

Motor Fitness Variables Among National Level Badminton And Kho-Kho Players: A Comparative Study



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Abstract

The purpose of the present study was to compare the selected motor fitness variables among national level Badminton and Kho-Kho players. A Sample of 30 male (15 Kho-Kho Players and 15 Badminton Players) was selected through purposive sampling technique from different Jawahar Navodaya Vidyalaya (Chandigarh, Himachal Pradesh, Jammu & Kashmir and Punjab). Their age ranged from 14 to 17. The different criteria measured were used speed, agility, power, flexibility, endurance were measured by 50 meter dash test, 10 meter shuttle run, standing broad jump, modified sit and reach test and 9 min run/walk Test respectively. To compare the mean difference between national level Badminton players and Kho Kho players on selected motor fitness variables, t-test was computed with the help of SPSS software. The level of significance chosen was set at 05. The results indicated that there were insignificant differences with regard to speed, agility and flexibility, whereas the significant differences were found with regard to power and endurance.

Keywords: Motor Fitness, Speed, Agility, Power, Flexibility, Endurance.

Introduction

Performance of the players depends upon the motor fitness, physiological and psychological variables. More specifically, motor fitness referred to as efficient performance in such basic requirements as running, jumping, dodging, falling, climbing, swimming, lifting, weighing, carrying load, and enduring sustained effort in a variety of situations. Movement in the games and sports are highly specific and are the result of training an experience for successful performance of a skill, the components of motor fitness contribute independently and interdependently. Strength, endurance, flexibility, speed, balance and co-ordination abilities are the prerequisites for motor action in any events.

General motor skills are developed from the childhood onward when the children run, jump or play. They are gradually converted to specific motor skills, when advanced training take place in a particular events and it goes a long way in making a person proficient in that particular field or sports. There are so many method of training to improve fitness and components such as strength, endurance, flexibility. Training provides the athlete with the basic means to adapt to his particular stressors, through controlled exercise, motor fitness of a player depends on the nature of his game and also external conditions. Badminton and Kho-Kho both are almost similar games in term of motor fitness level. A complete Badminton Players should possess that agility of an acrobat, the power of a race horse, the killer instinct of a panther as well as like a Kho-Kho player. Some of the standards the fit player attain to meet the demands of the games are speed, power, agility, flexibility and endurance of motor fitness component.

Procedure and Methodology

A Sample of 30 male (15 Badminton Players, 15 Kho-Kho players) who had represented the Chandigarh Region Team in Navodaya National tournaments was selected by employing purposive sampling technique. Their age ranged from 14 to 17. All players were selected from

different Jawahar Navodaya Vidyalaya from Chandigarh Cluster, Himachal Pradesh Cluster, Jammu & Kashmir Cluster and Punjab Cluster.

The speed of subjects was measured by 50 meter dash test, Agility was measured by 10 mt. shuttle run, power was measured by standing broad jump, flexibility was measured by modified sit and reach test and endurance was measured by 9 min

run/ walk test. To determine the significant difference on selected motor fitness variables, t-test was applied with the help of SPSS software. For testing hypothesis, the level of significance chosen was 0.05.

Results and Discussion

The comparison of motor fitness between national level badminton and kho-kho players is presented in table-1.

Table-1
Comparison of National Level Badminton Players and Kho-Kho Players with Regard to Selected Motor Fitness Variables

Variable	Testing Condition	Mean	SD	MD	SEM	't'
Speed	Badminton	8.69	0.96	0.50	0.29	1.74
	Kho-Kho	8.18	0.57			
Agility	Badminton	10.77	0.93	0.32	0.28	1.46
	Kho-Kho	10.45	0.55			
Power	Badminton	1.84	0.33	0.22	0.10	2.1*
	Kho-Kho	2.06	0.22			
Flexibility	Badminton	6.33	6.34	1.06	2.17	0.66
	Kho-Kho	5.26	5.52			
Endurance	Badminton	1570	153.90	151.33	51.17	2.95*
	Kho-Kho	1721	124.89			

*Significant at 0.05 level 't' _{0.05 (28)}=2.14

Table:1 showed the badminton players and Kho-Kho players mean values, standard deviation (SD) on speed 8.69, 0.96 and 8.18, 0.57, agility 10.77, 0.93 and 10.45, 0.55, power 1.84, 0.33 and 2.06, 0.22, flexibility 6.33, 6.34 and 5.26, 5.52, endurance 1570, 153.90, 1721, 124.89. The mean difference (MD), standard error mean (SEM) of experimental group on speed 0.50, 0.29, agility 0.32, 0.28, power 0.22, 0.10, flexibility 1.06, 2.17 and endurance 151.90, 51.17. The calculated 't' values in the case of significant variables power 2.1 and endurance 2.95 since the values obtained were greater than the tabulated value of 't' value 2.14 with 14 degree of freedom at 0.05 level of significant. The calculated 't' values in the case of insignificant variables speed 1.74, agility 1.46 and flexibility 0.66 since the values obtained were lesser than the tabulated value of 't' value 2.14 with 14 degree of freedom at 0.05 level of significant.

Figure: 1

The Graphical Representation of Mean Scores on Selected Motor Fitness Variables

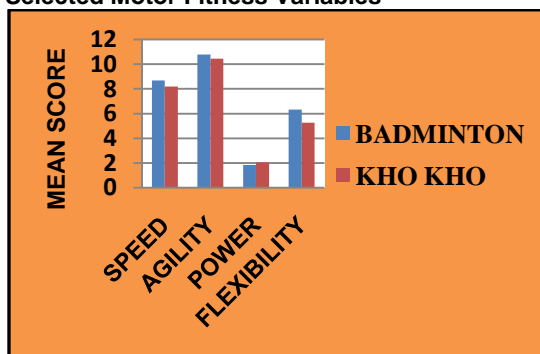
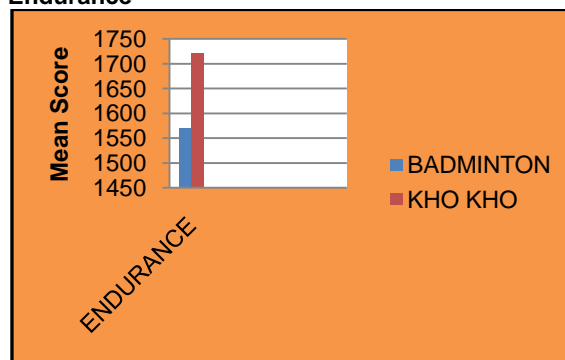


Figure: 2

The Graphical Representation of Badminton Players and Kho-Kho Players Mean Score for Endurance



Aim of the Study

The main aim of the present study was to compare the selected motor fitness variables among national level Badminton and Kho-Kho Players.

Discussion

From the above investigation, it was revealed that there were insignificant differences obtained speed, agility and flexibility between national level badminton players and kho-kho players and significant differences found with regard to power and between national level badminton players and kho-kho players. Sharma (2004) found that endurance and power are significant related to kho-kho players.

Conclusion

Significant difference was found among badminton players and kho-kho players in relation to power and endurance. There were no significant differences found with regard to speed, agility and flexibility between badminton players and kho-kho players.

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