



Relationship Between Playing Ability and Motor Fitness Components for Women Volleyball Players

KEYWORDS

Speed agility and playing ability

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ABSTRACT *The purpose of the study was to find out the effect of varied methods of playing ability on selected motor fitness components of collegiate female volleyball players. To achieve the purpose of the present study, thirty female volleyball players were selected as subjects from sports University College, Chennai, during the academic year 2012-2013. The subjects were selected on a random basis. The ages of subjects were ranged from 18-25 years. The collected data were analyzed statistically by using Analysis of Pearson correlations used to determine the difference, test means on selected dependent variables separately. In all the cases, 0.05 level of confidence was fixed to test the level of significance*

INTRODUCTION:

Volleyball is an excellent all round team-sport, and it has been widely accepted as a highly competitive and recreational game throughout the world. Since its inception in 1985, it has not only developed from a slow moving game into a fast one, but also has become and spectators alike. It is interesting to note that the speed of a powerfully spiked ball in the game of volleyball is about 45 meters per second, which is much faster than the movement of the game offers a wider opportunity for the development of strength, speed, endurance, agility, neuromuscular skills, and co-ordination volleyball has an added advantage in being suitable for both sexes, regardless of age and physical ability, as it is highly adaptable. It is game easy to learn, and since there is no body-contact between opponents, there is little danger of serious injuries. The game requires only a small play area and the equipment needed is within the reach of all income groups. Because of its usefulness to both sexes, there are great opportunities for healthy and sound social contacts among men and women of all races. As a sport, volleyball has immense recreational and carry-over values and thus meets all the requirements of an ideal form of physical activity (Gozansky, 1987).

Motor fitness is a term that describes an athlete's ability to perform effectively during sports or other physical activity. An athlete's motor fitness is a combination of five different components, each of which is essential for high levels of performance.

OBJECTIVES OF THE STUDY

- To find out the speed of the volleyball players.
- To find out the agility of the volleyball players.

SIGNIFICANCE OF THE STUDY

- The study will also make addition to the already existing Knowledge of physical education and sports.
- The research will encourage the girl's population to practice Volleyball to improve speed and Agility.
- It may help the coaches and teachers to select the students and motivated them according to their fitness components towards specific game.

HYPOTHESIS

At the beginning of the study the investigator had formulated the hypothesis that there may be significant difference on motor fitness variables among women volleyball players. The findings of the study showed similar results. So the researcher's first hypothesis was accepted.

DELIMITATION

This study is delimited to 30 volleyball players who represented the collegiate team.

The study was further delimited to the motor components are:

- Speed and Agility

The study was delimited to volleyball players only.

The study was delimited to college level players only.

The study was delimited to female Volleyball players only.

LIMITATION

Variation in the performance of motor fitness due to motivation factors which might have affected the study were considered as limitation of study.

METHODOLOGY

SELECTION OF SUBJECTS

The purpose of this study was to analyze between motor fitness components and playing ability in college level volleyball players. To achieve the purpose of the study 30 volleyball players at college level were selected as subjects and their age ranged between 18 to 25 years.

The nature and importance of this study was explained to the subjects and they were expressed their willingness to participate as subjects for this study. The subjects were selected from the Tamilnadu Physical Education and Sports University Chennai.

SELECTION OF VARIABLES

The research scholar reviewed the available scientific literature pertaining to analyze selected motor fitness components and playing ability from related books, internet and journals and also discussion with the experts, feasibility of inertia, availability of equipments, instrument and the relevance of the variables for the present study. The following variables were selected

Dependent variable

- Speed
- Agility

Independent variable

Playing ability

MOTOR SKILL RELATED PHYSICAL FITNESS VARIABLES

1. Speed was measured by 50 meters Dash
2. Agility was measured by Shuttle run

ORIENTATION OF SUBJECTS

Before collection of data, subjects were oriented about the

purpose of the study. The investigator explained the test procedure in detail to the subjects. The investigator had given proper instruction to the subjects, so the subject has participated in test without raising any doubts.

ANALYSIS OF THE DATA

Speed (50 meter dash)

The analysis of independent Pearson's correlation on the data obtained for speed of volleyball players have been analyzed and presented Table -1.

TABLE I

vari-ables	Number of subjects	Mean	Standard Devia-tion	'r' value	Tabulat-ed value
Speed	30	6.49	0.41	0.38	0.35
Playing ability	30	73.47	4.79		

Showing Number of Variables, Total Number of Subjects, Mean. standard Deviation of Playingability and Speed

Significant at 0.05 level of confidence. Table value 0.35 with the DF (N-1) = (30-1) =29

The result in table that there was significant relationship between playing ability and speed since 'r' value of greater than the table 'r' value +_0.38. There was significant relationship between speed and agility since 'r' value of 0.35 was greater than the table 'r' value of 0.35.

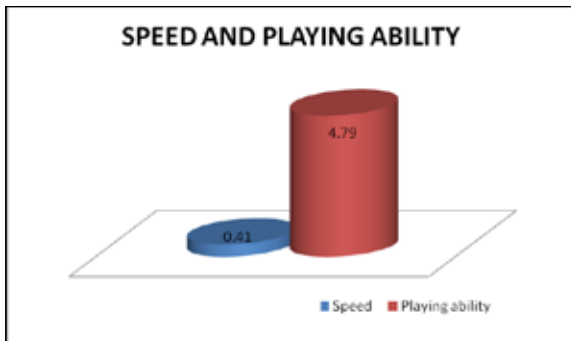


FIGURE-1 DIGRAM SHOW THE PLAYINGABILITY AND SPEED Agility (Shuttle Run)

The analysis of independent r-test on the data obtained for agility of volleyball players have been analyzed and presented in Table-2.

TABLE -2 SHOWING NUMBER OF VARIABLES, NUMBER OF SUBJECTS, MEAN, STANDARD DEVIATION OF PLAYING ABILITY AND AGILITY

variables	Number	Mean	Standard Deviation	Obtained 'r'	Required 'r'
Agility	30	10.83	0.59	0.38	0.35
Playing ability	30	73.47	4.79		

*Significant at 0.05 level of confidence. Table value 0.35 with the df (N-1) = (30-1) =29

The result in table that there was significant relationship between playing ability and agility since 'r' value of greater than the table 'r' value 0.38. There was significant relationship between speed and agility since 'r' value of 0.35 was greater than the table 'r' value of 0.35

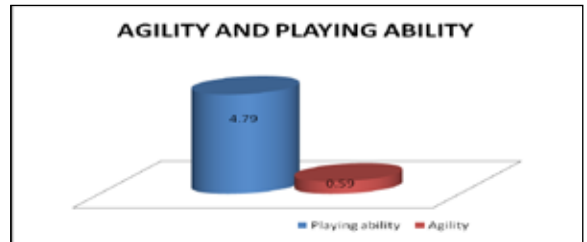


FIGURE-2 DIGRAM SHOW THE PLAYINGABILITY AND AGILITY

DISCUSSION ON HYPOTHESIS

At the beginning of the study the investigator had formulated the hypothesis that there may be significant difference on motor fitness variables among women volleyball players. The findings of the study showed similar results. So the researcher's hypothesis was accepted.

FINDINGS

The results of the study indicate that there was significant difference in speed, agility among women volleyball players.

RECOMMENDATIONS:

The subjects selected for this study were girls; hence a similar study could be conducted on boys. On the basis of the findings it can be recommended that some more additional motor fitness variables can also be included for the further study.

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