

251 **A STUDY ON SHOULDER MUSCULAR STRENGTH  
BETWEEN RURAL AND URBAN HIGH SCHOOL BOYS OF  
13–15 YEARS AGE GROUP**

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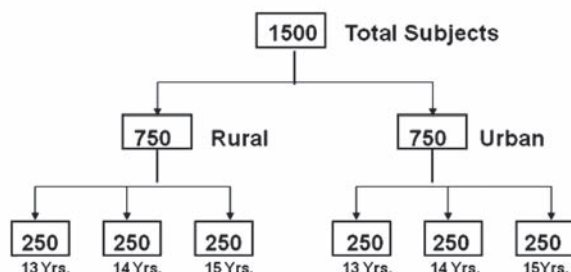
**Introduction** Physical fitness is one of the richest possession, it cannot be purchased; it has to be earned through systematic and daily routine of physical exercise/physical activity. One of the important, remarkable, beautiful, valuable and priceless things that God has created particularly on the earth is human life. Therefore, it is necessary to protect and maintain human life in order to achieve higher goals and objectives and also to live a happy and meaningful life. Fitness is the capacity of heart, blood vessels, lungs and muscles to function at optimum efficiency. Physical fitness is to the human body what fine tuning is to an engine. 'the ability to endure, to cheer up, to withstand stress, to carry on in circumstances where an unfit person cannot continue, and is a major basis for health and wellbeing'. People can only fulfil their potential when their bodies are healthy and fit.

The statistical analysis of data on shoulder muscular strength has been analysed by factorial analysis of variance to test the significant differences between the main effects (age group and areas) and their interactions (age group and areas). Post-hoc test was used wherever interaction was significant followed by post-hoc tests to find out the paired mean differences. The level of significances was set at 0.05.

**Findings**

The findings pertaining to the shoulder muscular endurance showed significant difference among the age groups. Thirteen years high school boys irrespective of rural and urban areas had the lowest shoulder muscular endurance. Significant differences in shoulder muscular endurance were found between 13 and 14 year and 13 and 15 year age groups, whereas no significant differences in shoulder muscular endurance was found between 14 and 15 year old high school boys. Irrespective of rural and urban areas, 15 year age group was found superior in shoulder muscular endurance compared to the other two age groups. Significant difference in shoulder muscular endurance

## Selection of Subjects in Different Age Groups



was observed between rural and urban high school boys irrespective of age group. Rural high school boys superseded their urban counterparts in shoulder muscular endurance strength. It was noticed from the results that there was an increasing trend in shoulder muscular endurance from 13 to 15 years. This clearly reveals that as the age advances, the shoulder muscular strength also increases. This improvement must be due to the sexual maturity and the boys become more muscular and strong due to the secretions of anabolic-androgenic hormones. The rural boys showed better performance due to their life style and the kind of physical activities they engage.

**Conclusions** On the basis of analysis of results and discussion of findings the final conclusions in shoulder muscular strength, that there was significant difference between 13, 14 and 15 year of rural and urban high school boys. It was found significant difference between 13 and 14; 13 and 15 year of both areas of high school boys.