

A Comparative Study of Selected Physical Fitness Variable Between Soccer Player and Sprinters

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Abstract:

The aim of the present study was to compare the selected Physical Fitness Variables (Flexibility and Endurance) of soccer players and Sprinters (male). Total 50 Subjects were selected (25 from soccer and 25 from sprints), The age ranged from 18-25 years were taken as a sample. Physical Fitness test was used to measure the selected Physical Fitness Variables of players. For analysis of the data mean and Standard deviation were calculated and to examine the insignificant difference between the groups mean of different physical fitness variables, independent t-test was applied and level of confidence was set at 0.05 level. Study concluded that significant difference was found between the means of selected physical fitness variables such as (Flexibility and Endurance) between Soccer players and Sprinters.

Keyword: Physical Fitness, Flexibility, Endurance

1. Introduction:

Sports are the most ending activity for all human. Physical fitness indicates the level of strength of the body to perform the day-to-day chores and to overcome dealing with unexpected changes in the life.

Physical Fitness: Physical fitness is now more or less a matter of national concern. Since activity is the basis of life and human body cannot remain in normal condition without activity, efforts have to be made to make up this deficiency by providing regular physical exercise to the children during their period of education.

Flexibility: Flexibility, often also referred to as joint mobility or suppleness, can be defined as the ability to perform movement with greater range of motion or large amplitude. It is controlled partly by the energy liberation processes of the body and partly by the coordinative processes of central nervous system.

Endurance: Endurance is characterized by the maintenance of working capacity and by the degree of resistance of the organism against fatigue and against the influence of unfavorable environmental conditions. It is also characterized by the pace of recovery after a tiresome activity.

Objective of the study: The purpose of the present study was to compare the selected physical fitness variables of Soccer players and Sprinters.

Hypotheses: There will be no significant difference in Flexibility among Soccer players and Sprinters. There will be no significant difference in Endurance among Soccer players and Sprinters.

Materials and Methods:

2.1 The study was conducted on 50 male subjects, 25 form each game, The age ranged from 18-25 years.

2.2 Selection of Variables:

(A) Flexibility

(B) Endurance

2.3 Criterion Measures: The criterion measures were used to collect the data in a deal and systematic way to record in a correct unit and style for each test item.

Flexibility was measured by Sit and Reach test and score were recorded in Inches.

Endurance was measured by 600 yards run/walk test and score were recorded in Minutes.

2.4 Administration of the Tests:

2.4.1 Flexibility (Sit and Reach Test)-

Objective- To measure the flexibility of players

Equipment- Sit and Reach Stand with measuring tape

Procedure- The apparatus consisted of a box (constructed) with a measuring scale showing 23cm at the level of the feet. The box was placed against the wall. The subjects removed their shoes and assume a sitting position on the floor with legs fully extended forward with the hand placed on top of each other.

The subject sit and reaches directly forward along the measuring scale on the box. In this position, the subject stretches forward, the maximum reach on each trial with the knees fully extended and the feet still in contact with the box. The distance attained was recorded to the nearest cm. For each trial, the maximum distance reached and maintained for the (10) seconds is the measure of flexibility.

Score- To measure in Inches

2.4.2 Endurance (600-meter Run)-

Objective- To measure the endurance of the performer in running.

Equipment- Two stopwatches and clappers.

Procedure- To measure the endurance (Cardio Respiratory) the 600-meter was used. The test was conducted on a 400-meter track and one same regulation were followed as to conducted 600-meter run on the track. The subjects run 1 ½ rounds or the track and the time was recorded in minute and seconds. Subjects were given a start from a common curved line.

Score- The score was recorded in minute and seconds.

3. Statistical Techniques used-

For the present study, the mean value, standard deviation and ‘t’ test were applied to analyze of the data.

4. Result and discussion-

Table 1- Comparison of Flexibility of component of footballer and sprinters

Physical Variables	Games	N	Mean	Std. Dev.	‘t’ Value
Flexibility	Footballer	25	20.80	1.89	0.7417
	Sprinters	25	21.16	1.52	

Significant at 0.05 level.

The mean score of the flexibility of footballer 20.80 is lower than sprinters mean score 21.16. However, the t- ratios of flexibility is 0.7417. Which is not significant at 0.05 level.

Table 2- Comparison of Endurance of component of footballer and sprinters

Physical Variables	Games	N	Mean	Std. Dev.	't' Value
Endurance	Footballer	25	1.2768	0.0617	1.6967
	Sprinters	25	1.2532	0.0321	

Significant at 0.05 level.

The mean score of the Endurance of Sprinter 1.2532 is lower than Footballer mean score 1.2768. However, the t- ratios of Endurance is 1.6967. Which is not significant at 0.05 level.

Conclusion

On the basis of findings for the study the following conclusion is made that table also reveals that calculated value of flexibility and endurance are less the tabulated value. It infers that there are no significant between the flexibility and endurance of footballer and sprinters.

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