



Effect of Yogic Practices on Vital Capacity and Body Fat among School Girls

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Abstract

The purpose of the study was to investigate the effects of selected yogic exercises on vital capacity and body fat. To facilitate the study, thirty subjects from selvam higher secondary school, Namakkal were selected as subjects at random and their ages between 14 to 17 years. The subjects were divided into two equal groups. In this study, yogic exercise was given to experimental group for the period of 6 weeks. The pre-tests were taken from the subjects before administrating the training. The subjects were involved with their respective training for a period of 6 weeks. At the end of the sixth weeks of the training posttest were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by paired t ratio. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 14. Vital capacity and body fat of experimental group showed significant difference when compared to control group. There was no significant difference in vital capacity and body fat of control group.

Keywords: Yoga Practices, Vital Capacity, Body Composition, School Girls.

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Introduction

Yoga provides one of the best means of self-improvement and attaining one's full potential. In the advanced stages of yoga, super conscious states are attained which result in a felling of bliss, deep peace and the emergence of psychic powers. Yoga was developed and perfected over the centuries by philosophers and mystics in India. It is basically a method by which we increase the body's supply of energy and remove any interference to the transmission of energy throughout the body. Yoga has specialized in this subject for thousands of years, and streamlined the methods to attain this aim.

Yoga works on the mind and the body at the same time, as well as exploiting their interdependence. No other system does this. Western psychology studies the mind, western exercise physiology studies the effect of exercise on the body, but there is no emphasis on the interrelationship of the mind and the body. Yoga asanas (postures) and breathing deal with the physical body, but due to their effect on the brain, they also affect the mind. All the wonders of modern science will not bring happiness, peace of mind, health or a long life. Although wonders have been achieved in our external environment such as space travel, computers, etc- our internal environment has been neglected. Thousands of years ago the ancient yogis turned their minds inwards and discovered their true nature. This allowed them to work out a system of body and breathing exercise which

results in vitality, rejuvenation and peace of mind. The aim of Patanjali Yoga is to set man free from the cage of matter. Mind is the highest form of matter and man freed from this dragnet of Chitta or Ahankara (mind or ego) becomes a pure being. The mind or Chitta is said to operate at two levels-intellectual and emotional. Both these levels of operation must be removed and a dispassionate outlook replaces them. Constant Vichara (enquiry) and Viveka (discrimination between the pleasant and the good) are the two means to slay the ego enmeshed in the intellect and emotions. Vairagya or dispassion is said to free one from the pain of opposites love and hate, pleasure and pain, honour and ignominy, happiness and sorrow.

Methodology

The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups of fifteen men students each. The groups were assigned as experimental group and control group in an equivalent manner. Experimental group participated for a period of six weeks and the post-tests were conducted. In this study, thirty school students were selected as subjects from Selvam higher secondary school, Namakkal and their ages were between 14-17 years. The subjects were selected random. To test the significance of changes made from the pre test to post test on two groups individually paired't' test was applied. The significance of the means of the obtained test results was tested at 0.05 level of confidence. It was considered as sufficient for the present study.

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Results and Discussion

The primary objective of the paired 't' ratio is describing the differences between the pre-test and post-

test of school students belong to yogic exercises criterion measures such as vital capacity and body fat.

Table I. Computation of 't' ratio between the pre test and post test means of vital capacity of experiment group

S.No	Variables	Means diff	SD	DM	't' ratio
1	Vital Capacity	373.33	79.88	20.63	18.10*

*Significant at 0.05 level

An examination of table I indicates that the obtained 't' ratio was 18.10 for vital capacity of experimental group. The obtained 't' ratio on vital capacity were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees

of freedom. So it was found to be significant. The results of this study showed that 6 weeks practice of yogic exercises produced a significant improvement in vital capacity. Hence the formulated hypothesis related to this was accepted in vital capacity.

Table II. Computation of 't' ratio between the pre test and post test means of vital capacity of control group

S.No	Variables	Means diff	SD	DM	't' ratio
2	Vital Capacity	13.33	35.19	9.09	1.47

*Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratio was 1.47 for vital capacity of control group. The obtained 't' ratio on vital capacity were found

to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be insignificant.

Table III. Computation of 't' ratio between the pre test and post test means of body fat of experiment group

S.No	Variables	Means diff	SD	DM	't' ratio
3	Body Fat	1.10	0.57	0.15	7.43*

*Significant at 0.05 level

An examination of table III indicates that the obtained 't' ratio was 7.43 for body fat. The obtained 't' ratio on body fat were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be

significant. The results of this study showed that 6 weeks practice of yogic exercises produced a significant mean lose in body fat. Hence the formulated hypothesis related to this was accepted in body fat.

Table IV. Computation of 't' ratio between the pre test and post test means of body fat of control group

S.No	Variables	Means diff	SD	O DM	't' ratio
4	Body Fat	0.03	0.77	0.20	0.17

*Significant at 0.05 level

An examination of table IV indicates that the obtained 't' ratio was 0.17 for body fat. The obtained 't' ratio on body fat were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be insignificant.

control group. There was no significant difference in vital capacity and body fat of control group.

Conclusions

Vital capacity and body fat of experimental group showed significant difference when compared to

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