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## Effect of callisthenic and aerobic exercises on flexibility of primary school children's

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### Abstract

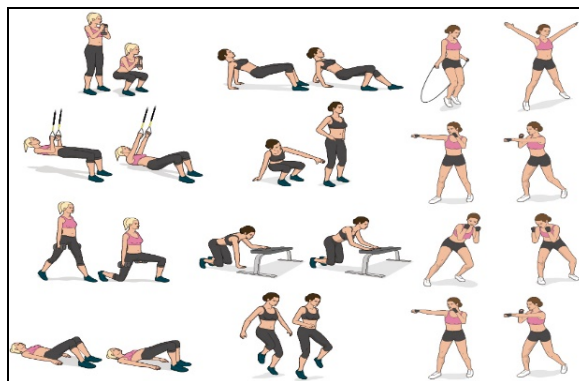
Callisthenic are exercises that use your body weight for resistance and are designed to strengthen and tone your muscles and increase muscular endurance. Derived from the Greek kilos, meaning and strength, callisthenic don't necessarily require any exercises equipment. Callisthenic exercises are easy on your joints. Exercises such as leg extensions and machine chest presses are safe enough but for some exercises, these movements can be hard on your joints. If you have a long history of hard training are over forty and beginning to experience the onset of joint pain, callisthenic exercises are one of the best ways to keep your joints moving while minimizing any discomfort. The primary callisthenic exercises are; sit-ups, crunches, push-ups pull-ups, squats, calf-raises and dips. Callisthenic originated in ancient Greece. It achieved national attraction when Victorian and South Australian coaches began moving throughout Australia.

**Keywords:** Introduction, callisthenic and aerobic exercises, flexibility, conclusion

### Introduction

Callisthenic exercises are easy on your joints. Exercises such as leg extensions and machine chest presses are safe enough but for some exercises, these movements can be hard on your joints. If you have a long history of hard training are over forty and beginning to experience the onset of joint pain, callisthenic exercises are one of the best ways to keep your joints moving while minimizing any discomfort. As many martial artists and ex-military personnel have proven, callisthenic exercises are suitable for older exercisers looking to maintain a high level of fitness despite worn joints.

Systematic and rhythmic body exercises generally performed without or weight that consists of bending, twisting, swinging, kicking and jumping movements and such specific exercises as push-ups, sit-ups and chin-ups.



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### The Importance of Callisthenic

Callisthenic are exercises that use your body weight for resistance and are designed to strengthen and tone your muscles and increase muscular endurance. Derived from the Greek kilos, meaning and strength, callisthenic don't necessarily require any exercises equipment.

**The Benefits of Callisthenic**

- The best benefit from callisthenic exercises is that you will understand everything about your own physical body and its limits.
- This is invaluable when functioning in your everyday life and helps you to avoid injuries.

**Aerobic Exercises**



Aerobic Exercises is sometimes known as cardio-exercise that requires pumping of oxygenated blood by the heart to deliver oxygenated blood by the heart to deliver oxygen to working muscles. Aerobic exercises stimulate the heart rate and breathing rate to increase in a way that can be sustained for the exercises session.

In contrast, anaerobic ("without oxygen") exercise is activity that causes you to be quickly out of breath, like sprinting or lifting a heavy weight. Examples of aerobic exercises include cardio machines, spinning, running, swimming, walking, hiking, aerobics classes, dancing, cross country skiing, and kickboxing. There are many other types.

**The Importance of Aerobic Exercises**

- The heart operates more efficient and becomes stronger.
- It helps to control your weight.

**The Benefits of Aerobic Exercises**

There are many benefits, aerobic exercise impulses the heart and circulatory system of the body, further than the easy pace of many every day activities. This stress obliges the body to adapt causing many changes which benefit us in lots of ways. The health benefits we obtain of the aerobic exercise are almost vital, not only does this kind of exercise help to regulate weight; it also limits the opportunities of developing many frequent illness and diseases.

**Flexibility**

Flexibility, mobility and suppleness all mean the range of limb movement around joints. Some sports such as gymnastics require a great deal of overall body.

**Importance of Flexibility**

- Because individuals with good flexibility have greater ease of movement, less pain and stiffness in joints.
- An increase in skill performance and less chance of injury, is important to incorporate a flexibility program into your workout routine.

**Methodology**

The purpose of investigator is to compare Flexibility. Performance of "Effect of Callisthenic and Aerobic Exercises on Flexibility of Primary School Children's." To execute the investigation selected 50 Experimental Group and 50 Control Group.

**Sample:** The total sample consists 100 Girls and the Age Levels was 09 to 12 Years.

**Callisthenic Exercises**

Basically all these exercises are freehand movements in nature and done with two counts or four counts to complete one movement.

- 1) Arm rotation
- 2) Trunk forward bending and back
- 3) Trunk bending – Sideways: Left and Right
- 4) Legs stretching sideways from crouch sit position with a hop (Alternate - Left and Right)

**Aerobic Exercises**

1. V-Step
2. L-Step
3. Zig-Zag Step
4. Left Side Right Side Movement

**Analysis and Interpretation of Data**

The Effect of 6 Weeks Callisthenic Exercises and Aerobic Exercises training on Flexibility Physical variables of Primary school students and training was imparted to Experimental Group and Control Group Performance was recorded at Pre-test and Post-test and Interpretation of data has done as follows.

**Shows Mean, SD and t-value of Flexibility [Sit and Reach] Between Experimental Group and Control Group Pre-test and Post-test**

| Variable    | Group              | Test      | Mean   | S. D    | Df | t-value | P-value | Significant |
|-------------|--------------------|-----------|--------|---------|----|---------|---------|-------------|
| Flexibility | Experimental Group | Pre Test  | 3.0160 | 1.50850 | 24 | 2.286   | .021    | S           |
|             |                    | Post Test | 3.9840 | 1.35606 |    |         |         |             |
|             | Control Group      | Pre Test  | 2.6920 | .74829  | 24 | -1.92   | .060    | NS          |
|             |                    | Post Test | 3.1200 | .82412  |    |         |         |             |

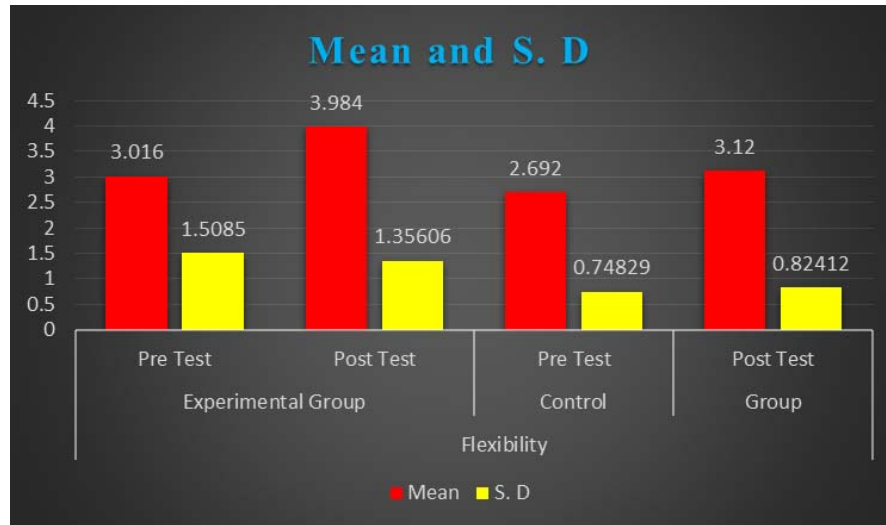
\*The level of significant is 0.05, Table value is 1.96

The Experiment Group showing the significant difference of the Pre-test and Post-test as well Mean, Standard Deviation and t- value. The mean Score of Pre-test 3.01, Post-test 3.98, Standard Deviation Pre-test 1.50, Post-test 1.35, The Variables of the study clearly shows that the impact of callisthenic and aerobic exercises increases the Flexibility Measure By the Sit and Rich. The t- value is 2.28, this indicate the level of significant difference between Pre-test and Post-test of the

Subject. The Control Group showing there is no significant difference of the Pre-test and Post-test as well Mean, Standard Deviation and t- value. The mean Score of Pre-test 2.69, Post-test 3.12, Standard Deviation Pre-test.74, Post-test.82 The Variables of the study clearly shows that the impact of calisthenics and aerobic exercises increase the Flexibility dose not play any role for Measure by the Sit and Reach. The t- value is -1.92,

this indicate there is no significant difference between Pre-test and Post-test of the Subject.

### Showing the Pre-test and Post-test for Flexibility



The above figure clearly indicates that the six weeks callisthenic and aerobic exercises training performance is drastically improved Flexibility of the Experimental Group.

### Summary

The purpose of this study was to examine the effects of callisthenic exercises and Aerobic Exercises training improve the Flexibility of Primary School Children's. Pre-test as been conducted then the six weeks callisthenic exercises and Aerobic Exercises training program organized to the Primary school children, after the six weeks training post test conducted the researcher found that the effect of motor ability level the post-test result indicates significant improvement in the motor ability level.

### Conclusion

On the basis of the result the following conclusions were drawn, the six weeks Callisthenic Exercises and Aerobic Exercises training improve the Flexibility of Primary School Children's.

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