

Original Research Paper

Physical Education

SPEED AND LEG STRENGTH WITH PERFORMANCE OF SANTOSH TROPHY PLAYERS OF TRIPURA: A RELATIONSHIP STUDY

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ABSTRACT

Soccer is the game which is provides an ample of opportunity for the development of various motor abilities through multiple body actions involved on it.

Aim of the study is to find out the relationship of speed and explosive leg strength with the performance of Santosh trophy players of Tripura.

Subjects: Eighteen (18) players were selected from the Tripura soccer team those who are going to participate in upcoming Santosh Trophy -2018.

Selection of variables: Two variable i.e., speed and explosive leg strength was considered as independent variable.

Criterion Measures and Administration of Test: a) Speed was measure by 50 meter sprint test and recorded to the nearest of 1/10th of a second. b) Explosive leg strength was measured by standing broad jump recorded the nearest point in meters/centimeters.

Statistic: To fulfill the purpose of the study descriptive statistics and person's product moment correlation method were used with 0.05 level of significant.

Results: The result of the study reveals that there is insignificant relationship of speed and explosive leg strength with the performance of santosh trophy players

Conclusion: Speed and explosive leg strength with the performance of santosh trophy players was found insignificant because the soccer performance is not fully depends on speed and leg strength. There are other motor abilities also be required in game.

KEYWORDS: Speed, explosive leg strength, performance

INTRODUCTION

Every athlete has their own ambition and trying to get it. For success in competition or improvement in sports performance required a well training process. Soccer is the game where provides an ample of opportunity for the development of various motor abilities of the players through multiple body actions involved on it. Such body movement actions meet all the requirements of an excellent form of physical activity as well as performance (Dhanraj 1963). That is the reason; in all type of training schedule required proper proportion of all types motor abilities.

Apart from all other motor abilities, speed is one of the motor ability which is required almost in all sports. But it's a bit more in soccer, where players have to move all around the ground with the ball and to bit the opponent players. This doesn't mean that they need to be blazing fast, but they should be able to move at full speed when they are dribbling. Athlete speed is strongly depends on the strength, and athletes are able to perform any motor task when they apply the strength as quick as possible. Strength is a direct product of mass and acceleration which is determining the speed.

Strength is another most important component in the modern system of training. Optimum performance in all kinds of sports is depends on this ability. The athlete's strength ability is based on the functional qualities of the body that ensure his ability to overcome considerable external resistance with the most speed possible. In soccer, a player has to perform variety of skills like kicking, dribbling, passing and so on and that should be fully depends on how they are applying their strength.

Aim of the Study

The aim of the study is to find out the relationship of speed and explosive leg strength with the performance of Santosh Trophy players of Tripura.

Methodology Selection of Subjects

For the requirement of the study eighteen (18) players were selected from the Tripura soccer team those who are going to

participate in upcoming Santosh Trophy -2018.

Selection of Variables

Selected two motor variables were taken into consideration and in some extend the following variables is prerequisite to improve the soccer performance.

- a. Speed
- b. Explosive leg strength

Criterion Measures

- a. Speed was measure by 50 meter sprint test and recorded to the nearest of $1/10^{\rm th}$ of a second.
- Explosive leg strength was measured by standing broad jump recorded the nearest point in meters/centimeters.

Measuring of Soccer Performance

The soccer player's performance was measured in the following areas i.e., techniques, tactics, positioning, passing accuracy, control over the ball and playing ability by the three soccer experts. The score was recorded as the average score of the three experts.

Administration of the Test and Collection of Data

The required tests were administrated upon the santosh trophy soccer players of Tripura. All the general instruction was elaborate by the investigator before the start of the test.

50 meters sprint: The test is administrated to measure the speed of the players. Each player has to complete the test by covering the distance of 50 meters. The nearest time was recorded and it was consider as individual score.

Standing broad jump: The test is administrated to measure the explosive leg strength of the players. From the starting line, everyone to take the standing jump and cover the optimum distance. The distance covered by the players was recorded in centimeters and it was considered as individual score.

Statistical Techniques

To fulfill the purpose of the study descriptive statistics and person's product moment correlation method were used with 0.05 level of significant.

Finding of the Study

The independent variables were describe by descriptive statistics and to determine the relationship between speed and explosive leg strength with the performance of soccer players, Pearson's product moment method was used with level of significant was set at 0.05.

Findings

The soccer player's speed and explosive leg strength data were computed and presented in table-1.

Table-1 Descriptive statistics of speed and explosive leg strength

Variable	Mean
Speed	7.18
Explosive leg strength	2.25

It can be observed from table-1 that the speed and explosive leg strength of soccer players of Tripura, the mean value is 7.18 for speed and 2.25 for explosive leg strength. The mean values of two independent variables were presented in figure-1.

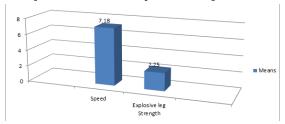


Figure No.-1: Means of Speed and Explosive Leg Strength of Santosh Trophy Players of Tripura.

Further to find out the relationship of speed and explosive leg strength with the performance of soccer players, Pearson's product moment method was used and the data were computed in table-2.

Table-2 Relationship of Speed and Explosive Leg Strength with Soccer Performance

Variable Correlated	Correlation Coefficient
Speed and Soccer Performance	-0.56
Explosive Leg Strength and Soccer	0.21
Performance	

^{*}Significant at 0.05 level, df 16

Coefficient of correlation result reveals that the relationship between speed and performance of soccer players are negative whereas the relationship of explosive leg strength and performance of soccer players are positive.

DISCUSSION ON FINDINGS

From the finding it is evident that the speed and explosive leg strength with the performance of santosh trophy players was found insignificant because the soccer performance is not fully depends on speed and leg strength. There are other motor abilities also be required in game.

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