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Relationship of Selected Anthropometric Characteristics with Spiking Speed of Volleyball Players

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ABSTRACT

The study was under taken to seek out the correlation between selected anthropometric variables and spiking speed of the volleyball players. To achieve the purpose of this study forty eight Volleyball players were selected from Madurai district, Tamilnadu, India and their age ranged between 18 and 25. The subjects were tested on selected anthropometric variables: standing height, body weight with spiking speed. Standing height was measured by stadiometer, body weight was measured by electronic weighing machine and spiking speed was measured using Bushnell radar speed gun. The investigators were well versed in the technique of conducting the test; the investigators had a number of practice sessions in the test administration. All the measurements were taken by the investigators. The administration of tests was clearly explained to the subjects to avoid any ambiguity. To ensure the relationship between the selected anthropometric variables with spiking speed, the coefficient of correlation was used. The result reveals that the standing height and body weight were showed significant relationship with the spiking speed.

KEYWORDS: Anthropometrical Variables, Spike Speed, Volleyball

INTRODUCTION

Sports play a really prominent role within the modern society. At present, the sports competitions are highly competitive and challenging. Citizen by nature are competitive and impressive for his or her excellence altogether athletic performance. Every sportsman or nation wants to point out their supremacy by challenging other nations by showing dominance and supremacy in sporting performance in international competitions. Thus this challenge stimulates, inspires and motivates all the nations to sweat and strive to run faster, jump higher, throw far and exhibit greater strength, endurance and skills in present competitive sports world. this will only be possible through scientific, systematic and planned sports training also as channelizing them into appropriate games and sports by checking out their potentialities. Anthropometric measurements are widely implemented to assess and predict performance in various sports. Anthropometric measurements and morphological characteristics play a crucial role in determining the success of a sportsperson. It's been well established that specific physical characteristics or anthropometric profiles indicate whether the player would be suitable for the competition at the very best level during a specific sport. Volleyball player requires more explosive within the lower limbs this is often especially emphasized in the front row hitting positions when attacking on offense or blocking on defence. Vertical jump may be a major determinant of volleyball performance and lots of researchers have studied different aspects of vertical jumping and spiking. Hence this study was under taken to seek out the

correlation between selected anthropometric variables and spiking speed of the volleyball players (Gai & Li, 2002).

MATERIALS AND METHODS

To achieve the purpose of this study forty eight Volleyball players were selected from Madurai district, Tamilnadu, India and their age ranged between 18 and 25. The subjects were tested on selected anthropometric variables: standing height, body weight with spiking speed. Standing height was measured by stadiometer, body weight was measured by electronic weighing machine and spiking speed was measured using Bushnell radar speed gun. The investigators were well versed in the technique of conducting the test; the investigators had a number of practice sessions in the test administration. All the measurements were taken by the investigators. The administration of tests was clearly explained to the subjects to avoid any ambiguity. To ensure the relationship between the selected anthropometric variables with spiking speed, the coefficient of correlation was used.

RESULTS AND DISCUSSION

The results were presented in the following tables,

TABLE - I
CALCULATION OF " r " BETWEEN THE SELECTED ANTHROPOMETRIC
VARIABLES WITH SPIKING SPEED IN HOCKEY

Variable	Mean	Standard Deviation	Co-efficient of Correlation
Standing Height	170.53	± 3.81	0.67**
Body Weight	61.07	± 7.12	0.33*

* Significant at 0.05 level

An examination of above table reveals that the mean and standard deviation of the selected anthropometric characteristics were standing height (170.53 ± 3.81) and body weight (61.07 ± 7.12) respectively. The table value at 0.05 level of significance was 0.33. It reveals that there was a significant relationship between the standing height (0.67) and body weight (0.33) with hitting speed at 0.05 level of confidence.

DISCUSSION ON FINDINGS

Normally the Volleyball players were good in physique and temperament to take precedence over the opponents. From the results it was observed that standing height and body weight were showed significant relationship with the spiking speed.

CONCLUSION

From the analysis of the data, the following conclusion was drawn.

1. The result reveals that the standing height and body weight were showed significant relationship with the spiking speed.

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