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## Comparison of physical fitness abilities of rural and urban school students

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### Abstract

The purpose of this investigation was to compare the physical fitness abilities of rural and urban school students. Forty boys students were (N = 40) randomly selected as subjects and their age were ranged between 13 and 16 years. The subjects were selected by using simple random sampling method. Among these forty subjects twenty (N = 20) were rural area and the remaining twenty (N = 20) were from urban area school going students. For the purpose of the study fitness variables were considered for this study as abdominal endurance, agility and flexibility. It was measured by using the standard test items of sit-ups, shuttle run and sit-and reach test. The collected data were analyzed by using the statistical tool of independent 't' test. The result of the study revealed that, there was a significant difference on selected fitness variables of abdominal endurance and agility between the rural and urban area school students of Amravati district in Maharashtra state and insignificant difference in flexibility. The basic fitness levels of rural area school students were better than the urban area school students.

**Keywords:** physical fitness abilities, abdominal endurance, flexibility, dynamic health.

### Introduction

Physical fitness is the capability of the heart, blood vessels, lungs, and muscles to function at optimal efficiency. Optimal efficiency means the most favourable health needed for the enthusiastic and pleasurable participation in daily tasks and recreation activities. Optimal physical fitness makes possible a life-style that the unfit cannot enjoy. To develop and maintain physical fitness requires vigorous effort by the total body. Functional cardiorespiratory and muscular systems enable you to carry out everyday activities efficiently. In other world, people who are physically fit look better, feel better, and possess the good health necessary for a happy and full life. The possession of optimal strength, muscle tone, and endurance, not only for emergencies, but for everyday living can be the key to dynamic health [1].

Physical fitness simply is the ability of your body systems to work together efficiently. Being efficient means a being able to do daily activities with the least amount of effort. A fit person is able to carry out the typical activities of living, such as work, and still have enough energy and vigor to respond to emergency situations and to enjoy leisure time activities. As a child you probably were very active and through little, if any, of improving or maintaining your fitness. However, as you get older you most likely will be less active and will need to develop a plan for regular physical activity. But getting fit and staying fit can be fun. The activities you choose can be those that you like doing best and those that are best for you [2].

### Purpose of the study

The main purpose of the study was to find out the comparison of physical fitness abilities of rural and urban school students. The allied objectives are as follows:

1. To find out the abdominal endurance of rural and urban school students.
2. To find out the agility of rural and urban school students.
3. To find out the flexibility of rural and urban school students.
4. To compare the abdominal endurance, agility flexibility of rural and urban school students.

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**Methodology**

Forty boys students were (N = 40) randomly selected as subjects and their age were ranged between 13 and 16 years. The subjects were selected by using simple random sampling method. Among these forty subjects twenty (N = 20) were rural area and the remaining twenty (N = 20) were from urban area school going students. For the purpose of the study fitness variables were considered for this study as abdominal endurance, agility and flexibility. It was measured by using the standard test items of sit-ups, shuttle run and Sit and reach test. The collected data were analyzed by using the statistical tool of independent ‘t’ test.

**Analysis of data**

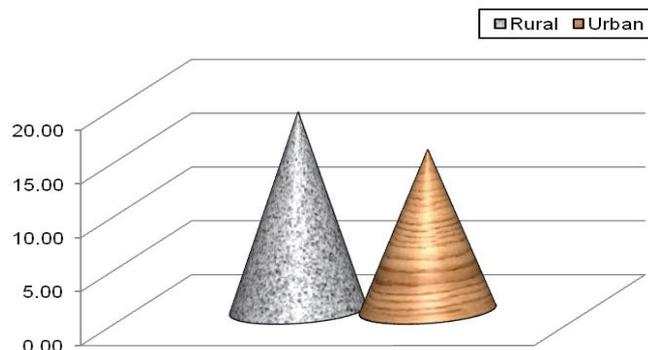
The data was collected from the subjects by using standard test and analysis and interpretation was done on the basis of special statistical techniques viz. mean, standard deviation and ‘t’ test. The level of significance was kept at 0.05 for testing the hypothesis.

**Result and Discussion**

**Table 1:** Showing comparison between rural and urban area school students in abdominal endurance

Group	Mean	SD	SE	MD	Ot	df	Tt
Rural	18.40	4.65	1.35	3.50	2.60*	38	2.02
Urban	14.90	3.84					

Table No.1 reveals that there is difference between means of rural and urban area school students because mean of rural is 18.40 which is greater than the mean of urban area school students which is 14.90 and calculated value of ‘t’ is found as 2.60, is greater than tabulated ‘t’ which is 2.00 at 0.05 level of significance. This shows mean of rural area students are having more abdominal endurance than urban area students.

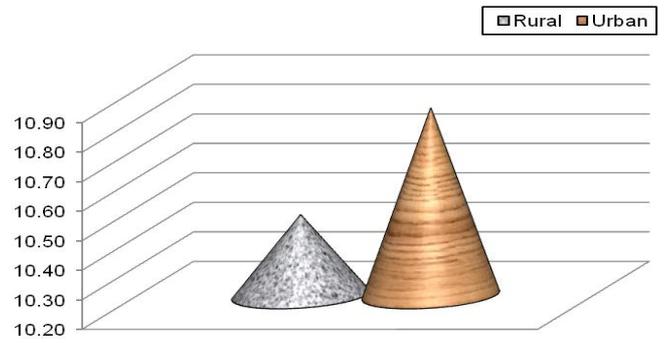


**Graph 1:** Mean of abdominal endurance between rural and urban area school students

**Table 2:** Showing comparison between rural and urban area school students in agility

Group	Mean	SD	SE	MD	Ot	df	Tt
Rural	10.47	0.48	0.15	0.36	2.38*	38	2.02
Urban	10.83	0.49					

Table No.2 reveals that there is difference between means of rural and urban area school students because mean of rural is 10.47 which is less than the mean of urban area school students which is 10.83 and calculated value of ‘t’ is found as 2.38, is greater than tabulated ‘t’ which is 2.00 at 0.05 level of significance. This shows rural area students are having more agility than urban area students.

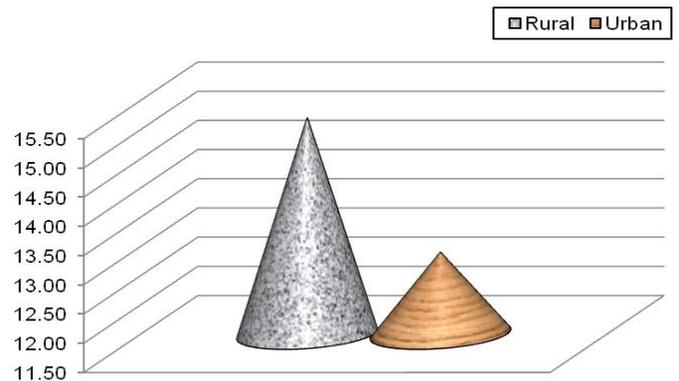


**Graph 2:** Mean of agility between rural and urban area school students

**Table 3:** Showing comparison between rural and urban area school students in flexibility

Group	Mean	SD	SE	MD	Ot	df	Tt
Rural	15.20	3.99	1.24	2.30	1.85	38	2.02
Urban	12.90	3.85					

Table No.3 reveals that there is difference between means of rural and urban area school students because mean of rural is 15.20 which is greater than the mean of urban area school students which is 12.90 and calculated value of ‘t’ is found as 1.85, is less than tabulated ‘t’ which is 2.00 at 0.05 level of significance. This shows mean of rural area students are having more flexibility than urban area students.



**Graph 3:** Mean of flexibility between rural and urban area school students

**Conclusion**

From the analysis of the data the following conclusions are drawn

1. There is significant difference of abdominal endurance component between rural and urban area school students.
2. There is significant difference of agility component between rural and urban area school students.
3. There is insignificant difference of flexibility component between rural and urban area school students.
4. The basic fitness levels of rural area school students were better than the urban area school students.

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