



GROWTH PHYSICAL FITNESS DEVELOPMENT OF YOUNG CHILDREN IN BASKETBALL, VOLLEYBALL, KHO-KHO AND ATHLETICS

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Abstract

There are many aspects of child development. Physical growth and development, physiological development, motor development, mental development, speech and language development, personality development, developmental stages in perception, cognition and motivation - these are some of the aspects which together make the organism whole. The research methods in child development are brought together by Mussen (1960).

The present study was an attempt to find out the difference in Growth Physical Fitness Development of Young Children in Basketball, Volleyball, Kho-Kho and Athletics of Dharwad District forty eight plyears playing four different sports (Basketball, Volleyball, Kho-Kho and Athletics). A total of 48 subjects (Basketball =12, Volleyball = 12, Kho-Kho = 12 Athletics = 12) participated in the study from Department of Youth Services and Sports of Dharwad District of Karnataka State and their age ranged from 12-16 years. To examine the speed of the player's speed (30 M. Flying Start Test) was conducted. 't'-test statistical technique and one way Analysis of Variance (ANOVA) test was used to find out the significance of differences with the help of SPSS (15.0 version) software. The level of significance was set at 0.05. The finding of study indicates that the mean values are Basketball Young players (9.1133), Volleyball Young players (8.9300), Kho-Kho Young players (7.5033) and Athletics Young players (7.2103). Thus, it concludes that the Speed of the Athletics young Childers Players is higher in comparison to the Basketball, Volleyball, Kho-Kho young players.

Keywords: *Speed, Basketball, Volleyball, Kho-Kho and Athletics, young Childers players.*

Introduction

The child growth and development includes an interrelated expression of physical, cognitive, social psychological size of the whole body or any of its parts. Growth is also used to indicate the process by which the child's body attains the mature, adult stage. Development refers to an increase with age in capacities, skill and complexity of function. Maturation refers to the development of body size, structure, functions and capacities via an inherent genetic programme. Growth in body height and weight are similar in boys and girls through late childhood (WA-\ 1 years) when girls enter puberty and the adolescent growth spurt about 2 years earlier than boys. The boys' adolescent growth rate is greater than that for girls, and is characterized by changes in body composition, such that more of the boy's body weight gain during adolescence is lean tissue. The proportion of lean tissue in girls decrease somewhat during adolescence boys' running, jumping and throwing performances increase through age 18 years, which is associated with continued growth in height and body weight and increase in the proportion of lean weight to body weight. While the sequence of maturation to adult size is nearly uniform, children achieve various stages (whether identified by skeletal age or some other marker) at different chronologic ages. Early maturing children are taller and heavier than other



children during early adolescence. This larger body size is associated with enhanced physical performance in boys.

While early maturing boys maintain size and performance superiority over the latest maturing boys throughout adolescence, some intermediate maturing boys grow at a more rapid rate, eventually surpassing some of the early maturing boys in late adolescence vigorous physical activity does not affect long bone growth, but does increase bone diameter and density. Vigorous physical activity during childhood and adolescence has no effect on height and relatively little impact on body weight, as increased lean mass is often effectively balanced by reduced body fat. There is no evidence that enhancing the training stimulus during the early adolescence growth spurt results in greater body structural and functional growth. Children are not merely scaled down adults, as their skeletal system is not fully developed, nor do they have proportionally developed cardio respiratory and thermo-regulatory function. Heavy exercise training in young children, which results in a greater rate of tissue breakdown than repair over time, can lead to orthopedic injury of the bone and the musculotendinous insertion to the bone.

Objective of the study

- To compare the Growth Physical Fitness Development between Basketball, Volleyball, Kho-Kho and Athletics Girls Players.

Hypothesis of the Study

For the present study it was hypothesized that:

- There was significant difference of speed between district level younger girls players.

Procedure and Methodology

The study was conducted among forty eight Growth Physical Fitness Development of young Girls players those who were represented District level from Department of Youth Services and Sports of Dharwad District of Karnataka State. The subjects were thoroughly acquainted with the testing procedure as well as the purpose and significance of the study. Subjects were made aware about the conduct of the study and relevant information was given by the researcher. Further the data were analyzed to find out the significant differences among the groups one way Analysis of Variance (ANOVA) test was used to analyze the significant differences and the level of significance was set at 0.05 levels for testing the hypothesis. Further the data were analyzed to find out the significant differences among the groups.

Tools: Physical Fitness Variables

- Speed

Criterion Measure

Selection of Test Item for Growth Physical Fitness

- To assess Speed of young Girls players speed (30 M. Flying Start Test) was conducted



Results and Discussions

Table 1. Descriptive Statistics for Physical Fitness Development Overall Score according to the Type of Sports.

Variable	Games	Mean	Standard Deviation
Speed	Basketball	9.1133	.09049
	Volleyball	8.9300	.44982
	Kho-Kho	7.5033	.19112
	Athletics	7.2103	.07744

The four groups of subjects were analysed descriptively. **Table 1** shows the scores for Physical Fitness Development to evaluate the mean and standard deviation for each group of subjects. The mean value for subjects in the Basketball group 9.1133 with a standard deviation of .09049. While the mean value for volleyball subjects was 8.9300 with a standard deviation of .44982. The Kho-Kho group was 7.5033 with a standard deviation of .19112 followed by mean of 7.2103 for subjects in the athletics group with a standard deviation of 07744

Figure No.1. Mean Values of Growth Physical Fitness Development among Basketball, Volleyball, Kho-Kho and Athletics Players on Speed.

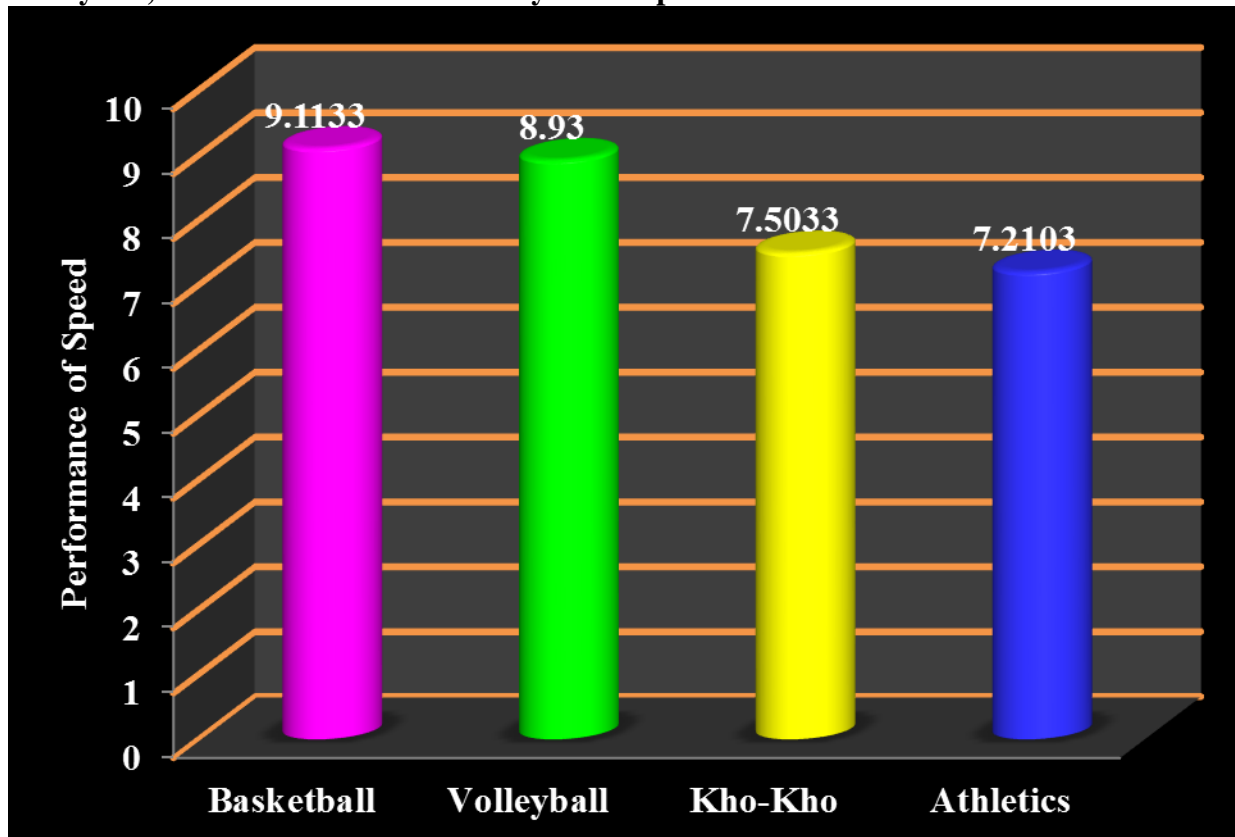


Figure No. 1 (a) the above graph shows the graphical representation of mean scores of Speed among Basketball, Volleyball, Kho-Kho and Athletics Players on Speed of District level teams.



Table No. 2. ANOVA Results on Speed among Basketball, Volleyball, Kho-Kho and Athletics Players

Source of Variance	Sum of Squares	df	Mean Squares	F-Value	Sig.
Between Groups	3.393	3	1.131	17.016	.000
Within Groups	1.728	26	.066		

* Significant at 0.05 level. Tab F0.05 (3, 26) =2.88).

It is evident from Table-2 (b) that there was significant difference on Speed among the four games teams i.e. Basketball players, Volleyball Players, Kho-Kho Players and Athletics Players as the obtained 'F' value was 17.016 which was more than the tabulated F-Value. Since 'F' value was significant. Hence, it was found that there was significant difference in the Speed among District level Basketball players, Volleyball Players, Kho-Kho Players and Athletics Players.

Above statistical findings have revealed that the four groups were found significantly different on their Speed.

Discussion

Growth Physical Fitness Development of Young Athletes by Different Type of Sport

This study aims to determine the level of Growth Physical Fitness Development of Young Athletes based on four types of sports Basketball players, Volleyball Players, Kho-Kho Players and Athletics. Analysis shows that young athletes obtain sports scores better in the age of equivalent speed score, control objects and Growth Physical Fitness Development. Based on the interpretation Growth Physical Fitness Development, young athletes that sport is a collection reached the highest level on the development of the speed. The second highest group is young Kho-Kho athletes in all aspects and was followed by younger Basketball and Volleyball obtain similar mean value of the four tests conducted.). This shows that physical activity at this stage of preparation is very important and effective training program should be done properly because it is a basic skill that is very important for this group. In fact, different game types, equipment and activity area also needs to be improved to suit the type of sport offered (Raudsepp, & Pall ; 2006)

Conclusion

This study examined and presents findings on Growth Physical Fitness Development among District level Young Athletes by Different Type of Sport in Department of Youth Services and Sports of Dharwad District of Karnataka State. The findings obtained from analysis of data and testing of hypotheses in the study revealed that there was a significant relationship between Speed among Young Athletes by Different Type of Sport in Department of Youth Services and Sports of Dharwad District in the study area.

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