



ANALYSIS OF STRENGTH AMONG WOMEN VOLLEYBALL PLAYERS IN DIFFERENT PLAYING POSITIONS

Dr. S.SUNDARARAJAN

Deputy Director of Physical Education, Anna University Sports Board, Anna University, CEG Campus, Chennai, Tamilnadu, India.

ABSTRACT

The purpose of the study was to analysis the strength among women Volleyball players in different playing positions. To achieve this purpose of the study one hundred and twenty (N=120) women Volleyball were selected. Among them, forty Spikes (n=40), Setters (n=40) and All-rounder's women Volleyball from Tamilnadu Universities who had participated in the Inter-collegiate Volleyball tournament during the year 2014-2015 were selected as subjects. The age of the subjects were ranged from 18 to 24 years. Strength was selected as criterion variable. Strength was measured by Push up Test. The data collected from the three groups was statistically analyzed by using Analysis of variance (ANOVA). Scheffe's post hoc test was applied to determine the significant difference between the paired means. In all the cases 0.05 level of confidence was fixed significance was fixed. The results of the study showed that there was a significant difference among Spikes, Setters and All-rounder's.

KEYWORDS: Spikes, Setters, All-rounder's, Strength.

INTRODUCTION

Sport and athletes have always been subjects for art. In early Greek Culture, where sport was so fundamental to social life, artists often used athletes as subjects, creating sculpture and decorating vases with athletes in action. Throughout history, artists have been intrigued by the physical beauty of the athletic body and the visual beauty of the athletic performance. Sport became the object for intellectual analysis and investigation during this century (Singh, 1991). Sport is intimate, profound and even spiritual. It reached the root of human existence and, as such, provided an area for the discovery of personal truth. Neither man alone nor did sport alone provide the completeness by existence. Sports and men, revealed to each other the opportunity of determining meaning. In this way, once again, man located a realm of value formation. It was a source of worth and meaning. Volleyball is a team sport in which two teams of six players are separated by a net. each team tries to score points by grounding a ball on the other team's court under organized rules ("volleyball" international olympic committee). it has been a part of the official program of the summer olympic games since 1964. The complete rules are extensive. but simply, play proceeds as follows: a player on one of the teams begins a 'rally' by serving the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net, and into the receiving team's court. the receiving team must not let the ball be grounded within

their court. the team may touch the ball up to 3 times but individual players may not touch the ball twice consecutively. typically, the first two touches are used to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from being grounded in their court. (Lamarache, 1980).

METHODOLOGY

To achieve this purpose of the study one hundred and twenty (N=120) women Volleyball players were selected. Among them, forty Spikes (n=40), Setters (n=40) and All-rounder's(n=40) women Volleyball from Tamilnadu Universities who had participated in the Inter-collegiate Volleyball tournament during the year 2014-2015 were selected as subjects. The age of the subjects were ranged from 18 to 24 years. Strength was selected as criterion variable and it was assessed by Push up test.

ANALYSIS OF THE DATA

The data collected from the Spikes, Setters and All-rounder's on selected Criterion variables were statistically examined by analysis of variance (ANOVA) was used to determine differences, if any among the means on selected criterion variables separately. Whenever they obtained f-ratio value was significant the Scheffe's test was applied as post hoc test to determine the paired mean differences, if any. In all the cases 0.05 level of confidence was fixed significance was fixed. The Analysis of variance (ANOVA) on Strength have been analyzed and presented in Table -1.

TABLE – 1
VALUES OF ANALYSIS OF VARIANCE ON THE MEANS OBTAINED IN FORM OF SPIKERS, SETTERS AND ALL-ROUNDER'S OF VOLLEYBALL PLAYERS ON STRENGTH

Certain Variable	Volleyball Players			Source of Variance	Sum of Squares	df	Mean Squares	'F' Ratio
	Spikers	Setters	All-Rounder's					
Strength	17.73	15.30	15.95	Between	126.05	2	63.03	12.45*
				With in	592.28	117	5.06	

* Significant at .05 level of confidence

(The table value required for Significance at 0.05 level with df 2 and 117 is 3.05)

Table-1 shows that the mean values of Spikers, Setters and All-rounder's are 17.73, 15.30 and 15.95 respectively. The obtained F-ratio value among different playing position is 12.45. The obtained F-ratio value is greater than the table value of 3.07 with df 2 and 117 required for significance at 0.05 level. Since the value of

F-ratio is greater than the table value, it indicates that there is a significant difference among the means of Spikers, Setters and All-rounder's on Strength. To find out which of the three paired means had a significant difference, the Scheffe's post-hoc test was applied and the results are presented in Table-2.

TABLE - 2
SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE PAIRED MEANS OF BETWEEN SPIKERS, SETTERS AND ALL-ROUNDER'S ON STRENGTH

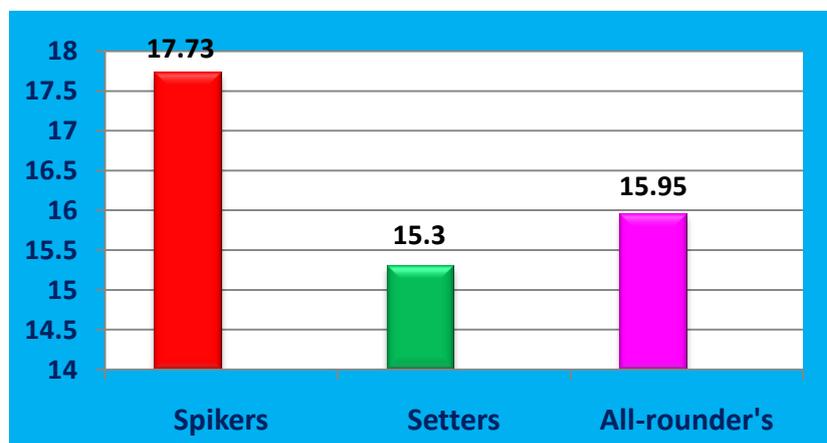
Mean Values			Mean Difference	Confidence Interval
Spikers	Setters	All-rounder's		
17.73	15.30		2.43*	0.49
17.73		15.95	1.78*	0.49
	15.30	15.95	0.65*	0.49

*Significant at 0.05 level.

Table- 2 shows that the mean difference in Strength between Spikers and setters, Spikers and All-rounder's, Setters and All-rounder's are 2.43, 1.78 and 0.65 respectively, The values are greater than the confidence interval value 0.49, which shows the significant differences at 0.05 level of confidence. The result of the study indicates that there is a difference

between Spikers and setters, Spikers and All-rounder's, Setters and All-rounder's on Strength. However, the mean values of All Rounders were found to be higher than Setters and Spikers on Strength. The mean values of Spikers, Setters and All-rounder's on Strength were graphically represented in the Figure -1.

FIGURE- 1
MEAN VALUES OF SPIKERS, SETTERS AND ALL-ROUNDER'S ON STRENGTH (IN NUMBERS)



CONCLUSION

Based on the results of the study the following conclusions were drawn.

1. There was a significant difference among women Volleyball Spikers, Setters and All Rounder's on Strength.
2. Volleyball Spikers was found to be better than the All Rounders and Setters in Strength.

REFERENCES

1. Lamarache, Robert J(1980), *Teach Yourself Volleyball*, Connecticut: Golf Digest, A. New York Time Inco.
2. Singh Hardayal, *Science of Sports Training*, New Delhi: D.V.S. Publications, 1991.