

COMPARISON OF SELECTED PHYSICAL FITNESS VARIABLES OF 18 to 25 YEAR OLD MALE VOLLEYBALL PLAYERS BELONG TO THE DIFFERENT DISTRICTS OF UNIVERSITY OF MYSORE

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Abstract- Motor development is the most important aspect of growth and development, which has direct implications for training the young children. The development of motor abilities and their accurate assessment invariably help in identifying talented children and also in formulating scientific training programme for the children of various ages, so that it leads to the achievement of high performance at the right age and also to preclude any negative or harmful effect of training on them.

Introduction

The physical fitness was the sum of five motor abilities namely speed, strength, flexibility, endurance and coordinative abilities and their complex form like strength, endurance, maximum strength, explosive strength, maximum speed and agility were the basic prerequisites of human motor action. Therefore the sports performances depend to a greater extent on these abilities. The improvement and maintenance of specific physical fitness or condition is the main aim of sports training. Each sport requires different types of fitness training requiring for different sports. Some sports like running requires a very high level of endurance and low level of other motor abilities. Sports like shooting and archery is not requiring high level of physical fitness.

Physical fitness was the capacity to carry out our various reasonable well forms of physical activities without being unduly tired and include qualities improvement in vigorous exercise increase physical fitness is desirable for full productive life, sedentary living habits and poor physical fitness have a negative impact on both health and daily living.

A Volleyball player who cannot perform for the entire 5 sets duration during the game situation was of no use for the team because of lesser shoulder strength, jumping ability, mobility and fatigue. He is not able to perform maximum at times of critical game situations. It has been observed by many coaches and physical education teachers that Volleyball players often concentrate more on their spiking ability and very little attention is given towards their specific fitness. That is why there should be more fit players in a team for better performance.

The sequence of physical growth and motor performance are concurrent developmental phenomenon and these developments can be seen in various perspectives. It is therefore, believed that the knowledge of these sequences and their inter relationship would help the coaches and physical education teachers to spot out gifted children and to provide activities conducive to them for the optimum development.

The difference in motor performance as motor outcomes are indicative of physical fitness and such differences can stem from multifarious influences of varied factors interacting in complex combinations. Hereditary factors, which can be controlled, are found interacting with all pervasive environmental factors. Factors like climate, culture, life style, etc. do form a module for the expression and realization of potential motor abilities. One of the natural process unfolding growth and development is the chronological age. The chronological age carries both hereditary and environmental influence and has been associated with motor development.

Materials and methods

Sixty boys of 18 to 25 years of age studying in Bachelor and Master Degree at University of Mysore were selected as subjects. The subjects were taken from Four different districts coming under University of Mysore jurisdiction, such as Hassan, Mandya, Mysore and Chamarajanagar. 15 students from each District were selected at random.

Speed, explosive strength, agility and endurance were selected as physical fitness variables. The Speed was

measured by 30m sprint, Explosive strength by Vertical Jump, Agility by 6 x 10 m. Shuttle run and Endurance by 1500m run. One Way of Analysis of Variance (ANOVA) was used to compare the physical fitness variables. The level of significance was set at .05.

Results and discussion

The findings related to Volleyball fitness variables of 18 to 25 years old boys from different Districts of University of Mysore are presented in Table 1 to 5. Table 1 reveals that there were significant difference in speed, explosive strength, agility and endurance among the 18 to 25 years old boys belong to different districts of University of Mysore. As F-ratio are found significant in all the selected fitness variables Scheffe's Post-hoc test was applied to test the significance of difference between paired means, which are presented in the following tables. Table 2 reveals that there were significant differences in speed between the 18 years old boys of Hasan, Mandya, Mysore and Chamarajanagar districts. Table 3 reveals that there were significant differences in explosive strength between the 18 to 25 years old boys of Hassan, Mandya, Mysore and Chamarajanagar districts. Table 4 reveals that there were significant difference in agility between the 18 to 25 years old boys of Hassan, Mandya, Mysore and Chamarajanagar districts. Table 5 reveals that there were significant difference in Endurance between the 18 to 25 years old boys of Hassan, Mandya, Mysore and Chamarajanagar Districts. The findings pertaining to the fitness variables revealed that the boys from Mysore district were found better in explosive strength and Endurance. Next to Mysore district, Hassan district boys stood at the second place in fitness. Chamarajanagar district boys were found inferior in

fitness to all the other three district boys. The life style, involvement in physical activities, food habits etc. might be the reasons for the superior performance of the Mysore District boys in physical fitness.

Conclusion

Mysore district boys were found superior to physical fitness variables compared to the other district boys. Hassan district boys were performed better in physical fitness and stood second next to Mysore district. Mandya district boys were performed at the 3rd place in Physical Fitness compared to Mysore and Hassan Districts. Chamarajanagar district boys were found inferior in fitness compared to all the other three district boys.

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Table 1- One Way Analysis of Variance for Physical Fitness Variables of 18 to 25 Year old Boys from the Four Districts of University of Mysore.

Variable	Source of Variance	df	Sum of Squares	Mean Squares	F-ratio
Speed	Between groups within groups	3	11.71	3.90	35.29*
		59	65.93	0.11	
Explosive strength	Between groups Within groups	3	52306.55	17435.52	44.48*
		59	233635.85	392.01	
Agility	Between groups Within groups	3	16.75	5.58	9.16*
		59	363.33	0.61	
Endurance	Between groups Within groups	3	33389.47	11129.82	30.189*
		59	219725.71	368.67	

* Significant at .05 level

Table 2- Post Hoc Analysis of the Data on Speed of 18 to 25 years Old Boys from the four Districts of University of Mysore

Group means				Mean Difference
Hassan	Mandya	Mysore	Chamarajanagar	
4.26	4.50			0.24*
4.26		4.11		0.15*
4.26			4.28	0.02*
	4.50	4.11		0.39*
	4.50		4.28	0.22*
		4.11	4.28	0.17*

* Significant at .05 level; Critical difference at .05 level of significance = 0.11

Table 3- Post Hoc Analysis of the Data on Explosive Strength of 18 to 25 years old Boys from the Four Districts of University of Mysore

Group means				Mean Difference
Hassan	Mandya	Mysore	Chamarajanagar	
19.6	18.9			6.74*
19.6		21.0		14.51*
19.6			18.6	9.70*
	18.9	21.0		21.24*
	18.9		18.6	2.96*
		21.0	18.6	24.20*

* Significant at .05 level; Critical difference at .05 level of significance = 6.32

Table 4-Post Hoc Analysis of the Data on Agility of 18 to 25 year old Boys from the Four Districts of University of Mysore

Group means				Mean Difference
Hassan	Mandya	Mysore	Chamarajanagar	
16.14	16.59			0.45*
16.14		16.25		0.11*
16.14			16.35	0.21
	16.59	16.25		0.34*
	16.59		16.35	0.24
		16.25	16.35	0.10

* Significant at .05 level; Critical difference at .05 level of significance = 0.25

Table 5-Post Hoc Analysis of the Data on Endurance of 18 to 25 years old Boys from the Four Districts of University of Mysore

Group means				Mean Difference
Hassan	Mandya	Mysore	Chamarajanagar	
18.4	18.3			1.70*
18.4		18.7		16.42*
18.4			16.8	2.88*
	18.3	18.7		14.72*
	18.3		16.8	4.58*
		18.7	16.8	19.30*

* Significant at .05 level; Critical difference at .05 level of significance = 6.13