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# **Muscular Strenth Of Rural And Urban Collegiate Students**

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## **Abstract**

The purpose of the study was to identify the Muscular Strength ability of rural and urban students. 40 students, 20 rural and 20 urban from various colleges of Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra India were selected as a subjects for the study. Execution criteria were the presence of chronic medical condition such as asthma, heart disease or any other condition that would put the subject at risk when performing the physical fitness components. The data was collected by use of measurements of height & weight as well as by application of tests like, running, jumping, steeping, setups etc. The data was analysed with the help of statistical procedure in which arithmetic mean, standard deviation and t - test were employed. The mean age of rural students were 21.03 ( $\pm$  3.11) years, height were 171.33 ( $\pm$  5.22) cm. and the weight were68.48 ( $\pm$  3.91) kg. On other hand the mean ( $\pm$  S.D.) age of the urban students were 21.99 ( $\pm$  3.72) years, height 171.66( $\pm$  8.29) cm. and weight 67.92 ( $\pm$  3.76). Significant difference in the muscular Strength ability (t=3.11, p<.05) was found between rural and urban students, urban students was found to be greater agility as compared to rural student

#### Introduction

Physical fitness is recognized as an important component of health (Lamb et al.1988; Twisk et al.2002) and it may be important for the performance of functional activities and quality of life (Noreau and Shephard1995; Stewart et al.1994). Low physical fitness may result in high physical strain during the performance of activities (Bruiningset al.2007). As a consequence, activity levels may decrease due to fatigue and discomfort, exacerbating low physical fitness. Caspersen and co-workers defined several health-related components of physical fitness, i.e. aerobic capacity, muscle strength and endurance, flexibility and body composition (Caspersen et al.1985).

Keeping in view the fact that childhood physical fitness has important health consequences during adulthood (sallis et al, 1992) a large number of studies on physical fitness have been reported form different countries of the world. Data on the physical fitness children from Denmark (Knuttgen, 1961), England (Campbell & Pohndof, 1961), South Africa (sloan 1966), Belgium (Hebbelinck& Borms, 1969), Israel (Ruskin, 1978), & Japan (Ishiko, 1978) are available in the literature. All these reports made the health planners realise the importance of the contribution of health education & physical fitness in the development of total fitness. The practice of physical testing in children started thereafter in various countries.

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## **Materials And Methods**

<u>Subjects</u>: Twenty rural and twenty urban students from various colleges of Swami Ramanand Teerth Marathwada University Nanded.

Who were regularly participating two years in the inter collegiate athletic tournament selected as subject for present study, "exclusion criteria were the presence of chronic medical conditions such as asthma, heart disease or any other condition that would put the subjects at risk when performing the test the subjects were free of smoking, alcohol and caffeine consumption, antioxidant supplementation and drugs. The age, height andmuscular strength of all subjects measured in physical education department ground. The data analysed with the help of stastical procedure in which mean, standard deviation, t test were used to compare the data.

# SELECTION OF VARIABLE AND THEIR CRITERION MEASURES

Muscular strength was measured by sit ups and test was conduct according to the AAPHER youth fitness test.

### Results

- The statistical of the results of Muscular Strength abilitybetween rural & urban students are shown in table 1.
- The mean (+S.D.) of the age of the rural students was 21.03 (+3.11) years, height 171.33 (+5.22) cm. weight68.48 (+3.91) kg. On other hand, the mean (+ S.D.) of the urban students was 21.99 (+3.72) years height 171.66 (+8.29) cm. and weight 67.92 (+3.76).

Table 1 shows statistical comparison of Muscular Strength between rural & urban collegiate students.

Students	No.	Means	S.D.	S.Ed.	t-value
Rural	20	24.85	3.40	0.98	3.98*
Urban	20	19.70	2.81		

\* = Significant

Table 1 indicates the existence of statistically significant difference between rural and urban students with respect to Explosive strength .Significant differences was found in explosive strength (t=6.53,p<.05).Rural students was found to have got greater explosive strength as compared to urban students

#### **Discussion**

This study reveals that significant defences were found in Muscular Strength ability( t=3.11, P< 0.5), between rural and urban students. Urban students were found to have got

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strongest than rural students. This results didn't supported sandhu (1983) compared rural and urban students of Amritsar district. He was found rural students were stronger than urban students. Tsimeas and Tsigilis (2005) conducted a study on Greek rural students to find out "Does living in urban or rural setting effect aspect of physical fitness in children". A similar type of result was obtained in the work of Mehtap and Nihal (2005). Who conducted a study on physical fitness in rural children compared with urban children in turkey and found that children living in the urban areas were more inactive and obese than rural children. Urban students incur significantly low speed ability as compared to rural children. This may be due to mechanization, automation and computerization have minimised the opportunities for vigorous physical activities to cause physical exertion in urban population. The result is supported Uppal and Sareen (2000) choudhary (1998) and Ray (1979)... This may be due to the rural life style is more active in nature then the life in urban areas which produced high level physical and psychological functioning in rural areas

### Conclusion

- It is found that the rural students were comparatively better than urban students except agility ability of colleges of Swami Ramanand Teerth University.
- Rural students were stronger to urban students in explosive strength speed and endurance. However urban students are stronger in agility.

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