

## EFFECT OF AEROBIC EXERCISE ON VITAL CAPACITY AMONG SECONDARY SCHOOL GIRLS

Kusuma C. Shamanur and Rajkumar P. Malipatil

Research Scholar , DOS in Physical Education and Sports Sciences  
Karnataka State Women's University Bijapur.  
Asst Prof DOS In Physical Education and Sports Sciences  
Karnataka State Women's University Bijapur.

### Abstract:

**Background:** The purpose of the study was to examine the effect of aerobic exercise training on vital capacity among secondary school girls

**Methods:** For the present study 30 secondary school girls from Sri B.M.Patil Public School Bijapur. were selected at random and their age ranged from 14 to 16 years. For the present study pre test – post test randomized group design which consists of experimental group was used. A total 21 days of aerobic exercise classes were conducted on a daily 30 girl students.

The selection variables of the study are only for selected floor exercise (Only step exercise) with music has been given for the one time in a day for one hour and 21 days. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) technique to find out the effect of aerobic exercise training programme. The level of significance was set at 0.05

**Result:** The findings of the present study have strongly indicates that aerobic exercise training of 21 days has significant effect on vital capacity. Hence the hypothesis earlier set that aerobic exercise training programme would have been significant effect on aerobic exercise training variables in light of the same the hypothesis is accepted.

**Conclusion:** Significant effect of aerobic exercise training was found on vital capacity.

### KEYWORDS:

vital capacity and aerobic exercise.

### INTRODUCTION

Aristotle the great philosopher of all the times observed that “body is the temple of soul and to reach harmony of the body mind and spirit. The body must be robust.”

The primitive man led a vigorous life for his survival in this world in valleys and hills. Because of these vigorous activities man developed a good physique.

Modern man is no longer required to lead a vigorous outdoor life in saving devices. Hence he is tempted to lead a sedentary life. Leading to a stage of physical degeneration and mental de-arrangement.

Aerobic activities include cycling, jogging, stair climbing but not golf, basketball or doubles tennis as these activities include pauses and may not contribute much to fat loss. Running at a moderate pace is an aerobic activity while sprinting is not; as it's just an outburst of energy 4 brief moment. Aerobics are best done early in the morning with an empty stomach as it'll help you burning more fat.

This is because your body doesn't need to burn glycogen as overnight, it has already been depleted, or burn what you have just eaten. With an empty stomach you start burning fat right away. Go through a

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moderate to intense exercise for 30-45 minutes, 4-5 days a week and be regular with that. Regularity will help you get leaner with the exercises whereas any break can weaken your motivation.

Many aerobic exercises are simple and can be done at home. Riding a bike is one of the best activities as it keeps your legs in tone, heartbeat up and burns calories. Rollerblading and jogging are as much effective and inexpensive too. Or you can just put your iPod with you and just go out for a long walk. Try setting goals for yourself and increase the duration of your exercise each day.

Another easy and fun way is to find some good stairs and walk up and down till you no longer can even walk. Try swimming as it will not only put pressure on your joints and raise your heartbeat but also trim your whole body. Working in your garden can be fun as well as a perfect exercise with mowing the lawn or picking up the weeds.

All these activities are healthy easier to perform and inexpensive. Aerobic exercises are beneficial in so many ways like Strengthening the respiratory muscles, Strengthening and enlarge the heart muscle and improve its pumping, Improving blood circulation and red blood cells, Reducing stress and depression Increasing your stamina and endurance of your muscles, In short it reduces the risk of heart attacks.

Aerobic exercises are a wonderful way to burn your fat and tone your body muscles, leaving you healthy and in a good shape. Finding the perfect Workout Routines [<http://www.workoutroutines.biz>] takes time and effort. These best workout routines is a great place to start if a person is interested in flat abs.

### AEROBIC CAPACITY

Aerobic capacity describes the functional capacity of the cardio respiratory system, (the heart, lungs and blood vessels). Aerobic capacity is defined as the maximum amount of oxygen the body can use during a specified period, usually during intense exercise. It is a function both of cardio respiratory performance and the maximum ability to remove and utilize oxygen from circulating blood. To measure maximal aerobic capacity, an exercise physiologist or physician will perform a VO<sub>2</sub> max test, in which a subject will undergo progressively more strenuous exercise on a treadmill, from an easy walk through to exhaustion.

### OBJECTIVE OF THE STUDY

The purpose of the study was to investigate the effect of aerobic exercise Training programme on vital capacity among secondary School girls. It was hypothesized that there would have been a significant effect of 21 days of aerobic exercise training programme on vital capacity among secondary school girls.

### PROCEDURE

To carry out the effect of aerobic exercise on vital capacity of 25 girl student studying in higher secondary school were selected randomly as per age, height and weight. The subjects were made of one group 25 girl students. The subjects were tested on above mentioned certain variables before and after completion of 21 days.

The vital capacity was determined by aerobic exercise and wet spirometere. T-test was used to find out the significance of the study.

### RESULTS AND DISCUSSIONS ON FINDINGS

The findings pertaining to analysis of co-variance between experimental group on vital capacity among secondary school girls pre-test and post test respectively have been presented in table No. 1 to 2.

Table No. 1 and Graphe shows the Pre test Mean, standred divition (SD) and level of vital capacity of girl students

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TABLE NO.1

Variables	Test	N	Mean	SD	Level of Significance
Vital capacity	Pre Test	25	1820.08	332.14	NS

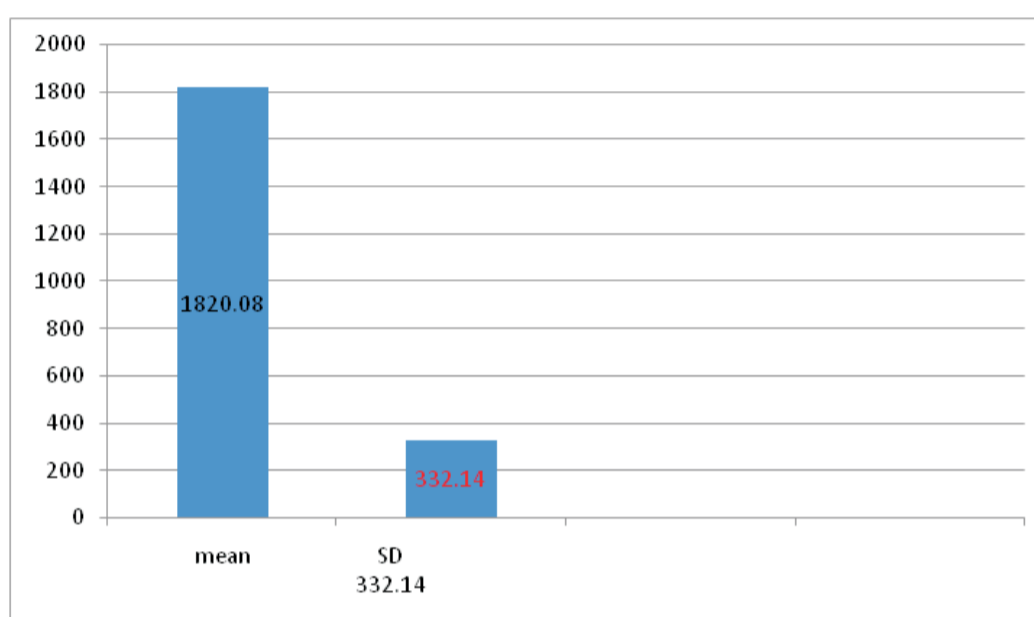


Table No.1 and Graph shows the Pre test Mean, standard deviation (SD) and level of vital capacity of girl students. Before the training the vital capacity of subjects measured by Wet spirometer the collected information has been gone through statistical procedure. The Mean is 1820.08, SD is 332.14 respectively. In this mean score the amount of vital capacity has been distributed from 25 subjects. The minimum amount of vital capacity is more than 1500 ml of each subject.

Because the level of fitness and capacity of lungs of an individual without any sports event and exercises were not affected on lung capacity. Height from stadiometer, Weight from weighing machine. After that, the certain number of subjects were selected as for the criteria that in the selected numbers of days were practised.

Table No.2 and Graph of the Post test shows the Mean, standard deviation (SD) vital capacity of girl students

Table - 2

Variable	Test	N	Mean	SD
Vital capacity	Post test	25	1872.80	340.86

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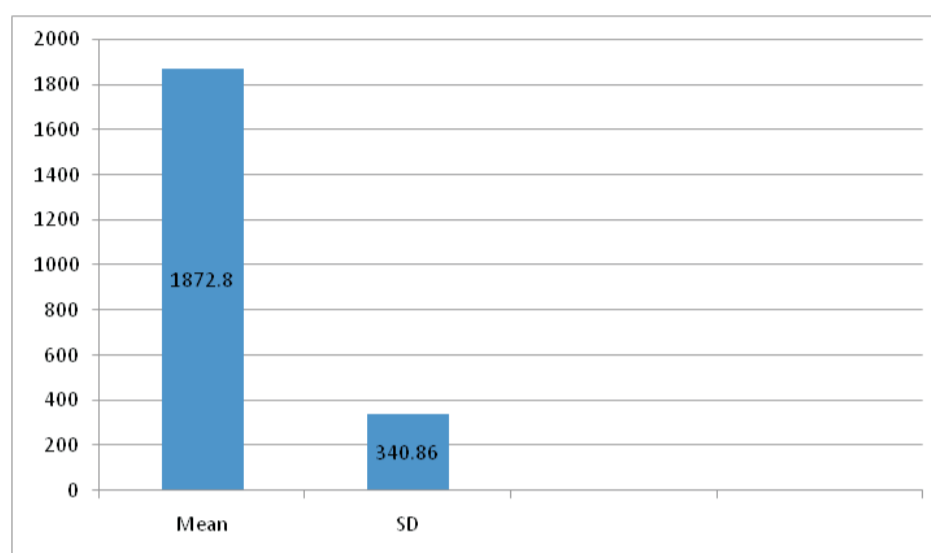
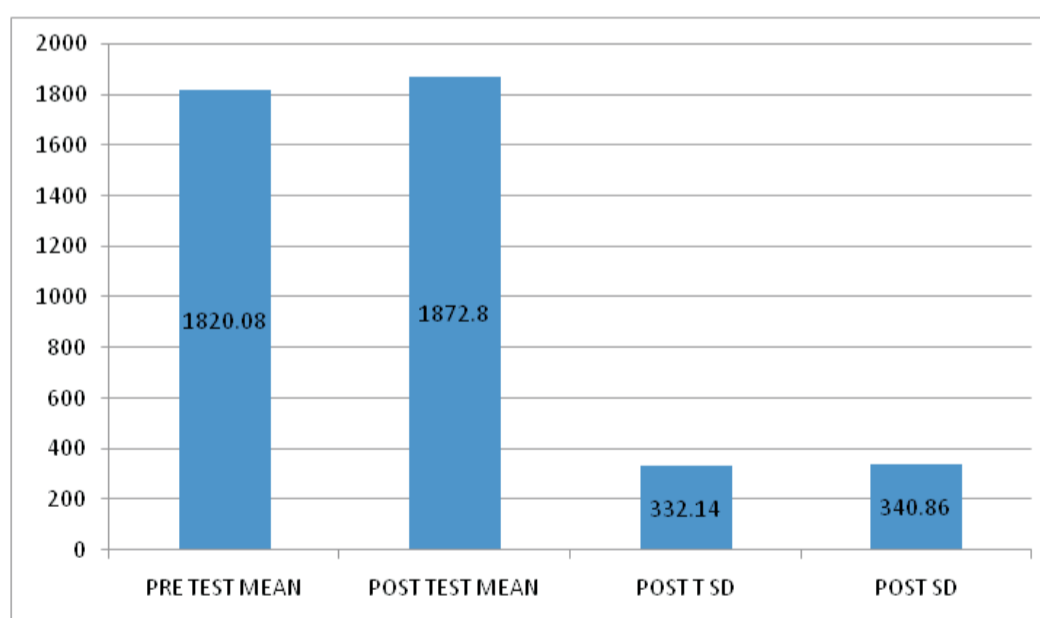


Table No.2 and Graph of the Post test shows the Mean, standard deviation (SD) vital capacity of girl students. The Mean is 1872.80, earlier pre test was 1820.08 and Standard deviation post test is 340.86 earlier was 332.14. Thus the comparative variables show that in this study there is some sort of significant difference on vital capacity.

**TABLE NO.3**

Variables	Test	N	Mean	SD	t
Vital capacity	Pre	25	1820.08	332.14	4.77
	Post	25	1872.80	340.86	



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Table number 3 and graph shows the significance difference of pre test and post test as well mean, Sd and t value. The mean score of pre test 1820.08 and post test is 1872.80. The standard deviation is 332.14 and post test is 340.86. The variables of this study clearly shows that the effect of aerobic exercise as increased vital capacity measuring the variable of t value is 4.77. This indicates the level of significance difference between pre test and post test of subjects.

This is possible because aerobic exercise is currently one of the most commonly Practised adult fitness activities which directly contribute to enhancement in their vital capacity and due to regular training programme of aerobic exercise training which may also bring sudden spurt in vital capacity among secondary school girls. The findings of the present study have strongly indicates that aerobic exercise training of 21 days have significant effect on vital capacity. Hence the hypothesis earlier set that aerobic exercise training programme would have been significant effect on vital capacity among secondary girls.

#### CONCLUSIONS

On the basis of findings and within the limitations of the study the following conclusions were drawn: Significant effect of aerobic exercise on vital capacity among secondary school girls.

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