

## EFFECT OF PHYSICAL ACTIVITY ON LEG STRENGTH OF SCHOOL STUDENTS

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### Abstract

*Research was conducted to study the effect of planned physical activity curriculum on elementary school students. To achieve the objective of the study, thirty six school students from the Doraha, District Ludhiana of Punjab in India were selected as subjects. Stratified random technique was used to select the samples from different schools. Samples/subjects were selected from the class ranging from Ist to VIth standard. Students were given the treatment of selected exercises for two weeks (six day a week) which lasted for forty minutes. To find out the significant difference between selected samples, statistical analysis was performed using SPSS version 16.0. All descriptive data pertaining to selected variable i.e. leg strength was reported as mean, standard deviation and t-test score. The level of the significance was set at 0.5. level. Result of the study reveal that significant difference was found between pre-test data and post-test data of leg strength of elementary school students.*

**Keywords:** school, students, physical activity, leg strength, statistical analysis.

### Introduction

Physical inactivity has become a serious problem in the India. More than half of Indian adults do not join the physical activity.

Regular physical activity of at least moderate intensity provides general health benefits across a range of diseases and all ages. Some of the health benefits of physical activities curriculum in schools are:

- Physical activity is an effective treatment for peripheral vascular disease and high blood pressure.
- Physical activity reduces the risk of all causes mortality.

- Physical activities reduce the tension of the study.
- Physical activity helps the students to make more active and fast.
- Physical activity reduces the shyness from the children.

The good exercises and physical activities help to the student to make a bright future in their life. They make them mentally alert and physically strong. Further, good [health](#) is one of the most important benefits of physical activity and sports. Students learn how to handle their difficult situations in better way. By displaying their feats before many spectators, they can overcome their nervousness. Physical activities are good diversions and give them energy to learn their lessons well. It gives the necessary break from the everyday monotonous life. Physical activity, games and sports help building a sense of [cooperation](#) and team-spirit in an individual. Children should actively participate in the sports to avoid of being tired and laziness. This is because physical activities improve their blood circulation and their physical well-being. Sports and games make the student confident and help them to choose their profession in future life.

At present in the schools, teachers and management are thinking that physical education is less important than education. This is very wrong because physical education is most important in present sanario. In the present era we all known that there are global warming is a dangerous for us. So we cannot neglect the importance of physical education and physically activities. Students learn so much from the educational institutions as well as from the social institutions. In the right that educational activities are very important but if we are not physically fit we cannot understand and learn our educational activities. So physical education is must in schooling education and in the higher education curriculums.

Many schools in the Punjab region thinks about the physical education and physical activity that it is a boring and burden subject and no one serious about this. In many school gives approximately one or two period in a week to the students. But in my opinion one period is must for every class in each day, because it's help to students to take off their burden in playing manner.

In the ancient time when there subject of physical education was started in the schools that physical education was only for health, but now it's become a major part of our educational system. Physical education becomes a compulsory subject of the education. It is not only for our physical growth but also for mental development, emotional development and moral development. When the student takes part in sports and physical activities they become a useful member of our society. The personality of a sportsman is different from others. That is why the subject of physical education should become a necessary part of our schools curriculum.

When a physical education department makes a curriculum for a particular class that should think in their mind age level, mental level and physical level of the students. In this curriculum teacher must teach to the student the basic skills and rules of the particular sports or other physical activity. In the school when a physical education teacher taught there students in the class room or in the playground he must keep in their mind the age level of the students and gives no over burden to them. If he thinks this types he win the confidence of students and the students also encourage towards sports and physical activities The facilities and other opportunities make the students so confident and self-dependent. When we make the curriculum for primary schools, middle schools, high schools and senior secondary schools must keep in our mind the interest of the students.

### Method and Procedure

For the purpose of the study thirty six students of I<sup>st</sup> to VI<sup>th</sup> standard Doraha, Ludhiana district of Punjab, India, were selected as subjects of the study by stratified random sampling technique. The test was conducted by using standardized tools. The leg strength was measured by the conduct of sit-ups (up and down) and total number of sit-ups performed was considered.

### Leg Strength

**Equipment:** - Stopwatch.



**Figure I:** Subjects performing sit-ups for leg strength

**Procedure:** - Children will perform maximum possible sit-ups (Sit and Stand).

### Result, Discussion and Interpretation

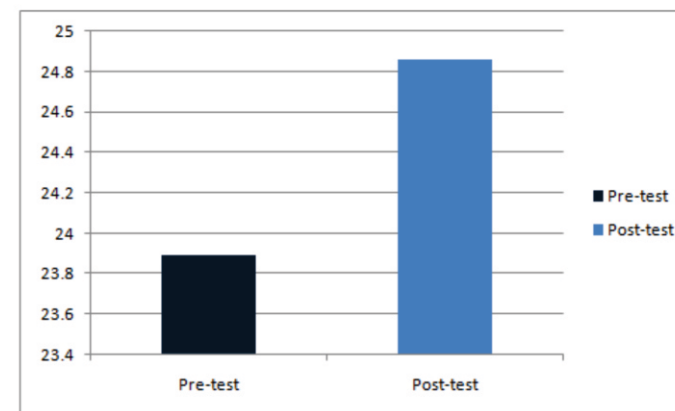
Training was conducted for fourteen days / two weeks with Sunday was observed as a rest day. Analysis of the results were represented in the following table:

**Table – I:** Comparison of mean values and t-value between pre-test and post-test for leg strength of the students.

	N	Mean	SD	SEM	t-value
Pre-test	36	23.8889	6.79402	1.13234	-1.932
Post-test	36	24.8611	7.79800	1.29967	

*Sig. at .05 = 2.021\* level of confidence*

**Figure - II:** Mean difference of leg strength between pre-test and post-test value.



The perusal of table I indicates the mean values of leg strength between pre-test and post-test is 23.8889 and 24.8611 respectively. The t-value -1.932 is significant at .05 level of confidence. Thereby indicating that there is a significant difference between the pre-test and post-test mean value of leg strength.

On the basis of the result of study, following conclusion was drawn.

Physical exercises were found effective since significant difference was found in the leg strength between pretest and posttest data of the school students.

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