ASSESSMENT OF MOTOR PERFORMANCE CHARACTERISTICS OF JUNIOR MALE SOCCER PLAYERS

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Abstract: There are a considerable number of published studies related to the kinanthropometric and physiological variables but there is little data on the motor performance of soccer players in Bolpur region according to playing level. The purpose of the present study was to assess and compare the motor performance characteristics of school level soccer players according to their playing level. Forty male soccer player of under-14 and under-16 (13.7 ±1.29 & 15.23 ±0.77) year from school sub-division level Bolpur, Birbhum were selected as subjects for the study. For the collection of data the following tests were used: abdominal muscular endurance was measured by Sit-Up test, agility was measured by right boomerang run, and lower leg muscular power was measured by vertical jump. Anthropometric measuring was carried out by using standard Stadiometer and weighing machine. To determine the differences, if any, the independent t-test was calculated. The data was processed by means of the MS Excel Data Analysis tool pack. That insignificant difference exists between the group when compared with muscular endurance (p=0.80), agility (p=1.67), and muscular power (p=0.18).The finding of the present study was that significant differences were absent between the two groups i.e.under-14 and under-16 group soccer players. The study suggested that there are anthropometric differences between the districts level soccer players but according to their motor performances significant differences were absent between the two groups of soccer players.

Key Words: Motor performance, Anthropometric, Soccer Players.

1. INTRODUCTION:

Soccer ranks as one of the most popular traditional sports in India. soccer is an extremely complicated and tactical sport. Playing football requires various skills and abilities, including endurance, agility, speed, and a technical and tactical understanding of the game. All of these aspects will be taught and improved during training sessions, but playing football also entails a substantial risk of injury. Thus, an optimal training session should also include exercises to reduce the risk of injury.

The term motor fitness was developed to describe a broad concept than physical fitness. This extensive term means the ability to perform basic motor skills efficiently and effectively. Motor fitness is an important component for an athlete in order to obtain optimal performance in sports. The level of motor abilities components is of prime 'importance for learning of various activities and perfection of different skills. Traditionally motor abilities have been viewed as a combination of factors that are basic to all moments. All the factors of motor ability are chiefly concerned with the ability of the player and his capacity of action. The level of motor ability is the prime importance for learning various general activities and perfection of different skills in various sports and physical activities.

There are a considerable number of published studies related to the kinanthropometric (Hencken and White, 2006) and physiological variables (Kalapotharakos et al., 2006),
There is little data on the motor performance of Soccer players in Bolpur region according to playing level.

2.   OBJECTIVE:

The purpose of the present study was to assess and compare the motor performance characteristics of school Soccer players according to their playing level.

3.   METHODOLOGY:

Selection of Subject:

Forty male Soccer player of under-14 and under-16 (13.7 ±1.29 & 15.23 ±0.77) year from school sub-division level Bolpur, Birbhum were selected as subjects for the study. The subjects were collected from Bolpur subdivision those who were participated in school sub-division level Bolpur.

Variables:

For the evaluation of Motor performance the chosen variables were Abdominal Muscular endurance, Agility and lower leg muscular power. For the collection of data the following tests were used: abdominal muscular endurance was measured by Sit-Up test, agility was measured by right boomerang run, and lower leg muscular power was measured by vertical jump. Anthropometric measuring was carried out by using standard Stadiometer and weighing machine. Prior to the investigation, coaches and their players had been informed about the aim of the study and its procedure. Approvals were taken from the respondents of the investigation.

4. ANALYSIS:

The basic statistical parameters were calculated for all the data: the mean, standard deviation. To determine the differences, if any, between the under-14 and under-16 Soccer player, the independent t-test was calculated. The data was processed by means of the MS Excel Data Analysis tool pack.

5. RESULT & DISCISSION:

Result of Anthropometric measurement of the under-14 and under-16 Soccer players according to the study Variables are shown in tables 1.

Table: 1 The basic descriptive statistics and the statistical significance of the difference in the means of the applied variables of under 14 and under 16 group

Variables	Under 14	Under 16	't'
Age	13.7 ±1.29	15.23 ±0.77	0.001*
Height	1.39±0.04	1.43±0.03	4.25*
Weight	32.51±4.57	36.44±1.63	4.27*

*Significant at 0.05 levels

It appears from the table-1 that the computed t-value (4.25 & 4.27) in relation to height and weight respectively was greater than the tabulated p value (2.00), at 0.05 levels. The results of the study indicated that there was a significant difference between under-14 and under-16 when compared to their height and weight.

The data on motor performance of under-14 and under-16 groups kho-kho player have been analyzed by descriptive statistics and independent 't'- test and the results are presented in table-2

Table 2 The Mean, SD and Significant Difference of motor Performance variables of the Under-14 and under-16 male Group

Variable	Under 14	Under 16	't'
Muscular endurance	12.3±2.52	12.43±1.62	0.80
Agility	14.07±0.68	13.44±1.07	1.67
Muscular Power	14.62±2.48	16.08±2.17	0.18

In Table 2, the comparison of mean of the two groups indicated that the motor performances level namely abdominal muscular endurance, agility and lower leg muscular power were lower in under-14 group than their under-16 group counterparts. The above table also presents the computed **t- value** comparing the motor performance level of the under-14 and under-16 group of Soccer players and shows that insignificant difference exists between the group when compared with muscular endurance (p=0.80), agility (p=1.67), and Lower leg muscular power (p=0.18). When compared to the mean values of both the groups, finally it has been found that under-16 group has performed well on muscular endurance, agility and vertical jump than their counterparts.

The finding of the present study was that significant differences were absent between the two groups i.e.under-14 and under-16 group Soccer players. Moreover, the homogeneity in training that the players in the under 14s and under 16s age groups undertake may also contribute to the results obtained; for example, in these age groups players participate in training on a part time basis (i.e., after school and on weekends). On the other hand the trainers and coaches may share and implement similar kind of training regimes, resulting in similar training outcomes being achieved in this age group of players or their activity or role in the game in various playing position.

6. CONCLUSION:

In summary, this paper was addressed the differences in anthropometric and motor performances of district level Soccer players of Birbhum districts. The study suggested that there are anthropometric differences between the districts level Soccer players but according to their motor performances significant differences were absent between the two groups of Soccer players. The uniformity motor performances among the players of two groups may be due to their activity in the game in various playing position and similarity in training regimen.

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