



RELATIONSHIP OF SELECTED ANTHROPOMETRIC MEASUREMENT AND MOTOR FITNESS COMPONENTS ON SOCCER SKILL PERFORMANCES FOR SCHOOL BOYS

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Abstract

The purpose of the study was to find out the Relationship of selected anthropometric measurement and motor fitness components on soccer skill performances for School boys. To achieve this purpose of the study eighteen school men students were selected. To achieve this purpose of the study, ninety college men students of inter- school boys were tested. Eighteen players below 19 years of different schools affiliated to CBSE Board who had Inter School football team in the district football tournament were selected. The subjects for this study were oriented properly towards the performance of football. The procedure of taking measurement was also explained and demonstrated to them and trial measurements were taken. The students were motivated to gain their best during the testing period. The following statistical procedures were adopted to examine the relationship between the leg length, speed and kicking ability. The data collected were tested statistically to obtain co-efficient of correlation 'r' by raw score method. The obtained 'r' was tested for significance by comparing it with the tabulated 'r' required for significance at .05 level of confidence was fixed to test the significance, which was considered as appropriate. The results of the study revealed that there was a significant difference between relationship between the leg length, speed and kicking ability.

Keywords: Anthropometric, Motor Fitness, School Boys.

INTRODUCTION

For thousands of years man has subconsciously developed the basic instinct for play in the form of organized games and sports. Every human being require muscular activity. Every human being engaged in physical activity in one way or other during the course of life. Every body possesses physiological and psychological intrinsic needs for physical activity. Physical activity can be a very vital adjunct to health, high thinking and emotional well being. In short, exercises favour both physical and psychic health.

Physical activities and sports are serving as vehicles to achieve and maintain social relationship with other people. Play permits the person to participate and enjoy minor victories that are not attained in real life. Now a days in sports, competition is reinforcement at an international level. By demonstrating supremacy at an international level, a nation may achieve status in the eyes of others. This status may lead the nation to reinforce sports behaviour. For this reason many of them participate in sports. Competition in all fields of life especially in the field of physical education and sports have increased so much that one cannot excel the other without taking advantage of his own physic. So a person is said to be fit for an activity only if his structure confirms

it.

According to Charles A.Bucher "Physical education is an integral part of the total educational process, and is a field of Endeavour which has as its aim, the development of physically, mentally, emotionally and socially fit citizens through the medium of physical activities which have been selected with a view to realizing these out comes".

The study of physical fitness components has an important place in the field of physical education. Physical fitness is the capacity of an individual to perform a given task

According to Clarke "physically fit when capacity for performance and endurance in physical activities is great or when it is equal to his own potentiality.

Betrand Russel has stated that, "physical fitness is a safe-guard against envy because it makes life pleasant".

METHODOLOGY

The purpose of the study was to find out the Relationship of selected anthropometric measurement and motor fitness components on soccer skill performances for School boys. To achieve this purpose of the study eighteen school men students were selected. To achieve this purpose of the study, ninety college men students

of inter- school boys were tested. Eighteen players below 19 years of different schools affiliated to CBSE Board who had Inter School football team in the district football tournament were selected. The subjects for this study were oriented properly towards the performance of football. The procedure of taking measurement was also explained and demonstrated to them and trial measurements were taken. The students were motivated to gain their best during the testing period. The following statistical procedures were adopted to examine the relationship between the leg length, speed and kicking ability. The data collected were tested statistically to obtain co-efficient of correlation 'r' by raw score method. The obtained 'r' was tested for significance by comparing it with the tabulated 'r' required for significance at .05 level of confidence was fixed to test the significance, which was considered as appropriate.

The following statistical procedures were adopted to examine the relationship between the leg length, speed and kicking ability.

The data collected were tested statistically to obtain co-efficient of correlation 'r' by raw score method.

$$r = \frac{\sum xy - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2)(N\sum y^2 - (\sum y)^2)}}$$

where

XY = Correlation of x and y variables

X = Total scores of x variables

Y = Total scores of y variables

N = Total number of scores

The obtained 'r' was tested for significance by comparing it with the tabulated 'r' required for significance at .05 level of significance.

STATISTICAL ANALYSIS

TABLE -I

Correlation between playing ability and speed.

Variables correlated	Correlation coefficient	.05 level of significance r
Playing ability and speed	0.054	0.468

Table -I reveals that the obtained "r" value 0.0543 is lesser than the required "r" value at .05 level of 0.468 of significance. Hence there was no significant relationship between playing ability and speed.

TABLE -II

Correlation between playing ability and kicking ability.

Variables correlated	Correlation coefficient	.05 level of significance r
Playing ability and kicking ability	-0.4145	0.468

Table -II reveals that the obtained "r" value -0.4145 is lesser than the required "r" value of 0.468 at .05 level of significance. Hence there was no significant relationship between playing ability and kicking ability.

TABLE -III
Correlation between playing ability and leg length.

Variables correlated	Correlation coefficient	.05 level of significance r
Playing ability and leg length.	-0.182	0.468

Table -III reveals that the obtained "r" value K-0.1825 lesser than the required "r" value of 0.468 at .05 level of significance. Hence there was no significant relationship between playing ability and leg length.

TABLE IV
Correlation between speed and leg length.

Variables correlated	Correlation coefficient	.05 level of significance r
Speed and leg length	0.0269	0.468

Table -IV reveals that the obtained "r" value 0.0269 lesser than the required "r" value of 0.468 at .05 level of significance. Hence there was no significant relationship between speed and leg length.

TABLE V
Correlation between speed and kicking ability.

Variables correlated	Correlation coefficient	.05 level of significance r
Speed and kicking ability	0.578	0.468

Table -V reveals that the obtained "r" value is 0.578 is more than 0.468 the required "r" value at 0.05 level of significance. Hence there is a significant relationship between speed and kicking ability.

TABLE VI
Correlation between leg length and kicking ability

Variables correlated	Correlation coefficient	.05 level of significance r
Leg length and kicking ability	0.527	0.468

Table -VI reveal that the obtained "r" value 0.52716 is more than the required "r" value of 0.468 at .05 level of significance. Hence there is a significant relationship between leg length and kicking ability

TABLE VII
Correlation between playing ability and agility.

Variables correlated	Correlation coefficient	.05 level of significance r
Playing ability and agility	0.059	0.4693

Table -VII reveal that the obtained "r" value 0.4693 is lesser than the required "r" value at .05 level of 0.4693 of significance. Hence there was no significant relationship between playing ability and agility.

TABLE -VIII
Correlation between playing ability and throwing ability.

Variables correlated	Correlation coefficient	.05 level of significance r
Playing ability and throwing ability	-0.4791	0.489

Table -VIII reveals that the obtained "r" value -0.4791 is lesser than the required "r" value of 0.489 at .05 level of significance. Hence there was no significant relationship between playing ability and throwing ability.

TABLE IX
Correlation between speed and agility.

Variables correlated	Correlation coefficient	.05 level of significance r
Speed and agility	0.678	0.523

Table -V reveals that the obtained "r" value is 0.678 is more than 0.523 the required "r" value at .05 level of significance. Hence there is a significant relationship between speed and kicking ability.

CONCLUSIONS

Within the limitations of this study the following conclusions appeared are justified as per the results obtained.

1. The dependent variable playing ability has no significant relationship with speed.
2. The dependent variable playing ability has no significant relationship with kicking ability.
3. The dependent variable playing ability has no significant relationship with the anthropometric variable leg length.
4. The anthropometric variable leg length has no significant relationship with speed.
5. The kicking ability of the players has a significant relationship with speed.
6. The kicking ability of the players has a significant relationship with the anthropometric variable leg length.

7. The playing ability of the players has no significant relationship with agility.
8. The playing ability of the players has no significant relationship with arm length.
9. The speed of the players had significant relationship with agility.

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