

Compare the Motor Fitness Components among Different Match Practice Group

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Abstract

Most of the games demand a higher level of speed, strength, endurance, flexibility, co-ordination and optimum fitness of organism. Although Motor Fitness is most often used synonymously with the physical fitness by the coaches but it is very important for the physical education students to understand the basic difference between physical fitness and motor fitness. The study was delimited to the male students of different match practice group of C.S.J.M.University Kanpur UP . The study was confined to the motor fitness components namely muscular strength, muscular endurance, speed, Agility and Explosive strength. The study was further delimited to Football, Hockey, Basketball, Volleyball and Track &Field. Each subject got one chance in all the test items except standing broad jump. In the other test items i.e. 50 mts dash, shuttle run, sit- ups, pull- ups and 600 mts run/walk second chance was provide in case subject made mistake in the performance of any test items. For the standing broad jump 3 chances were given and best of three was taken into consideration as a score of this subject. The distance jumped was measured with the help of steel tape. The ANOVA was applied to finding out the difference in various motor fitness components at 0.05 level of significance. In case of comparison of motor fitness among different match practice groups i.e. Hockey, Basketball, Football, Volleyball and Track and Field, the result have shown the insignificant differences therefore the hypothesis as stated earlier that there may be significant difference in motor fitness of different match practice groups was rejected.

Keywords: Motor Fitness, Volleyball, Basketball, Track & Field

INTRODUCTION

A sport is as old as the human society and it has achieved a universal status in the modern society. It now enjoys a popularity, which outstrips any other form of social activity. It has become an integral part of the educational process as physical education and sports have been included in the regular curriculum. The students are taught various games and sports in a systematic manner. Besides teaching the students are evaluated in their performance. Many people participate in games and sports for getting enjoyment besides deriving physical, mental social and emotional benefits.

Even the research findings show that high level of technique perfection done cannot produce success in competitive sports. Most of the games demand a higher level of speed, strength, endurance, flexibility, co-ordination and optimum fitness of organism

Although Motor Fitness is most often used synonymously with the physical fitness by the coaches but it is very important for the physical education students to understand the basic difference between physical fitness and motor fitness. Physical fitness is used to denote only the five basic fitness components (muscular strength, muscular endurance, cardiovascular endurance, freedom from obesity and flexibility), whereas motor fitness is a more comprehensive term which include all the ten fitness components including additional five motor performance components (power, speed, agility, balance and reaction time), which are important mainly for success in sports. In other words, motor fitness refers to the efficiency of basic movements in addition to the physical fitness .The purpose of this study was to compare the motor fitness components among different match practice group.

METHODOLOGY:

The research scholar chose 50 male students of C.S.J.M.University Kanpur UP and 10 students of each Match practice group. The study was confined to the motor fitness components namely muscular strength, muscular endurance, speed, Agility and Explosive strength of Football, Hockey, Basketball, Volleyball and Track &Field players.

The tests were administered to the subjects at their respective playgrounds by the researcher himself with the help of a few assistants. Each subject got one chance in all the test items except standing broad jump. In the other test items i.e. 50 mts dash, shuttle run, sit- ups, pull- ups and 600 mts run/walk second chance was provide in

case subject made mistake in the performance of any test items. For the standing broad jump 3 chances were given and best of three was taken into consideration as a score of this subject. The distance jumped was measured with the help of steel tape. The random group design was applied for selecting the subjects to find out the comparison of motor fitness components. The one-way analysis of variance (ANOVA) was applied to finding out the difference in various motor fitness components at 0.05 level of significance

RESULTS OF THE STUDY

The statistical analysis of the data collected on 50 male students C.S.J.M.University Kanpur UP, for the Comparison of motor fitness among different Match Practice Groups i.e. Football, Hockey, Basketball, Volleyball and Track and field are:

Table–ONE WAY ANALYSIS OF VARIANCE OF MOTOR FITNESS AMONG DIFFERENT MATCH PRACTICE GROUPS.

Source of Variance	Degree of Freedom	Sum of Squares	Mean Sum of Square	F Value	F critical
Between Groups	4	5.614	1.4035	0.19	2.57
Within groups	45	329.82	7.329		

Table – Indicate motor fitness comparison between different match practice groups i.e. Hockey, Basketball, Football, Volleyball and Track and Field which was not significant as calculated ‘f’ ratio 0.19 was less than tabulated ‘f’ ratio 2.57.

Discussion of Findings:

The statistical finding of the present study revealed that there were no significant differences among different match practice groups in relation to their motor fitness this may be attributed to the fact that all the subjects of the study are basically under graduate students of C.S.J.M.University Kanpur UP; who undergo similar activities throughout the day, apart from the match practice session of one hour. The sports groups were involved in more or less similar nature of activity and motor movements during the daily routine. They all possess similar type of motor components due to the type of exercise and movements involved basically all sports groups are team games except Track and Field and undergo similar strategies and tactical elements during their skill practices and training so the motor abilities are almost same so there was no significant difference among them. In case of comparison of motor fitness among different match practice groups i.e. Hockey, Basketball, Football, Volleyball and Track and Field, the result have shown the insignificant differences therefore the hypothesis as stated earlier that there may be significant difference in motor fitness of different match practice groups was rejected.

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