



Relationship of Body indices with Playing Ability of Football Players

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Abstract

The present study was conducted to investigate the relationship of body indices and playing ability of football players. Thirty males football player between the age group of 18-25 were selected through purposive random sampling technique from Lovely Professional University and Khalsa College Jalandhar. Training program was not given subjects. Body Indices (foot length, foot breadth, calf length, thigh length, max. thigh circumference, calf circumference, leg length) were measured by Steel Tap and Anthropometric rod. To find out the relation between body indices and playing ability (passing, dribbling, shooting) of football players, statistical technique correlation was applied. The result of the investigation showed significant improvement in one variable which was tested on 0.05 level of confidence.

Keywords: *Body indices, playing ability, Football Players*

Introduction

Anthropometric measurements pertaining to body as a whole, or a segment, there of relate to the study of body size only. The systematic quantitative representation of the human body i.e. anthropometric techniques is used to measure the absolute and relative variability in size and shape of the human body. Anthropometry is that branch of anthropology that is concerned with the taking measurement on the human body. Keogh(1999) conducted this study that physical conditioning and anthropometric measurements do play an important part in determining selection in elite junior Australian Rules football teams. American football is a fascinating sport that has drawn people from over 50 countries on all 6 continents under its spell. Anthropometrical method used independently in analysis of the player's body builds. These methods also are useful in relating body structure to both physiological and physiological functions. Jain (1988) conducted a study for comparison of selected anthropometric measurement of team games of intercollegiate male player of volleyball, basketball, football, of Indira Gandhi Institute of physical education and sports science (Delhi University). Total 90 students were randomly selected ranging from 17to22 years. The measurements like height,

weight, sitting height, leg length, calf circumferences, knee diameter, elbow diameter, upper arm circumference were taken and F-ratio was computed.

To predict superior performance in any sports, a thorough understanding of an indicate complex composed of mental, social and physical factor is very essential. Knowledge of these factors is also of great importance in matters of selection of potential athletes for a given sports before a serious training begins. A number of studies have been done in which performance regard to from various sports have been compared with some of these factors. An athlete morphology is, but one of the physical characteristics that influence top performance. Normally, a player starts taking part in a game or event without proper guidance of anthropometrical measurements. It is thus a sheer chance that his/her choice of the sport may be suitable to his inherent capabilities. Therefore, the failure to become a champion in most of the cases is inevitable. Thus this is an urgent need to provide counseling to those endowed with such suitable characteristics that from the basis of performance in a game or event.

Objectives of the study

1. The present study was conducted to found out the relationship between Lower leg-foot index and passing skill of football players.
2. To investigate the relationship between Lower leg-foot index and dribbling in football.

Method and Procedure

The present study was a descriptive type of study. In this the researcher measured the indices of Inter college level players. For the present study 30 students were taken from Lovely Professional University, Phagwara and Khalsa College Jalandhar. Purposive random sampling technique was used to select the samples for the present investigation.

Measurements Taken

The following standardized anthropometric measurements were used for research.

1. Foot Breadth (cms)
2. Foot Length (cms)

Tools Used

The following standardized instruments were used for collection of data from the laboratory of Lovely Professional University, Phagwara, Punjab.

1. Measuring Tape

Table 1.1

Correlation between Body Indices (Lower Leg-Foot Index) and playing ability (Passing)

	N	Mean	Std. Deviation	Df	Coefficient correlation
Lower Leg-Foot	30	1.6365	10.00742	28	.381
Passing		6.4667	1.99540		.381

Table value of 'r' at 0.05 level = .349

The value of correlation is .349 at 0.05 level of significance. There significant correlation is observed between body indices (Lower Leg-Foot Index)and playing ability (Passing) of Football players. So the hypothesis is accepted.

Table 1.2

Correlation between body indices (Lower Leg-Foot Index) and playing ability (Dribbling)

	N	Mean	Std. Deviation	df	Coeff correlation
Lower Leg Foot	30	1.6365	10.00742	28	- .123
Dribbling		16.9580	.96553		- .123

Table value of 'r' at 0.05 level = .349

The value of correlation is .349 at 0.05 level of significance and insignificant correlation is observe between body indices (Lower Leg-Foot Index) and playing ability (Dribbling) of football players. So the hypothesis is rejected.

Table 1.3

Correlation between body indices (Lower Leg-Foot Index) and playing ability (Shooting)

	N	Mean	Std. Deviation	df	Coefficient correlation
Lower LegFoot	30	1.6365	10.00742	28	.220
Shooting		12.8000	7.21302		.220

Table value of 'r' at 0.05 level = .349

The value of correlation is .349 at 0.05 level of significance and insignificant correlation is observe between body indices (Lower Leg-Foot Index) and playing ability (Shooting) of football players. So the hypothesis is rejected.

Discussion

Result of the present study showed significant correlation between body indices (Lower leg-foot index) and playing ability (passing) of football players. For passing in football, foot is frequently used. Hip and leg/knee must rotate outward to allow contact with ball. A study conducted by Suruchi (1999) support the results of the present investigation. The Anthropometrical variables (body weight, standing height, sitting height, by length, upper leg length, lower leg length arm length, upper arm length and lower arm length) were found significantly contributing towards the performance.

Insignificant correlation was observed between body indices (lower leg-foot index) and playing ability (dribbling) of football players. Dribbling is, perhaps the most important skill a players should have for playing football. This is the ability to carry the ball past an opponent while being is controlled, whether by using a series of simple taps or a fantastic move around a foe. The key to dribbling is to kick the ball ever so lightly with both foot without loosing control at the comfortable speed.

Insignificant correlation was observed between body indices (lower leg-foot index) and playing ability (shooting) of football players. Shooting is the important part of the football. When shooting at goal from a distance or making longer passes to team mates, shooting is used. The top of the foot where the laces are on a traditional boot is the best part of the foot to use for this kick. Soccer shooting makes up for almost 70% of scoring in soccer, the other 30% being reserved to headers, own goals and the likes. There will be three main factors that need to focus

on when shooting a soccer ball from the ground i.e. the position of supporting leg, the position of body and the way player strike the ball.

Conclusion

In the view of analysis of data of the present study it can be concluded that:

1. There was positive significant relationship between Lower leg-foot index and passing.
2. There was negative insignificant relationship observed between Lower leg-foot index and dribbling.
3. Positive insignificant relationship was observed between Lower leg-foot index and shooting.

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