

Effect Of Aerobic Exercises On Endurance Of School Boys**Dr. Divakar Ruikar**

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Abstract

Aerobic exercise is any physical activity that makes you sweat, causes you to breathe harder, and gets your heart beating faster than at rest. It strengthens your heart and lungs and trains your cardiovascular system to manage and deliver oxygen more quickly and efficiently throughout your body.

Keywords: Aerobic exercise, Physical, Heart rate.

Introduction

Aerobics is a form of physical exercise that combines rhythmic aerobic exercise with stretching and strength training routines with the goal of improving all elements of fitness (flexibility, muscular strength, and cardiovascular fitness). It is usually performed to music and may be practiced in a group setting led by an instructor (fitness professional), although it can be done solo and without musical accompaniment. With the goal of preventing illness and promoting physical fitness, practitioners perform various routines comprising a number of different dance-like exercises. Formal aerobics classes are divided into different levels of intensity and complexity and will have five components: warm-up (5–10 minutes), cardiovascular conditioning (25–30 minutes), muscular strength and conditioning (10–15 minutes), cool-down (5–8 minutes) and stretching and flexibility (5–8 minutes).

Benefits of Aerobic Exercise

In addition to strengthening your heart and cardiovascular system, participation in regular aerobic exercise has many health benefits.

Aerobic exercise:

- a. Improves your circulation and helps your body use oxygen better
- b. Increases energy
- c. Increases endurance, which means you can workout longer without getting tired
- d. Helps reduce the risk of developing heart disease
- e. Helps reduce the risk of developing diabetes
- f. Helps reduce body fat

- g. Helps you reach and maintain a healthy weight
- h. Helps reduce stress, tension, anxiety, and depression
- i. Improves sleep

Examples of Aerobic Exercise

Physical activity such as walking, jogging, indoor cycling, or aerobic dancing are all examples of aerobic exercise that strengthen the heart and lungs, therefore improving your body's utilization of oxygen. For general health, aim for a 30-minute workout (or three 10-minute workouts per day) three to five days a week at moderate intensity. Moderate intensity refers to an activity that will increase your breathing and heart rate.

Physical activity or exercise can improve your health and reduce the risk of developing several diseases like type 2 diabetes, cancer and cardiovascular disease. Physical activity and exercise can have immediate and long-term health benefits. Most importantly, regular activity can improve your quality of life.

Purpose of the study

The main purpose of the study was to find out the effect of aerobic exercises on endurance of school boys.

Hypothesis

On the basis of available literature and researcher's own experience and understanding about the problem, it was hypothesized that, there may be significant effect of aerobic exercises on endurance of school boys.

Review of Literature

Aerobics is a form of physical exercise that combines rhythmic aerobic exercise with stretching and strength training routines with the goal of improving all elements of fitness.

People of all ages can improve health and fitness by including moderate amounts of physical activity in their daily lives. A moderate physical activity is any activity that requires about as much energy as walking 2 miles in 30 minutes, such as rowing, cycling, vacuuming, swimming, tennis, and volleyball.

Haluk Kele (2006), studied that the “ Effects of the aerobic exercise training on the heart rate- work rate relationship and estimation of aerobic thresholds and obese females”. The purpose of the study was to assess the effects of aerobic exercises on the relationship between heart rate deflection point and anaerobic threshold.

Methodology

Dancing, swimming, water aerobics, biking, walking, hiking, climbing steps (two at a time for a more vigorous workout), low-impact dance classes, kick-boxing, all the cardio machines at the gym (treadmill, elliptical, bike, rower, x-c skiing, stair-climber), and many other activities are all examples of types of aerobic or cardio activities, but they can be anaerobic too if they are performed at a high enough intensity. Try riding your bike alongside Lance Armstrong in the French Alps and you'll know what anaerobic exercise means in moments. But then again, riding along on your bike at a leisurely 8-10 mph on the boardwalk at the seashore is the same activity, but at a much lower intensity, much lower heart rate, and much lower oxygen consumption, and so in this case, biking is aerobic. The bottom line is that the intensity at which you perform an activity determines if it's aerobic or anaerobic.

Aerobic exercises

1. Aerobic exercise classes
 2. Canoeing or kayaking
 3. Cheerleading
 4. Dancing
 5. Gymnastics
 6. Hiking
 7. House and yard work
 8. Ice skating
 9. Jumping rope
- Karate or other martial arts
 - Riding a bicycle

- Rollerblading
- Rowing
- Running
- Skateboarding
- Skiing or snowboarding
- Sports such as baseball, softball, basketball, volleyball, soccer, lacrosse, tennis, hockey, basketball, football, fencing, badminton, or swimming
- Walking

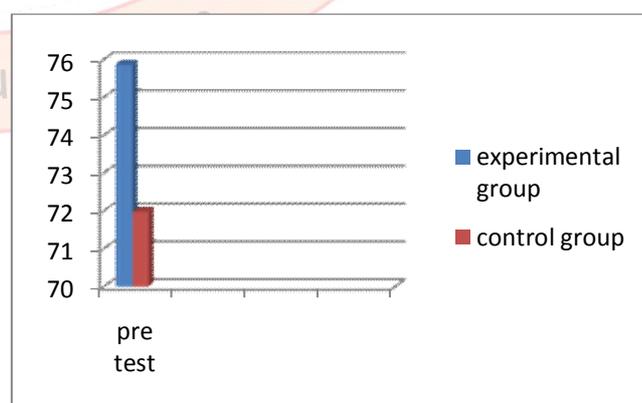
Analyzing the effects of aerobic exercises on endurance of school boys.

To find out the effect of aerobic exercises on endurance the data were collected through administration of Harvard Step Test before and after six weeks training programme. The collected data were analyzed by employed ‘t’ test statistical technique.

Mean differences between the pre-test scores of experimental and control groups on endurance

Sr. No.	Group	Test	N	Mean	SD	M.D	d.f	‘t’ value
1	E.G	Pre test	15	75.88	8.00	2.98	28	1.03
2	C.G	Pre test	15	72.90	7.75			

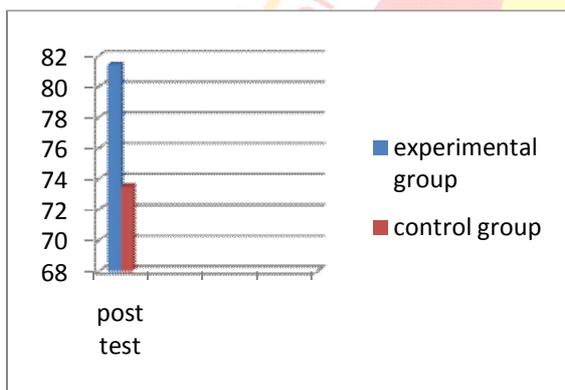
Graphical representation



Mean differences between the post- test scores of experimental and control groups on endurance

S r · N o	Gr o u p	T e s t	N	Me a n	S D	M D	d f	't
1	EG	P o s t t e s t	15	81.46	9.11	7.90	28	2.53
2	CG	P o s t t e s t	15	73.56	7.99	7.99		

Graphical representation



Conclusion

After 6 weeks training the results were statistically analyzed. The study revealed that aerobic exercises have considerable effects on endurance of school boys after 6 weeks training programme.

The similar study may be done with greater number of subjects. The similar study can be repeated to their physical fitness components on the same subjects. The similar study may be helpful to the physical education teachers, sports persons, teachers of sports medicine and also to the parents well.

Aerobic exercise is essential to muscle health for several reasons. During aerobic exercise, your heart rate increases and your blood flows more quickly, carrying more oxygen between your lungs and muscles. Aerobic activity helps to promote overall health, which in turn makes it easier to maintain muscle health.

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