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A COMPARATIVE STUDY ON SPEED, ENDURANCE, AGILITY AND FLEXIBILITY OF SELECTED GAME PLAYERS OF SIRSA DISTRICT

Singh Baldev[1]

[1]Associate Professor, Government National College, Sirsa, (H.R)-INDIA.
E. Mail: dr.baldevcoach2k@gmail.com

ABSTRACT

The main objective of the study was to compare the speed, endurance, agility and flexibility of selected game players of Sirsa district of Punjab. 30 subjects were selected on the bases of systematic sampling method in the age group between of 18-26 years. The data was analyzed by descriptive statistics and t-test. After statistical analysis, it is observed that there was no significant different between speed, endurance, agility and flexibility of selected game players of Sirsa district of Punjab.

Keywords: Speed, Endurance, Agility, Flexibility & selected game players.

INTRODUCTION

Physical activity is defined as any bodily movement produced by skeletal muscles that result in energy expenditure. The energy expenditure can be measured in kilocalories. Physical activity in daily life can be categorized into occupational, sports, conditioning, household, or other activities. Exercise is a subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness.

Physical fitness is a set of attributes that are either health- or skill-related. Being physically fit has been defined as "the ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies" The degree to which people has these attributes can be measured with specific tests.

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Physical fitness measures are closely allied with disease prevention and health promotion, thus it is common and appropriate to measure components of physical fitness before preventive and rehabilitative programs. Physical fitness can be modified through regular physical activity and exercise. Physical fitness components have been shown to have a significant positive relationship with enhanced outcomes in physical activity, including sports participation. The term components of physical fitness refers to the several key components required to facilitate quality overall fitness. In most traditional circles, there are considered to be five general components of fitness: cardio respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition, although healthy body composition is most often a by-product of the other components, and is therefore not recognized in some circles as an actual "component" of fitness. Following the five general components of fitness are the components of "motor" fitness, which most affect athletic performance. These include muscular power, speed, balance, coordination, accuracy, and agility. Reaction time is also considered by some to be a component of motor fitness, however, some also contend that it is a type of speed, i.e. "reaction speed". Improvements in endurance, stamina, strength, and flexibility come about through conditioning/training. Training refers to activity that improves performance through a measurable organic change in the body. Concurrently, improvements in coordination, agility, balance, and accuracy are developed through practice. Practice refers to activity that improves performance through changes in the nervous system. Power and speed are adaptations of both training and practice.

HYPOTHESIS OFTHHE STUDY

It was hypothesized that there might be a significant difference of speed, endurance, agility and flexibility between the selected game players.

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DESIGN OF THE STUDY

The main objective of the study was to compare the speed, endurance, agility and flexibility of selected game players of Sirsa district of Punjab. 30 (15/15)subjects were selected on the bases of systematic sampling method in the age group between of 18-26 years. The badminton and Lawn tennis players were selected for the present study. The data was analyzed by descriptive statistics and t-test. The Descriptive statistics (mean and standard deviation) and Independent 't' test were employed using SPSS Software to compare the variables.

RESULTS AND DISCUSSION

- The comparison of the study variables between selected game players were highlighted in the table no 1.
- From the table no, 1 shown that the 30 mean values and standard deviation of Lawn-Tennis and Badminton male Players were 5.14±0.47 and 5.2±.41 respectively.
- The Sit ups values and standard deviation of Lawn-Tennis and Badminton male Players were 35.8±6.36 and 41.8±5.9 respectively.
- The Shuttle run values and standard deviation of Lawn-Tennis and Badminton male Players were 10.44±0.99 and 11.41±1.05 respectively.
- The Bridge up test values and standard deviation of Lawn-Tennis and Badminton male Players were 17.53±3.58 and 18±3.74 respectively.
- The Shoulder and wrist elevation test values and standard deviation of Lawn- Tennis and Badminton male Players were 12.86±3.24 and 14.2±3.16 respectively.

The t test calculation values of 30 M dash (0.72), Sit ups (0.01), Shuttle run (0.01), Bridge up test (0.72) and Shoulder and wrist elevation test (0.26) were less than

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the tabulated value at 5% level of significant (Table 1). Thus there were no differences of all the variables between Lawn-Tennis and Badminton male Players.

Table No 1: Table showing the comparison between Lawn-Tennis and Badminton Male Players of Sirsa

Variables	Lawn tennis		Badminton		t test
	Mean	SD	Mean	SD	
30 M dash	5.14	±0.47	5.2	±0.41	0.72
Sit ups	35.8	±6.36	41.8	±5.9	0.01
Shuttle run	10.44	±0.99	11.41	±1.05	0.01
Bridge up test	17.53	±3.58	18.0	±3.74	0.72
Shoulder and wrist elevation test	12.86	±3.24	14.2	±3.16	0.26

*Significant at 0.05 level

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