



## A COMPARATIVE STUDY ON MUSCULAR STRENGTH OF PHYSICAL FITNESS COMPONENT AMONG DAVANGERE CITY SLUM AREA BOYS

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### ABSTRACT

*In sports and games physical fitness play's vital role in the improvement of the player's performance especially at the competitive level therefore, physical fitness in sports and games has become indispensable for superior performance.*

**KEYWORDS:** *physical fitness play's , sports and games , personal social adjustment.*

### INTRODUCTION

Modern thinkers in education now a day's emphasis that best individual is one who is physical fit mentally sound and sharp, emotionally balances and socially well adjusted.

Man's existence and effectiveness depend upon his physical fitness physical fitness really implies more than the ability to do a work with out much efforts, physical fitness to some degree all of his life activation not only in physical well being but his effectiveness and personal social adjustment as well.

The concepts of fitness are not a new. It has a long and involved history. Since the day's of the early greed's physical fitness has an important objective of physical education. The later of course resulted in president Eisenhower's establishing 1956 the president council of youth fitness which launched the recent wave of concern for physical fitness.

Man's existence and effectiveness depends upon his physical fitness.physical3 33fitnes impress more than the ability to do a work without much effort .physical fitness effects to same degree all of his life's activities ,not only physical wellbeing but his mental effectiveness and personal adjustment as Sally and Froncine [1987].

### MUSCULAR STRENGTH

Muscular strength refers to the amount of force a muscle can produce with a single maximal effort. The size of your muscle fibers and the ability of nerves to activate muscle fibers are related to muscle strength. It is measured during muscular contraction. Building muscle strength helps with body alignment, makes performing everyday actions easier, and increases metabolism.

### WHAT IS MUSCULAR STRENGTH?

According to the American Council on Exercise (ACE), muscular strength is the maximal force a muscle or muscle group can exert during a contraction. But there are other factors that affect how strong you are and how much strength you have to complete daily chores or exercises. ACE provides definitions for these terms that are related to muscular strength:

- **Muscular endurance:** The ability of your muscles to exert force against resistance over a sustained period of time.
- **Muscular power:** The combination of muscular force and the speed of movement

The size of the muscle and the ratio of fast twitch and slow twitch fibers in that muscle is one component. Then the neural connection is key, as the motor neurons must be coordinated in their firing in order to signal the muscle fibers to contract at the same time. Strength also relies on the muscle having good support for movement of the joint, including the health of the joint, bones, ligaments, and tendons.

## METHOTOLOGY

In this chapter the procedure adapted for selection of the subject selection of test items. The method adapted for statistical treatment of data or described.

## SELECTION OF THE SUBJECTS

For the purpose of the study 100 boys (n=100) staying in the slums of Davanagere city in this context all 100 boys taken as a subjects only the male boys are taken for the study.

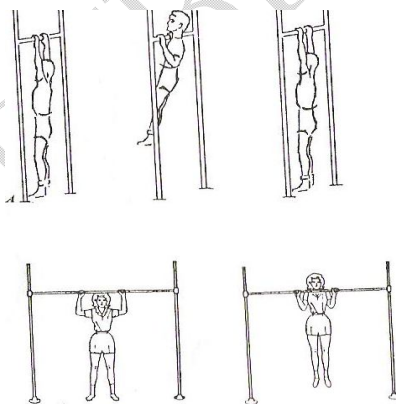
## SELECTION OF THE TEST ITEMS

AAPHER Youth fitness test was accepted to be an appropriate instrument for the it includes.

### Pull ups

#### DESCRIPTION OF THE PULL UPS TEST.

This test is comparable to upper body muscle strength contained in the boysAAPHER Fitness Test. The height of the bar is adjusted to equal each boy standing height. With the assistance of two spotters, one in front and one behind; rasp the overhead bar using either an overhand grip (palms facing away from body) or underhand grip (palms facing toward body), with the arms fully extended. The subject then raises the body until the chin clears the top of the bar, then lowers again to a position with the arms fully extended. The pull-ups should be done in a smooth motion. Jerky motion, swinging the body, and kicking or bending the legs is not permitted. As many full pull-ups as possible are performed. The countis stopped when stop the upper body pull.



## ANALYSIS AND INTERPRETATION OF DATA

The purpose of the study was to compare themuscular strength ofphysical fitness component of slum area boys in Davanagere city, to achieve this purpose the data collected in this study were put in to statistical analysis and the results of which are presented in this chapter.

For the study, 15 years of age and 16 years of age boys of slum area in Davanagere city were selected.

Mean, standard deviation and't' value of all the components presented in different tables and groups with appropriate reading in this chapter.

### STATISTICAL TECHNIQUE

Statistical technique employed for this study were mean standard deviation and 'T' ratio to find out the significant differences between the mean scores of the groups.

The statistical analysis was carried out by both manual and with the help of S.P.Ss software developed by S.P.Ss Inc-USA.

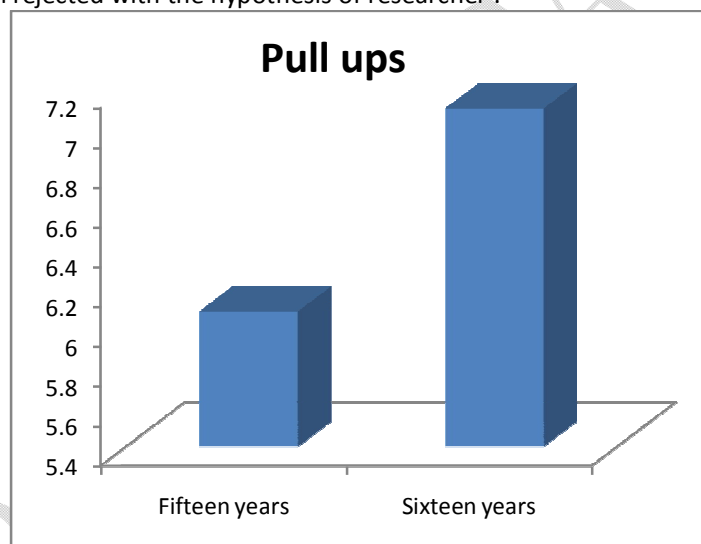
**TABLE 1**  
Showing the mean value  $\pm$  standard deviation and 'T' score of the strength (pull ups)

PULL UPS			
AGE	MEAN	STDEV	T-Test
Fifteen years	6.08	1.79	0.024177
Sixteen years	7.1	2.53	

Table 1 show the mean value and standard deviation of the two group i.e. 15 years and 16 years slum area boys with 't' score.

The 't' score on calculation is 0.024 which is lesser than table value, i.e. 2.01 and is not significant at 0.05 level.

The result is in rejected with the hypothesis of researcher .



Graphical represent of the mean value of strength (pull ups) between 15 years and 16 years of slum area boys.

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### Summary:

The purpose of the study was to compare the physical fitness component Muscular Strength 15 years and 16 years slum area boys of Davanagere city. To achieve this purpose, the investigation was conducted on fifty, fifteen year's boys, fifty, sixteen years slum area boys, in Davanagere city. The data were statistically analyzed to find out the difference in physical fitness among 15 years and 16 years age group of slum area boys in Davanagere city.

## CONCLUSION

Within the limitation of the present study, the following conclusions were drawn there was difference between 15 years and 16 years slum area boys of Davangere city for 15 years slum boys more work outs or training can give then only it is significant.

## RECOMMENDATION

While conducting the study, the researcher felt certain recommendation for further research.

1. The similar study may be conducting on slum area girls
2. Investigation may be made on the other variables such as psychological variable physiological, physical variables also.
3. The study may be conducting other age group.
4. Make physical training and exercise compulsory for other students, to develop the physical fitness
5. To given a proper training for slum area boys it is help full for individual achievement.

## REFERENCES:

1. Carl e. will Goose. 1961. Evaluation in health and physical education. McGrawHil. Book Company, new York
2. Laurence E. Morehouse. Ph.D. Total Fitness in 30 Minutes A week. Simon and Schuster. New York. Pp.57
3. Sally and Froncine. Evaluation in physical education. [1987]
4. <https://www.verywellfit.com/how-to-increase-muscular-strength-3496121>
5. [www.topendsports.com/testing/tests/pullup.htm](http://www.topendsports.com/testing/tests/pullup.htm)



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