

RELATIONSHIP BETWEEN SELECTED MOTOR FITNESS VARIABLES AND PLAYING ABILITY OF VOLLEYBALL MEN PLAYERS

¹ Govindaiah H.K., ² Dr. R. Muni Reddy

¹ Research Scholar, ² Director of Physical Education (Retired)

¹ University College of Physical Education

¹ Bangalore University, Jnana Bharathi, Bengaluru 560 056, Karnataka, India

Abstract: The purpose of the study is to find out the relationship of motor fitness variables with playing ability of university Volleyball men players. Thirty Five university level Volleyball players from different universities of Karnataka who have represented at South Zone Volleyball Tournament 2018 were randomly selected as subjects for this study and their age were ranged from 18 to 25 years. With regard to motor fitness variables speed, agility, muscular strength, explosive power, flexibility and endurance were taken into consideration under the independent variables. The playing ability considered as dependent variable and it was assessed by Coaches Rated Scale on 10 point scale. Speed was assessed by 30 Meter Dash, agility was assessed by 4 x 10 Meter Shuttle Run, Muscular Strength was assessed by Bent Knee Sit Ups, Explosive Power was assessed by Standing broad Jump, Flexibility was measured by Sit & Reach Test and Cardiovascular Endurance was assessed by 1000 Meters Run/Walk. The collected data was used to find out the relationship among the selected dependent and independent variables. The Karl Pearson's Product Moment Coefficient of Correlation was used to find out the relationship between the selected variables. The level of significance was fixed at 0.05 and 0.01 levels. The results concluded that the playing ability of volleyball men players had positively correlation with agility, muscular strength, explosive power, flexibility and cardiovascular endurance variables. The motor fitness is most essential for development of playing ability of Volleyball players.

Index Terms - Relationship, Motor Fitness, Playing ability, University level men volleyball players

I. INTRODUCTION

Ball games require far reaching ability including physical, mental and tactical abilities. Among them, physical abilities of players apply checked consequences for the playing ability of the players themselves and the strategies of the group. Thusly players must have the physical and motor abilities to fulfill the need of the game.

It is important for each person to be motorly fit to play out their work ease and to partake in different exercises adequately. Motor fitness is to a great extent gained through what an individual accomplishes for his motor fitness is to a great extent. Motor Fitness lay generally with persons possess powers and the body is the vehicle through which development of fitness is accomplished. The specialized perfection in aggressive games, the healthy and productivity of the general population are the pre necessities speed, endurance, skill, power, flexibility and agility.

Volleyball is a standout amongst the most prominently played games on the world. Shockingly, the dimension of performance of the Indian volleyball players falls a long ways behind the global principles. The ability of the player to execute different techniques and strategies of volleyball skills, such as serving, passing, assaulting, and blocking proficiently and precisely, amid the amusement circumstance. The fundamental skills in volleyball are base on serving, blocking, passing, setting, hitting and digging. Volleyball players are skilled in these zones, yet the vast majority of them exceed expectations in a single specific skill. Players of all dimensions are continually searching for approaches to improve their skills. Setting, spiking, serving, passing, and blocking are troublesome skills to ace. For these takes speed, direction, position, technique, flexibility, endurance, and significantly more to overwhelm the challenge.

Arvind Bahadur Singh (2012) discover the connection between chose motor fitness factors and skill performance of ancestral women handball players and he found that defensive, passing, dribbling abilities had positive relationship with speed, agility explosive power, cardio-respiratory endurance, and flexibility of handball players. Sindhu Devi (2014) explored to know the impact of fluctuated techniques for playing ability on chose motor fitness segments of collegiate female volleyball players and results demonstrate that there exists critical relationship of playing ability with speed, agility among volleyball players. Gangey and Kerketta (2016) inspected the connection between chose motor fitness and playing ability of volleyball players of Guru Ghasidas Vishwavidyalaya, Bilaspur found that there was noteworthy relationship found in agility, coordination and reaction time with volleyball playing ability of players. From the investigations it was discovered motor fitness of players had association with playing ability of players. The fitness variable hoists the 'skills' to more elevated amounts of performance in the amusement.

Motor fitness are interrelated and dependent on the line of this announcement the analyst was sharp and wound up interested to contemplate the “Relationship between Motor Fitness and Playing Ability of Volleyball players, which will feature the significance of motor fitness on playing ability considered as indispensable and generally required by Volleyball players.

1.1 Statement of the Problem

Playing Ability in Volleyball game depends on many motor fitness factors. The objective of this study is to assess the relationship of selected motor fitness variables with playing ability of university level men Volleyball players.

1.2 Delimitation

This study is delimited to university level men volleyball players who have participated at South Zone Volleyball Tournament during 2018 from Karnataka State and selected motor fitness variables such as speed, agility, muscular strength, explosive power, flexibility and cardiovascular endurance. The subjects were selected in the age group of 18-25 years.

1.3 Limitation

The subjects were from different socio-economical conditions and their ways of living, food habits, daily routine and previous training have been not considered and the data procured from the relevant tests conducted during the university competition.

1.4 Hypothesis

There is no significant relationship between Playing Ability and selected Motor Fitness variables of university level men Volleyball players.

II. METHODOLOGY

The Descriptive Survey Method was followed. Thirty Five university level Volleyball Players from different university players of Karnataka who have represented at South Zone Volleyball Tournament 2018 were randomly selected as subjects for this study. The age of the subjects were ranged from 18-25 years. In the present study, dependent and independent variables were considered. With regard to motor fitness variables speed, agility, muscular strength, explosive power, flexibility and cardiovascular endurance were taken into consideration under the independent variables. The playing ability considered as dependent variable and it was assessed by Coaches Rated Scale on 10 point scale. Speed was assessed by 30 Meter Dash, agility was assessed by 4 x 10 Meter Shuttle Run, Muscular Strength was assessed by Bent Knee Sit Ups, Explosive Power was assessed by Standing broad Jump, Flexibility was measured by Sit & Reach Test and Cardiovascular Endurance was assessed by 1000 Meters Run/Walk. The Karl Pearson’s Product Moment Coefficient of Correlation was used to find out the relationship between the selected variables. The level of significance was fixed at 0.05 and 0.01 levels.

III. RESULTS AND DISCUSSION

The relationship of selected motor fitness variables with playing ability of University Volleyball players were ascertained by the obtained values of coefficient of correlation. The results are presented in the following table.

Table-1: Relationship of selected Motor Fitness variables (Speed, Agility, Muscular Strength, Explosive Power, Flexibility and Cardiovascular Endurance) with Playing Ability of University level men volleyball players (N=35, df=33).

Dependent Variable	Independent Variable Motor Fitness	Mean	Standard Deviation	‘r’ value and Sig. level
Playing Ability (M=79.257; SD=4.749)	Speed	6.843	0.240	0.029 ^{NS}
	Agility	11.368	0.219	-0.398*
	Muscular Strength	34.257	5.014	0.410*
	Explosive Power	2.160	0.136	0.337*
	Flexibility	24.343	4.820	0.342*
	Cardiovascular Endurance	4.685	0.385	-0.381*

* Significant at 0.05 level.

From the above table it shows that playing ability of the Volleyball players was correlated with selected motor fitness variables. The table clearly reveals that there is correlation of playing ability with agility, muscular strength, explosive power, flexibility and cardiovascular endurance since the obtained 'r' values -0.398, 0.410, 0.337, 0.342 and -0.381 are greater than the table value of 0.325 at 0.05 level of significance. The motor fitness variables such as muscular strength, explosive power and flexibility are positively correlated with playing ability of volleyball players and agility and cardiovascular endurance are negatively correlated with playing ability of volleyball players. This may be due agility and cardiovascular endurance scores in time, lesser time will be best performance.

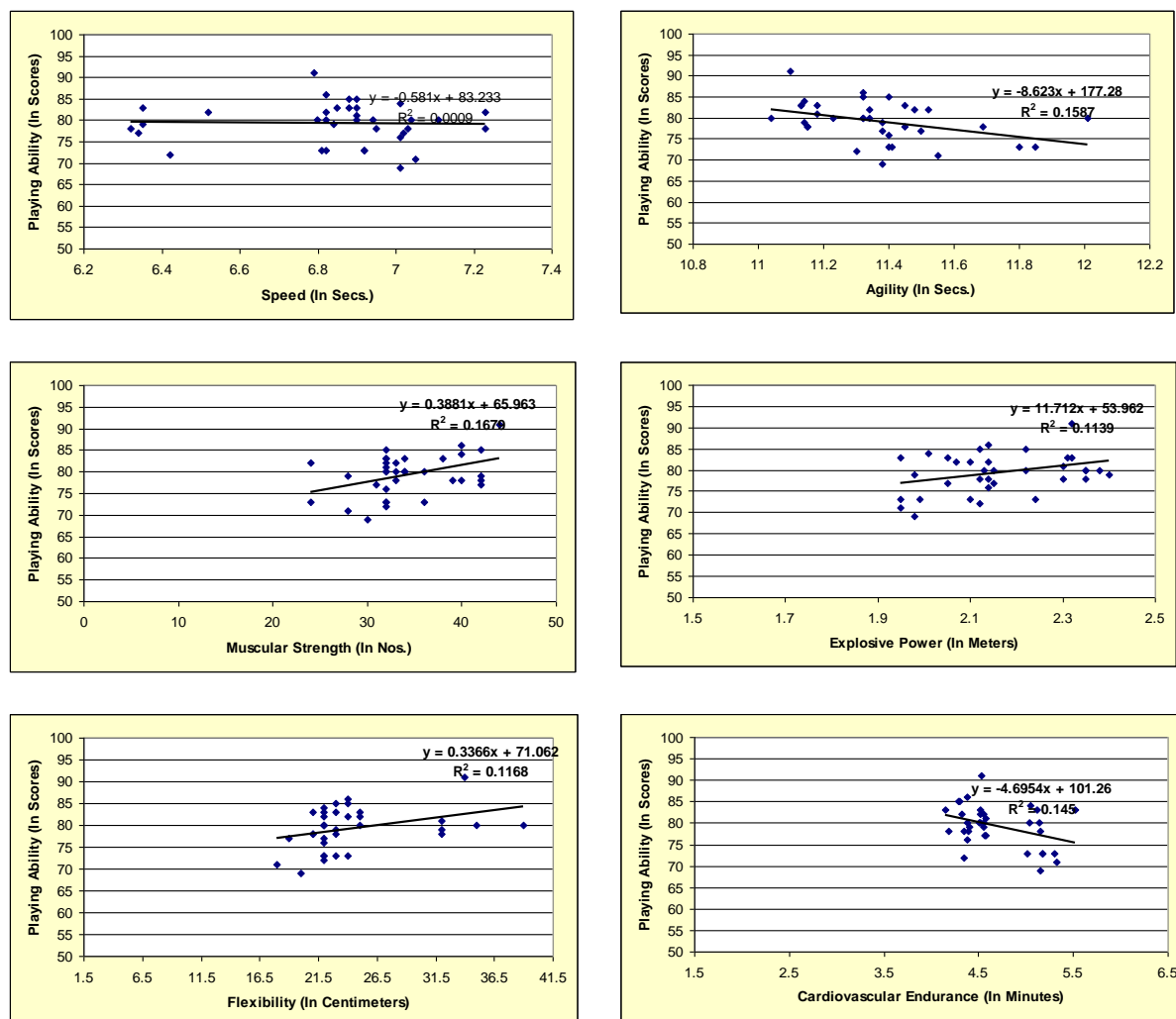


Fig.1: Scatter diagram shows relationship of motor fitness variables with playing ability of volleyball players

IV. DISCUSSION OF RESULTS

The results of the study showed that there was significant correlation between selected motor fitness variables and playing ability of Volleyball players except speed. Every game needs particular fitness and skills, which are necessary for success in the competition. The fitness components required to differ as per the demands of the skills and the game type. Volleyball is indigenous game involving varied fitness components which are important for success of game. The similar results confirmed with Gangey & Kerketta (2016); Sindhu Devi (2014) and Singh (2012) they found that motor fitness variables showed significant relationship with playing ability of male and female volleyball players of different Universities of varied States. The motor fitness and playing ability can be improved by practicing volleyball skills, drills with resistance training.

V. CONCLUSION

It was found that there was significant correlation of playing ability with selected motor fitness variables of agility, muscular strength, explosive power, flexibility and cardiovascular endurance of university level volleyball players except speed. The improvement and maintenance of these components are very important in sports training for success of volleyball game.

REFERENCES

- [1] Gangey, Omprakash and Kerketta, Inder (2016). Relationship between selected motor fitness and playing ability of volleyball players, *International Journal of Academic Research and Development*, 1(6), 25-26.
- [2] Kuljeet Kaur Gill (2012). *Statistics in Physical Education*. New Delhi: Khel Sahitya Kendra.
- [3] Prakash J, Verma (2000). *Sports Statistics*. Gwalior: Venus Publication.
- [4] Sindhu Devi V. (2014). Relationship Between Playing Ability and Motor Fitness Components for Women Volleyball Players, *Indian Journal of Applied Research*, 4(7), 465-466.
- [5] Singh, Arvind Bahadur (2012). Relationship Between Playing Ability And Selected Motor Fitness Variables Of Tribal Women Basketball Players. *International Journal of Behavioral Social And Movement Sciences*, 01(02), 1-7.