometric.

Introduction

The investigators in many countries are striving hard to find out the best and easiest possible means and economical methods of selecting and training their sports. Generalizations are being made on specific grounds in athletics without exception as each country is aspiring to reach the top levels so as to bring credit to the nation

The various actions in volleyball are so fast that it is difficult to justify the performance of a player without analyzing it. It is also essential to ascertain performance development of players in various factors like skills, physical, physiological, anthropometrical and psychological variables affecting performance. It also helps in comparing the opponents standard with the own team. The topmost teams in the world have come up because they have evaluated performance of their players in training and competition and have worked hard to reach world level through long term systematic and scientific training. There are many factors such as physical

fitness, anthropometrical factors level of skill experience knowledge and under standing competitive instinct and so on that contribute to a volley baler's performance. Those who have enjoyed the wonderful competition, physical and mental challenge of volleyball for quite a long time, they can realize that volleyball truly is a sport for a life time.

The performance divergence has confined the researcher to reveal the basic performance traits. The total make up of athletes does not rely on one or two components. There may be many factors that collectively contribute to the performance standard. Hence the importance must be given to all those specific result oriented factors while selecting and training in volleyball at higher level participation. The higher level performance of a volley baler does not depend only on the mastery of technical, tactical aspects alone, but also upon the anthropometric variables.

Purpose of the study

The purpose of the study was to know the influence/correlation of selected anthropometric measurements with volleyball playing ability from selected Anthropometric measurements of Inter University men volleyball players.

Methodology

To achieve the purpose of the study the data was collected from eighty volleyball men players, who participated in the Inter University volleyball tournament, were selected as subjects for this study.

Selection of Variables

For this study Anthropometric measurements such as Height, Weight, Leg length, Arm length, Fore arm length, and Performance Variables such as Service accuracy, Spiking, Over Head pass, and Under hand pass were selected .Data pertaining to anthropometric measurements anthropometric rod was used and standardized tests were used for Service accuracy, Spiking, Over Head pass, and Under hand pass.

Results:

The data collected from the subjects were treated with product moment correlation to know the relationship between the selected anthropometric measurements and the volleyball playing ability by using Statistical package for social sciences 20th version and results are presented in the following tables.

TABLE – 1
Shows the correlation between service accuracy and the selected anthropometric measurements

Sl. No.	Variables	Correlation coefficient
1.	Service accuracy and height.	.846**
2.	Service accuracy and weight.	.565**
3.	Service accuracy and leg length.	.685**
4.	Service accuracy and arm length.	.681**
5.	Service accuracy and fore arm length.	.718**

** Significance at the 0.01 level (2-tailed).

The above table number 1 indicate the serving accuracy significantly related to Height = .846, Weight = .565, Leg length = .685, Arm length = .681, Fore arm length = .718,. Therefore, it is evident that height, weight, leg length, arm length, fore arm length, contributed to serving accuracy.

TABLE – 2
Shows the correlation between spiking ability and the selected Anthropometric measurements

Sl. No.	Variables	Correlation coefficient
1.	Spiking ability and height.	.880**
2.	Spiking ability and weight.	.526**
3.	Spiking ability and leg length.	.794**
4.	Spiking ability and arm length.	.790**
5.	Spiking ability and fore arm length.	.812**

** Significance at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The above table number 2 indicate the Spiking ability significantly related to Height = .880, Weight = .526, Leg length = .794, Arm length = .790, Fore arm length = .812. Therefore, it is evident that height, weight, leg length, arm length, fore arm length contributed to Spiking ability.

TABLE – 3

Shows the correlation between over head pass and the selected anthropometric measurements

Sl. No.	Variables	Correlation coefficient
1.	Over head pass and height.	.804**
2.	Over head pass and weight.	.565**
3.	Over head pass and leg length.	.686**
4.	Over head pass and arm length.	.726**
5.	Over head pass and fore arm length.	.736**

** Significance at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed)

The above table number 3 indicate the Over head passing ability is significantly related to Height = .804, Weight = .565, Leg length = .686, Arm length = .726, Fore arm length = .736, Therefore, it is evident that height, weight, leg length, arm length, and fore arm length, contributed to Over head passing ability.

TABLE – 4

Shows the correlation between under hand pass and the selected anthropometric measurements

Sl. No.	Variables	Correlation coefficient
1.	Under hand pass and height.	.685**
2.	Under hand pass and weight.	.430**
3.	Under hand pass and leg length.	.583**
4.	Under hand pass and arm length.	.577**
5.	Under hand pass and fore arm length.	.625**

** Significance at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The above table number 4 indicate the under hand passing ability is significantly related to Height = .685, Weight = .430, Leg length = .583, Arm length = .577, Fore arm length = .625. Therefore, it is evident that height, weight, leg length, arm length, fore arm length, to under hand passing ability.

Conclusions

With in the limitation of the study, the selected anthropometric variable height, weight, leg length, arm length, fore arm length, are significantly related to volley ball playing ability. Athletic success is multifactorial and that anthropometric attributes are not the only definitive factors in athletic performance. Despite this, in a sport such as volleyball, several elements in the in anthropometric profile such as height, weight, arm length, leg length and fore arm length all can influence competitive success.

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