

## Prediction of Football Playing Ability on Selected Physiological Variables of School Level Male Football Players



### Physical Education

**KEYWORDS :** 1. Dribbling, 2. Passing, 3. Shooting, 4. Resting pulse rate 5. breath-holding time

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### ABSTRACT

*We examined the Prediction of football playing ability on selected physiological variables of school level male football players. Various football teams participated in the Inter School Football Tournament (Zonal Level). One hundred and twenty school male football players from ten schools (n = 120) were selected. The study was formulated as a survey method design. The age of the subjects were ranged between 16 and 18 years. Motor fitness variables such as, agility, power and coordination and the skill related variables such as, dribbling, passing and shooting ability were selected variables for this study. Based on the results of the study the correlation between agility and power, coordination, dribbling, passing and shooting was high.*

### Introduction:

The skillful soccer player produces high ball velocity by maximizing angular velocities of the thigh and shank. The accuracy of kicks depends mainly on the contact area of foot with the ball. The bigger the ball the better the accuracy. Accuracy in kicking has been the highest when the velocity of the ball has been 80 % of the maximal velocity (T. Asami, 1983). The skilled players showed greater muscle relaxation of the antagonistic muscles in the swinging phase (E.C. Bollens, 1987). There was also greater peak muscle activity in the knee extensors during the swinging phase. Soccer kick is the main offensive action during the game and the team with more kicks on target has better chances to score and win a game. Dribbling is nothing more than moving with the ball across the field. It is a skill used to relocate a player into desirable positions where he can shoot or pass the ball. An efficient player knows what to do with the ball even before receiving it and can pass equally well with either foot. If controlling the ball is the most important technique, then the ability to pass the ball comes next in the technical hierarchy (M. Lyons, 2006). Motor fitness is actually broader and less definite in scope. It includes both physical fitness and motor ability and includes not only strength and endurance components but also factors of speed, power and agility. The seven components used to measure motor fitness are muscular strength, muscular endurance, circulator and respiratory, muscular power, agility, speed and flexibility (Harrison, 1983). Cureton (1979) states that motor fitness is significantly correlated with desirable psychological attributes.

### Methods:

The purpose of the study was to Prediction of football playing ability on selected physiological variables of school level male football players. Physiological variables (resting pulse rate and breath-holding time) of school level male football players. To achieve this purpose of the study, various football teams participated in the Inter School Football Tournament (Zonal Level) for boys were selected. One hundred and twenty school male football players from ten schools (n = 12), were selected.

### Statistical Tool:

The Pearson Product Moment correlation was used to find out the relationship between the selected physiological variables such as resting pulse rate, and breath-holding time and and football playing ability of various school football players. Further, the one way ANOVA was used to find out the significant difference between the selected school footballs players on selected criterion variables.

### Results:

**Table - I DESCRIPTIVE STATISTICS ON SELECTED CRITERION VARIABLES**

| Sl. No. | Variables           | Mean  | S.D.  |
|---------|---------------------|-------|-------|
| 1.      | Resting Pulse Rate  | 74.26 | 1.096 |
| 2.      | Breath Holding time | 34.58 | 5.121 |

**Table - II PEARSON PRODUCT MOMENT CORRELATION BETWEEN THE SELECTED VARIABLES**

| Dependent Variable | Variables           | 'r' value |
|--------------------|---------------------|-----------|
| Dribbling          | Resting pulse rate  | 0.18      |
|                    | Breath-holding time | - 0.260*  |
| Passing            | Resting pulse rate  | 0.045     |
|                    | Breath-holding time | 0.263*    |
| Shooting           | Resting pulse rate  | 0.116     |
|                    | Breath-holding time | 0.263*    |

### From the scores exhibited in following inferences were drawn:

1. The correlation between power and resting pulse rate was positive and  $r = - 0.509$  and it was much higher than 0.00001 ( $p > 0.01$ ) and found to be statistically significant.
2. The correlation between resting pulse rate and breath-holding time was negative and  $r = 0.104$  and it was much lower than 0.260 ( $p < 0.01$ ) and found to be statistically insignificant.
3. The correlation between resting pulse rate and dribbling was negative and  $r = 0.018$  and it was much lower than 0.0010 ( $p < 0.01$ ) and found to be statistically insignificant.
4. The correlation between resting pulse rate and passing was negative and  $r = 0.045$  and it was much lower than 0.001 ( $p < 0.01$ ) and found to be statistically insignificant.
5. The correlation between resting pulse rate and shooting was negative and  $r = - 0.116$  and it was much lower than 0.0209 ( $p < 0.01$ ) and found to be statistically insignificant.
6. The correlation between breath-holding time and dribbling was positive and  $r = - 0.260$  and it was much higher than 0.004 ( $p > 0.01$ ) and found to be statistically significant.
7. The correlation between breath-holding time and passing was positive and  $r = 0.263$  and it was much higher than 0.004 ( $p > 0.01$ ) and found to be statistically significant.
8. The correlation between breath-holding time and shooting was positive and  $r = 0.245$  and it was much higher than 0.007 ( $p > 0.01$ ) and found to be statistically significant.

### Conclusion:

It was found that the correlation between resting pulse rate, breath-holding time, dribbling, passing and shooting was high. There was a high correlation resting pulse rate, breath-holding time, dribbling, passing and shooting. The correlation between breath-holding time and dribbling, passing and shooting was high.

## REFERENCE

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