

**IMPACT OF YOGIC PRACTICES ON PHYSIOLOGICAL PARAMETERS IN OBESE
MALE VETERINARY SCIENCE STUDENTS**

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Abstract

Yoga is a psycho-somatic-spiritual discipline for achieving union and harmony between our mind, body, and soul and the ultimate union of our consciousness with the universal consciousness(MadanMohan-2009). An Experimental study was conducted on 30 Veterinary Science students of the College of Veterinary Science-Proddatur, to understand the variations in their physiological parameters, the results reveal that there is a significant variation in the control and test groups taken. It established a widely accepted conclusion that Yoga is an effective practice to curb obesity among individuals.

Key words: Yoga, Health, Physiological variables, Obesity, Vital Capacity

Introduction

Yoga is a commonly known generic term for physical, mental, and spiritual disciplines that originated in ancient India Specifically; yoga is one of the six astika schools of Hindu philosophy. It is based on the Yoga Sutras of Patanjali. Various traditions of yoga are found in Hinduism, Buddhism, Jainism, and Sikhism.

Pre-philosophical speculations and diverse ascetic practices of the first millennium BCE were systematized into a formal philosophy in the early centuries CE by the Yoga Sutras of Patanjali. By the turn of the first millennium, Hatha yoga emerged as a prominent tradition of yoga distinct from the Patanjali's Yoga Sutras. While the Yoga Sutras focus on discipline of the mind, Hatha yoga concentrates on health and purity of the body.

Hindu monks, beginning with Swami Vivekananda, brought yoga to the West in the late 19th century. In the 1980s, yoga became popular as a physical system of health exercises across the Western world. Many studies have tried to determine the effectiveness of yoga as a complementary intervention for cancer, schizophrenia, asthma, and heart patients. In a national survey, long-term yoga practitioners in the United States reported muscular–skeletal, and mental health improvements. In a RCT conducted at All India Institute of Medical Sciences, Delhi, India, showed that adding a comprehensive yoga-based mind-body intervention to the conventional treatment improved several measures of pulmonary function in subjects having mild to moderate bronchial asthma, a decrease in exercise-induced bronchoconstriction in the yoga group, particularly in the exercise-sensitive subjects (Vempati-2009)

Yoga is a system of attaining perfect physical and mental health. "The body is the temple of soul and to reach harmony of mind, body, and spirit, the body must be physically fit". Yoga controls one's sense resulting in an integrated personality. Positive changes in the lifestyle of people can be brought through Yoga during the middle and old age. Yoga training produced statistically significant ($P < 0.05$) increase in FEV, FEV1, peak expiratory flow rate (PEFR) also increased significantly ($P < 0.01$) after the yoga training. (Reddy-2010)

Statement of The Problem

The purpose of this study was to find out the Effect of Yogic Practices on Selected Physiological Variables of Veterinary College Obese Boys.

Hypotheses:

The researcher had gone through various related research studies completed on this area. Based on the available literature, keeping the above logical concepts, the following hypotheses have been formulated.

It was hypothesized that Yogic Practices would improve the Vital Capacity of the Veterinary College Obese Boys.

Objectives of the study:

1. To assess the effect of yogic practices on Physiological variables of Veterinary College obese students.
2. To find the nature of the relation that exists between yogic practices with Physiological variables of Veterinary College Obese Boys students.
3. To assess the significant changes as a result of the 6 weeks of the training practices program of Veterinary College Obese Boys students before and after the training.

Methodology

The present study was carried out by simple random sampling, a group of 30 students belonging to the age group of 20-24 years pursuing their veterinary graduation at the College of Veterinary Science, Proddatur was selected as a sample for the study. With prior consent and permission after making them aware of the experimental procedures the participating students were divided into two groups as Control (15) and the experimental group (15) and all the individuals were allowed to perform yoga and pranayama for about 1hr for 6 weeks. After the experimental period, the individuals were recorded for some parameters like vital capacity, etc. Statistical analysis was performed using SPSS ver20.0 paired sample t-test to test the significance of the difference between the control and experimental group of individuals before and after the experimental period.

Results on Vital Capacity

To find out the statistical difference between the initial and final performance of experimental and control groups, 't' test was employed at a 0.05 level of significance.

Table I

Showing the Mean and Standard deviation of Vital Capacity(ml) before the experiment.

Groups	Means	MD	SD	SDM	Obtained 't'	'P' before experiment.	'P' after experiment.	va

Experimental Group (N=15)	2154.26	108.1	569.3	244.7	0.44	2680	3430
Control Group (N=15)	2046.13		758.1			2620	2700

Not Significant at 0.05 level 't' Value Required at (0.05)(1,14) = 2.14

Table IV shows the mean, mean difference, standard deviation, and value of pre test of the experimental and control group from the data obtained.

The study was to find out the effect of yogic practices on Vital Capacity. The obtained means on the experimental group was 2154.26 and the control group was 2046.13 with a mean difference of 108.1. The obtained 't' value of 0.08 was less than the required table 't' value of 2.14 to be significant at a 0.05 level.

This proved that the groups, experimental and control were equal at initial state of the experiment.

Table V shows the final means, mean difference, standard deviation and obtained 't' value after six weeks yogic practices among corporate school Obese boys.

Table II

Significance of Difference Between the Final Means of the Experimental and Control Group on Vital Capacity

Groups	Means	MD	SD	SDM	Obtained 't'
Experimental Group (N=15)	2658.6		227.15	162.7	3.15*

Control Group (N=15)	2144.8	513.8	587.9		
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* Significant at 0.05 level 't' Value Required at (0.05)(1,14) = 2.14

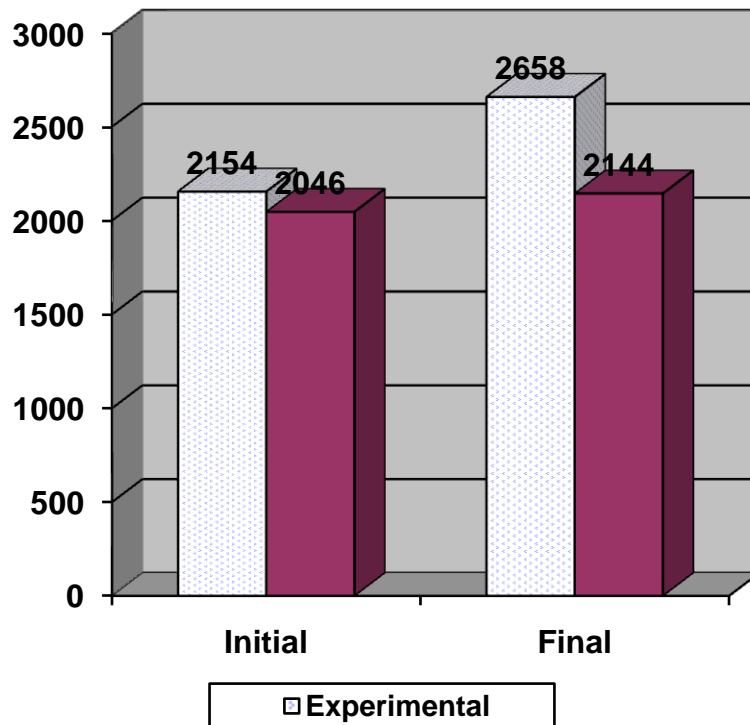
Table IV shows the mean, mean difference, standard deviation and 't' value of post test of the experimental and control group from the data obtained. The study was to find out the effect of yogic practices on Vital Capacity.

The obtained means on the experimental group was on final score was 2144.8 and control group was 2658.6 with mean difference of 513.8. The obtained 't' value of 3.15 was greater than the required table 't' value of 2.14 to be significant at 0.05 level. Hence the hypothesis stated was accepted.

Figure I show the final mean values of experimental and control group for better understanding of the results.

Figure I

Showing the Initial and Final Means of Experimental and Control Groups



Discussions on Hypotheses

For the purpose of the study, the following hypotheses were formulated:

It was hypothesized that there would be significant differences due to yogic practices on selected vital capacity variables.

Conclusions

Within the limitations and delimitations of this study, the following conclusions were drawn.

It was concluded that the physiological variable Vital Capacity was significantly influenced by yogic practices compared to the control group among Veterinary College Obese Boys.

The studies were in line with several studies conducted in India and confirmed a similar study in MBBS students (Gopal, 2011)

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