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A Comparative Study of Selected Physical Fitness Variables of 15-19 Years Basketball Players of Urban and Rural Area of Rohtak District In Relation To Their Age

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Abstract

The purpose of the study was to compare the physical fitness variable of 15-19 years of urban and rural area of Rohtak district in relation to their age. To fulfill the objective of the study 40 Basketball player (20 each) players of Rohtak was selected. The age of the selected subjects ranged from 15 to 19 years. Only (Standing Board Jump and 50 yard dash tests) were used to measure the selected physical fitness variables of the players. The study was delimited to Aapher youth fitness test. In order to analyze the data t-test was used to analyze the data and investigator observed the significant difference between Rural and Urban basketball players of Rohtak.

Keywords: Urban, Rural, Basketball, Male, Physical fitness.

1. Introduction

Sports is all forms of usually competitive physical activity which, through casual or organized participation, aim to use, maintain or improve physical ability and skills while providing entertainment to participants, and in some cases, spectators. Hundreds of sports exist, from those requiring only two participants, through to those with hundreds of simultaneous participants, either in teams or competing as individuals. Physical fitness is not an end in itself but it is a means to an end. It provides us with a basis for optimal physiological health and capacity to enjoy a full life. As we regularly need food, rest and sleep so do we need daily exercise for the maintenance of our physical capabilities. Physical fitness is a pre-requisite not only for excellence in competitive sport but is also closely related to defense and economic potential of a nation and for the quality of individual and social life. Physical fitness is a general concept defined in many ways by differing scientists. Here two major categories are considered: general fitness (a state of health and well-being), and specific fitness (a task-oriented definition based on the ability to perform specific aspects of sports or occupations). Physical fitness is generally achieved through correct nutrition, exercise, hygiene and rest. Physical fitness used in two close meanings: General fitness (a state of health and well-being) and Specific fitness (a task-oriented definition based on the ability to perform specific aspects of sports or occupation). Physical fitness is the capacity of the heart, blood vessels, lungs and muscles to function at optimum efficiency. In previous years, fitness was defined as the capacity to carry out the day activities without undue fatigue. Automation, increased leisure time and changes in life style following the industrial revolution meant this criterion will be no longer sufficient. Optimum efficiency is the key. Physical fitness is now defined as the body's ability to function efficiently and effectively in work and leisure activities to be healthy, to resist hypokinetic diseases and to meet emergency situations. When you think of a person who is very physically fit, who do you see? An ultra-marathoner, a sprinter, a weightlifter, a gymnast, a professional football player, or maybe a guy on the beach with a six-pack?

2. Review of related literature

RUDI M, et.al, (2001) ^[1] A total of 146 professional rugby league football players, contracted to 2 teams competing in England ($n = 45$) and Australia ($n = 101$), participated in this study. All players completed the following series of physical fitness performance tests: 1 repetition maximum squat and bench press, 15- and 40-m sprint, agility run, 5-minute run for distance, 60-second sit-up, 30-second plyometric push-up, and measurement of body weight and subcutaneous skinfold (4 sites).

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Analysis of variance with a criterion α level of $p < 0.05$ was used to determine if any significant difference could be found when grouping players into 3 different positional categories typically identified in the sport. There were a number of significant differences with respect to test results between categories, and this was apparent for all 3 systems of categorization. On the basis of these findings, we recommend that to more efficiently structure the physical fitness training of players, the players should be grouped either according to the 2 broad positional categories of forwards or backs or according to the 4 categories of forwards, distributors, adjustable, and outside backs. Grouping players according to the 9 specific positions played on the team is not warranted.

Gupta et al. (2002) [2] conducted a study of the physical fitness, spinal mobility and flexibility in footballers. The study deals with physical fitness spinal mobility, and flexibility of 95 footballers of national and inter-university levels. The player's performances were competed with adequate controls. Three physical fitness tests viz, sit-ups standing broad jump and shuttle run, anterior and lateral spinal flexion and spinal extension were conducted on all the subjects. The results of this study indicated a greater physical fitness in footballers.

3. Objectives of the Study

The proposed objectives of the present research were follows.

1. To measure the present level of Speed between Rural and Urban Basketball players of Rohtak.
2. To measure the present level of Explosive Strength between Rural and Urban Basketball players of Rohtak.
3. To compare the speed and explosive strength between Rural and Urban Basketball players of Rohtak.

4. Hypothesis of the study

Having a view of objectives of the study, null hypothesis is framed for the present investigation.

5. Delimitation of the study

- The present study was delimited on the following aspects such as:
- Only 40 Male (20Rual and 20 Urban) students were considered.
- The age of the subjects were ranged from 15 to 19 years.
- The physical fitness components i.e.- Explosive strength and speed considered for the present study.

6. Method and Prodre

6.1 Selection of the Subjects

- a) The subjects were selected in following basis:
- b) He should be male student.
- c) He should attain the age of 15 years and not more than 19 years.
- d) He should be study in Rohtak.
- e) Only rural and urban players was considered for the study.

6.2 Criterion Measures

The criterion measures were used to collect the data in a deal and systematic way to record in a correct unit and style for each test item.

- Explosive leg strength was measured by Standing Broad Jump test and scores were recorded in centimeters.
- Speed was measured by 50 Yards Dash and time was recorded to the nearest 1/100 of a second with the help of digital stopwatch.

6.3 Statistical Techniques Used

For the present study, the mean value, standard deviation, 't' test were applied to analyze the data

7. Results and Discussion

Table 1: Comparison of Explosive Strength Component of Rural and Urban Basketball male players of Rohtak in Standing Broad Jump.

| Variable | Rural | | Urban | | SEd. | t-ratio | Level of significant |
|--------------------------------|-------|------|-------|------|------|---------|----------------------|
| | Mean | S.D. | Mean | S.D. | | | |
| Strength (Standing Broad Jump) | 2.38 | 0.23 | 2.31 | 0.1 | 0.05 | 1.4 | Significant |

*Significant at .05 level

The mean score (2.38) of the explosive strength component of physical fitness of rural basketball players is high than the mean score (2.31) of Urban basketball players of Rohtak. However, the t-ratio is 1.4, which is significant at 0.05 level. High score better Explosive strength. It means that Rural players of basketball players have better Explosive strength of physical fitness than the Urban Basketball players of Rohtak.

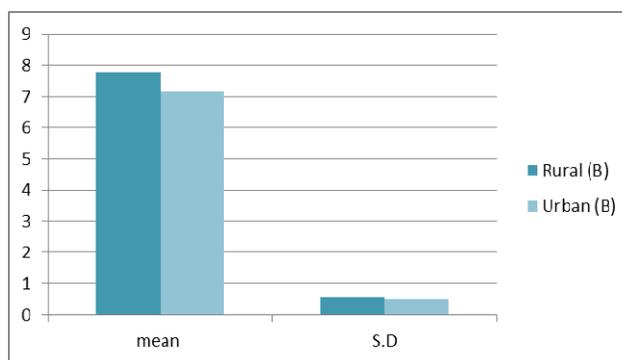


Fig 1: Comparison of Explosive Strength Component of Rural and Urban Basketball players in Rohtak

Table 2: Comparison of Speed Component of Rural and Urban Basketball male players of Rohtak in Standing Broad Jump.

| Variable | Rural | | Urban | | SEd. | t-ratio | Level of significant |
|----------|-------|------|-------|------|------|---------|----------------------|
| | Mean | S.D. | Mean | S.D. | | | |
| Speed | 7.79 | 0.55 | 7.17 | 0.51 | 0.16 | 3.88 | Significant |

*Significant at .05 level

The mean score (7.79) of the speed component of physical fitness of rural basketball players is high than the mean score (7.17) of Urban basketball players of Rohtak. However, the t-ratio is 3.88 which is significant at 0.05 level. High score better speed. It means that rural players of basketball players have better speed of physical fitness than the Urban Basketball players of Rohtak.

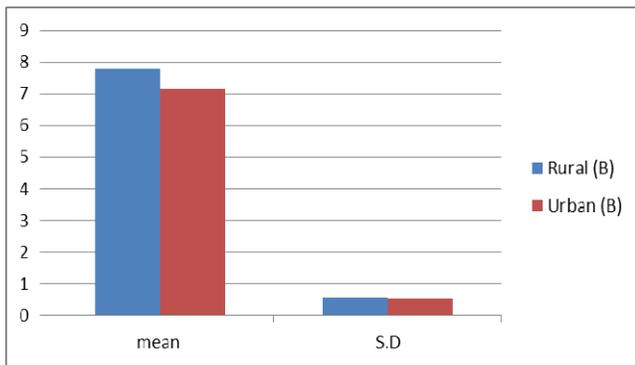


Fig 2: Comparison of Speed Component of Rural and Urban Basketball male players of Rohtak

8. Conclusion

On the basis of the analysis of data the Rural Basketball players were having better mean values among speed and Explosive strength than Urban Basketball players. Basketball Rural players performed better than the Urban male players.

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