



COMPARISION OF SELECTED MOTOR FITNESS COMPONENTS OF MALE PLAYERS BELONG TO DIFFERENT TEAM GAMES

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ABSTRACT

The Purpose of the present study was to compare the selected motor fitness components in male players of different team games. . One hundred and twenty male players belong to handball, basketball, football and volleyball having equal representation of 30 subjects each team game were selected at randomly as subjects for this study. All the subjects were tested in pull-ups and 50 meter dash, to collect data for selected motor fitness components . For testing the significance of difference among the mean in selected motor fitness components of male players of different team games groups an analysis of variance was computed for each test item, separately. The analysis of variance and scheffe's test clearly revealed the difference among male players of different team games in their speed as well as arm and shoulder strength components. of motor fitness components.

Keywords:: Motor fitness, components . Male players, handball, football, basketball, volleyball

1. INTRODUCTION

Players in various games have need of optimum physical fitness. In physical education Many complexes are easily overcome by success in physical activities. In childhood and adolescence periods, most often physical inaptitude creates inferiority complex in an individual. Athletic success can help in getting rid of it and enhances ones self esteem which ultimately depends upon the degree of physical fitness of that individual⁸.

Modern age is an age of technology which inhibits physical activity. Machines are used to perform much of our work and we are forced to lead a sedentary life. Our life span is increasing but physical fitness is deteriorating. Most of our leisure time is also passed in a very inactive way sitting before television .

There are many factors which influences growth basically heredity furnishes the frame of reference for times along which growth and development takes place. Important as heredity is in the growth and development of the individual, there are wide limits within which environmental factors may become influential. Perhaps heredity does set the boundaries but environment and the impact of mature dictate how one falls within these limits. Environmental factors which can significantly influence the growth and development are: nutrition climate, outdoor living, fresh air, sunshine, exercise and rest.

The dominance of different components of motor fitness is not uniform in various activities of game and sports. There are certain activities in which speed is dominating factors, in some sports strength dominates whereas in a large number of activities endurance is limiting factors. Therefore, after assessing the variation among components of motor fitness of children, the teacher of physical education will be in a better position to group the children according to their ages for effective participation in physical education activities.

Therefore, the study of Learner is highly specific to the learning situation for the most effective assessment of the learner. Each teacher must individually measure and evaluate the characteristics and ability of the group for which he is responsible. The purpose of the present study was undertaken to compare the motor fitness components in male players of different team games

2. METHODOLOGY

2.1 Selection of Subjects

120 Male players studying in various senior Secondary School of Tribal Welfare Department of Chhattisgarh were selected randomly from handball, basketball, football and volleyball to serve as the subjects of the study. Thirty male players from each team games age ranging from 15 to 18 years were selected randomly.

2.2 Selection of Test Items

S.NO.	Tests
1.	Pull ups
2.	50 Meter Dash

2.3 Criterion Measures

1. Number of correctly executed pull-ups,
2. Time taken to run a distance of 50 meters as fast as possible recorded to the 1/10th of a second.

2.4 Scoring of Data

Number of correctly executed pull ups and time taken to ran a distance of 50 meter as fast as possible recorded 1/10th of a second, For the purpose of making comparison among various team games male players, raw scores were directly used,

2.5 Statistical Analysis

For finding out the significance of difference of means among the various age groups an analysis of variance (F ratio) was used which was followed by Scheffe's Test of post-hoc comparison »s to determine the significance of difference between paired means.

3. RESULTS

To find out the significant difference among the means in selected Motor components of various team games male players, Mean, SD and F-ratio were computed. To find which of the differences among the paired means were statistically significant, the Scheffe's test was applied and the data pertaining to this is presented in Table 1-4.

TABLE 1
ANALYSIS OF VARIANCE OF THE MEAN DIFFERENCES OF SPEED OF MALE PLAYERS OF VARIOUS TEAM GAMES

Sources of Variance	df	Sum of Squares	Mean Square	F-ratio
Within Groups	3	91.85	27.28	11.70*
Between Groups	116	270.84	2.33	

*Significant at .05 level, $F_{.05}(3, 120)=2.68$

It is evident from Table 1 that the significant difference existed among the means of male players of various team games on speed, as the F-ratio of 11.70 was high than the required value $F_{.05}(3, 236)=2.68$. In order to find out, which of the differences among the paired means were statistically significant the Scheffes's Test was applied and data pertaining to this have been presented in Table 2

TABLE 2
SIGNIFICANCE OF DIFFERENCES BETWEEN THE OEDERED PAIRED MEANS ON SPPEED OF MALE PLAYERS OF DIFFERENT TEAM GAMES

Mean Scores					
Handball	Basketball	Football	Volleyball	Paired Mean Difference	C.I.
8.08	8.30	-	-	0.22*	0.04
8.08	-	8.23	-	0.15*	0.04
8.08	-	-	7.95	0.13*	0.04
-	8.30	8.23	-	0.07	0.04
-	8.30	-	7.95	0.35*	0.04
-	-	8.23	7.95	0.28*	0.04

*Significant at .05 level

TABLE 3
ANALYSIS OF VARIANCE OF THE MEAN DIFFERENCES OF DIFFERENT AGE GROUPS ON ARM AND SHOULDER STRENGTH

Sources of Variance	df	Sum of Squares	Mean Square	F-ratio
Within Groups	3	249.85	83.28	4.41
Between Groups	116	2186.80	18.85	

*Significant at .05 level, $F_{.05}(3,236)= 2.68$

It is evident from Table 3 that the significant difference existed among the means of male players of various team games on speed, as the F-ratio of 4.41 was high than the required value $F_{.05}(3, 236)=2.68$. In order to find out, which of the differences among the

paired means were statistically significant the Scheffes's Test was applied and data pertaining to this have been presented in Table 4

TABLE 4
SIGNIFICANCE OF DIFFERENCES BETWEEN THE OEDERED PAIRED MEANS ON ARM AND SHOULDER STRENGTH FOR DIFFRENT AGE GROUPS

Mean Scores					
Handball	Basketball	Football	Volleyball	Paired Mean Difference	C.I.
9.55	7.40	-	-	2.15*	1.61
9.55	-	11.24	-	1.69*	1.61
9.55	-	-	12.03	2.48*	1.61
-	7.40	11.24	-	3.84*	1.61
-	7.40	-	12.03	4.63*	1.61
-	-	11.24	12.03	0.79	1.61

*Significant at .05 level

4. DISCUSSION

The analysis of data using analysis of variance (F-ratio) and scheffe's test of post-hoc comparison, shows that difference exists among male players of different team games on selected motor fitness component i.e. speed, Arm and shoulder strength.

Speed with which an individual can run depends upon the length of stride and frequency of stride, steady increase in body size and its components increases in level, length and strength provide increase length and tempo to the running stride.

Increase in body weight would normally reflect increases in the amount of muscle tissue. This increase in muscle tissue coupled with increase lever length resulting from growth in height should result in greater power and thus increase in motor achievement. Growth in height in school years is apparently reflected adequately by increase in weight. With this constant increase in body size and strength, it is also to be expected that there are also consistent improvement in the basic skills of running, jumping, and throwing as the age increases.

Therefore significant difference in performance of male players of different team games on selected motor fitness components may be due nature of different games.

5. CONCLUSIONS

1. Significant difference was observed among male players of various team games in their speed as well as arm and shoulder strength Performance of boys ranging in components of motor fitness.
2. Basketball male players were found to have more speed followed by football, handball and volleyball players.
3. Volleyball male players were found to have more arm and shoulder strength followed by football, handball and Basketball players.

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