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A Comparative Study On Muscular Strength Among Individual Sports

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Abstract : The aim was A Comparative Study On Muscular Strength Among Individual Sports. Players of individual activities such as 40 athletics, 40 gymnastics and 40 swimming total 120 subjects were selected as subjects of the present study, in which male players of 14 to 17 age groups were included as subjects. The tests of aspects of physical fitness were held and statistical analysis was made based on scores obtained by subjects. Tables were prepared according to variables selected under the study. Muscular powers measurement from Pull ups were used for muscles of hands and shoulders. Numbers of pull ups were noted. Statistical analysis was made with the help of data collected in different tests. Significance was examined by applying LSD (Least Significance Difference) in 'F' test at 0.05 levels. The results as Scores of male players of athletics, gymnastics and swimming selected at Gujarat State level were found at equal distance, so no significant difference was found in muscular strength between all three groups.

Introduction:

Human being is the best creation of God. Nature has created human specially and specifically. It has gifted a specific body filled with plentiful physical and mental abilities. So human being is different from other living beings. He has thinking and reasoning abilities. Mental power is attained by him with physical efficiencies. So human being has achieved too much progress and gone ahead beyond the time. The God has submitted the responsibility of cultural development by gifting him a valuable life.

The aspects such as higher level of speed, endurance, muscular power, co-ordination, flexibility etc are considered more important in sports. Higher physical fitness is considered more essential among sport persons than other aspects. For example, getting success is difficult in sports activities such as swimming, gymnastics, basketball, volleyball, hockey, sports and games etc without having necessary aspects of physical fitness.

Where there is life, there is movement. Walking and running are much familiar forms of movement. They can be developed after certain duration by repetition of training and practice.

Running is the oldest form of sports of human being. It is a simple test to measure ability of speed of a person to reach one place to another. The theoretical meanings of Olympic goals: Citius, altius and fortius are speedier, higher and stronger. Starting from ancient Greece, rapid and long race has become very popular in the present age.

Aims of the Study :

The aim was "A Comparative Study On Muscular Strength Among Individual Sports."

Selection of Subjects :

Players of individual activities such as 40 athletics, 40 gymnastics and 40 swimming total 120 subjects were selected as subjects of the present study, in which male players of 14 to 17 age groups were included as subjects. The tests of aspects of physical fitness were held and statistical analysis was made based on scores obtained by subjects. Tables were prepared according to variables selected under the study.

Criterion Measurements :

Muscular power: Pull ups were used for muscles of hands and shoulders. Numbers of pull ups were noted.

Statistical Process :

Statistical analysis was made with the help of data collected in different tests. Significance was examined by applying LSD (Least Significance Difference) in 'F' test at 0.05 levels.

Result of the Study :

Table

'F' ratio of muscular strength of male players selected at Gujarat State level athletics, gymnastics and swimming

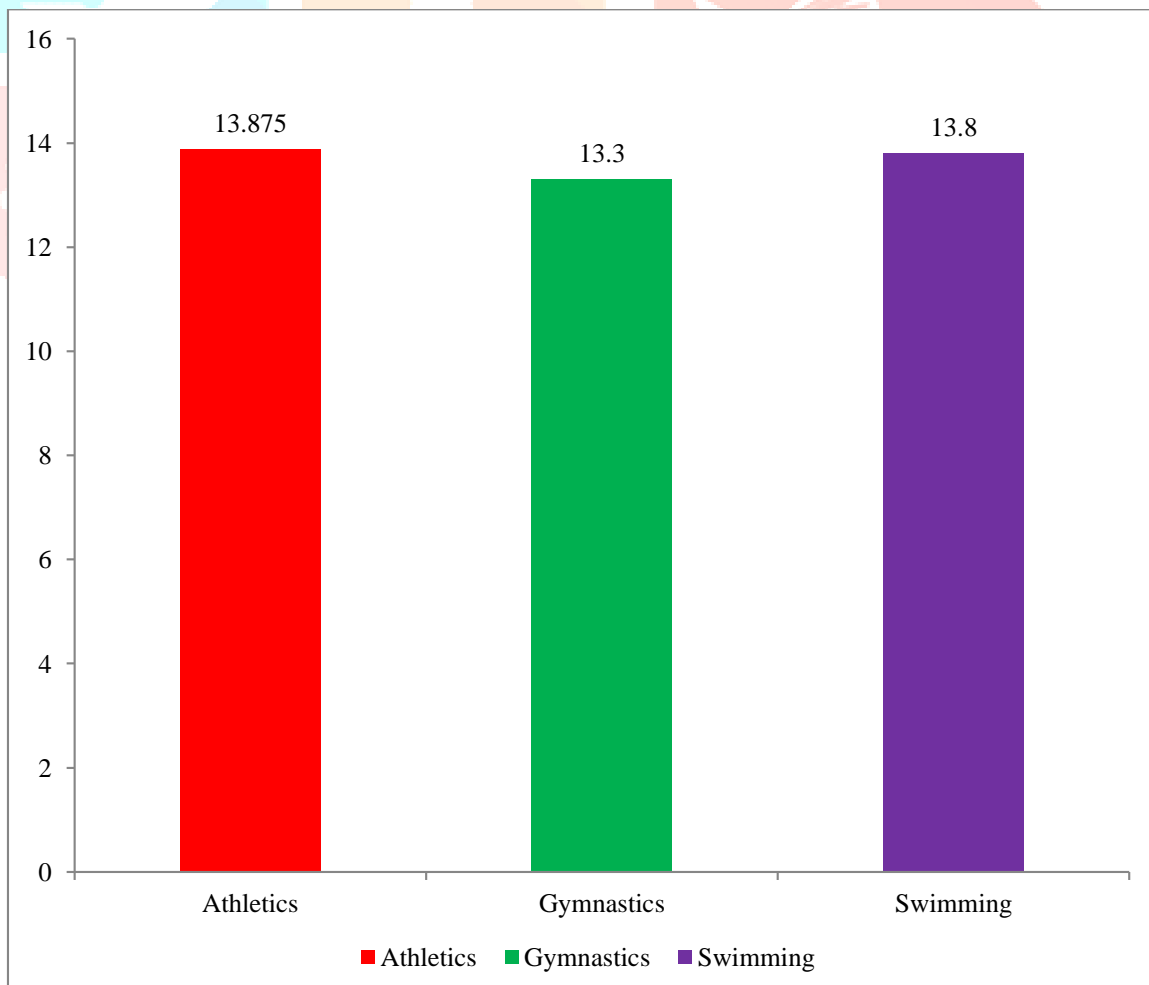
Test	Group		Analysis of variance				
	Mean	Subject	SS	df	MSS	'F'	
Athletics	13.875	40	A	7.816	2	3.908	0.255
Gymnastics	13.3	40					
Swimming	13.8	40	W	1789.175	117	15.292	

Significance at 0.05 levels 'F' = 0.05 (2,117) = 3.073

It is observed from table that, mean of muscular strength of male players of athletics, gymnastics and swimming selected at Gujarat State level was found 13.875, 13.3 and 13.8 respectively. Sum of squares of all groups was found 7.816 and sum of classes between all scores was found 1789.175. Mean deviation of all groups was 3.908, whereas mean deviation of all scores was found 15.292. 'F' ratio was found 0.255, which was not significant at 0.05 levels, whereas standard significance at 0.05 levels was (2,117) 3.073.

Graph

Mean of muscular strength of male players of athletics, gymnastics and swimming selected at Gujarat State level



Conclusion :

- Scores of male players of athletics, gymnastics and swimming selected at Gujarat State level were found at equal distance, so no significant different was found in muscular strength between all three groups.

Reference :

Clark, H. Harrison and Clark, David H., **Application of Measurement into Physical Education**, New Jersey: Prentice Hall Inc., 1987.
Varma, Prakash J., **A Textbook on Sports Statistics**, Gwalior: Venus Publication, 2000.
Whitehead, Nick, **Track Athletics**, West Yorkshire; E. P. Publishing Ltd., 1976.

