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Research Paper - Physical Education

A Study of Selected Physical Fitness Components of Haryana Basket Ball Players

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A B S T R A C T

Basket ball is a game for the mind as well as for the body, during the course of play; the player must be physically and psychologically sound. Basket ball is an oldest sport played with a ball since similar game reportedly played in the Egyptian and Greek cultures as early as the eleventh century BC. Many researches have been conducted in Basket ball showed that it dependent upon physiques, general physical fitness , specific physical fitness , skill involved in the game , tactical jollities and competitive abilities etc. of players (Milvi 2007). The purpose of the study was to determine the physical fitness components of different groups of urban and rural Haryana basketball school players. Age ranging from 16-19 years and total number 300.

1 To determine the difference in physical fitness among different group of urban of Haryana school basketball players.

2 To determine the difference in physical fitness among different groups of rural Haryana school basketball players.

Introduction

Basketball is an oldest sport played with a ball since similar game reportedly played in the Egyptian and Greek cultures as early as the eleventh century BC. Amateur Basketball federation of India (A.N.F.I.) introduced the basketball game in 1972 in India for men, women, girls, and boys. Performance in any sports depends upon certain factors i.e. physique and body composition, physiological and psychological etc. out of these physique and body composition are most important. Similarly, many researches have been conducted in basketball showed that it dependent upon physiques, general physical fitness , specific physical fitness , skill involved in the game , tactical jollities and competitive abilities etc. of players (Milvi 2007). From these studies it is concluded that physique, body composition and physical fitness are essential ingredients for excellence performance at different levels of participation in basketball.

Since physique and body composition provide a suitable raw material for specific game and sports, without proper parameters of size, shape and body composition, it is useless to spend lot of money and time on such type of Basketball players for their conditioning and training programs who are not suitable for this game. The selection and training can be done better with adequate knowledge of selected physical fitness components of the successful Basketball players. The present study was attempted to provide guidelines about the relationship of selected physical fitness components variables and Basketball performance and physical education teachers and coaches can be benefited to inform their trainees about the specific qualities that should possess for each Basketball player.

Physical Fitness:

To achieve the objectives of the present study, i.e., comparison of physical fitness of Urban and Rural basketball players AAHPER Youth Fitness Test (1976) was utilized. The components and test items chosen to represent in the original battery were as follows:

1. Cardio-respiratory endurance - 600 yard run-walk
2. Muscular power - Standing broad jump
3. Speed - 50 Yard dash
4. Flexibility - Reach and sit test
5. Agility - Zig Zag Run

1. Cardio-Respiratory Endurance

600 Yard Run-Walk Test: The purpose of this test was to measure the cardio-respiratory endurance of the subjects.

To achieve the purpose, the 440 yard track was marked. The runners started behind a line upon the starting signal. The subject was required to complete one full lap plus 160 yards on the track. The spotter watched her runner and recorded the time called out by the timer as the finished line was crossed. The scoring was made in minutes and seconds.

2. Muscular Power

Standing Broad Jump: The purpose of this test was to measure the explosive strength of the legs in forcing the body to leap horizontally.

A take-off line was drawn on the ground. Each subject was asked to stand behind a take-off line with her feet comfortably apart. Before jumping, the subject was allowed dipping at the knees and swinging the arms backward. She then jumped forward by simultaneously intending the knees and swinging the arms forward to cover maximum possible horizontal distance, leaning on both the feet. Three trials were permitted

Table 1: Physical Variables Measurements

Variables	Urban		Rural		Sed	T-Test
	Mean	SD	Mean	SD		
Endurance	2.24	0.12	2.16	0.11	0.029	2.680**
Speed	7.76	0.17	7.65	0.22	0.05	2.19*
Strength	1.68	0.08	1.74	0.05	0.017	3.43**
Flexibility	27.13	0.97	27.90	1.30	0.297	2.59*
Agility	8.90	1.02	8.51	1.12	0.289	1.35

and best jump was credited to her . The score was the horizontal distance measured in meter and centimeter to the nearest cm. between the take off line and the nearest point where any part of the subject's body touched the ground.

3. Speed

50 Yard dash: The purpose of this test was to measure the running speed of the subjects. The subjects positioned behind the starting line. The tester commanded 'Ready' and 'Go' which was accompanied by a downward drop of her arm so that the timers at the first line could start the watch. The subject had to run as fast as possible across the finish line.

4. Flexibility

Sit and Reach Test: The purpose of this test was to measure the development of hip and back flexion as well as extension of the hamstrung muscles of the legs, sit and reach test was administered. Flex measure case with yardstick and ruler guide inserted were the equipments used for measuring the performance.

The 15 inch mark of yardstick was lined-up with a line on the floor and the ends of the yardstick were tapped to the floor. The subject sat down and lined-up heels with the near-edge of the 15 inch mark and slided his seat back beyond zero and of the yard-stick. With heels not more than 5 inches apart slowly she stretched forward, while touching the yardstick with the finger tips of both hands. The point touched was read and recorded. The best of three trials mea-sured to the nearest of quarter of an inch was the subject's test score.

5. Agility

Zig-Zag Run: The purpose of this test was to measure agility primarily and speed secondarily.

Equipments: Equipments needed to conduct this test were watched and five standards with flange. The sub-ject at a point 'x' in a semi-crouched position on the command ' ready' and 'go' , traversed the course for three times continuously, The subject was instructed not to grasp the stand of chairs that had been placed in the course as obstacles. If a foul was committed knocking an obstacle, a second travel was permitted. Time was recorded nearest to 1 / 10 of a second.

Further from the table 1, It is clearly obvious that the differences in mean scores of endurance, speed, strength & flexibility components of physical fitness of rural school basketball players are found significant at 1% & 5% level except agility. It shows that the rural school basketball players possess more endurance capacity, speed, strength and flexibility as compared to urban school basketball players. Agility has been found statistically equal in both groups of Haryana school basketball players.

Discussions

" Physical fitness of rural group players is more than those of the urban group because of healthier and balanced diet. Due to the same reason, Endurance, speed, strength, Flexibility of the rural group basket ball players is more than that of urban group. Besides these factors the basket ball players of rural groups have to perform domestic duties due to which they have better physical fitness Components .

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