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**Dr. J Samuel Jesudoss**

Asst. Prof., Y.M.C.A College of  
Physical Education, Chennai.  
Tamil Nadu, India

## Effect of yogic exercise on selected physiological variables of college men students

**Dr. J Samuel Jesudoss**

### Abstract

The purpose of the study was investigating the effect of Yogic exercise on selected physiological variables of College men students. For the purpose of this study, thirty subjects were randomly selected from the Ramco Institute of Technology, Rajapalayam. Hostel students were selected as subjects for the study and divided into two equal groups. Group – I (n=15) acted as control group and Group – II (n=15) acted as Experimental group. Control group maintained their daily routine activities and no special training was given to them. Experimental group underwent Yogic exercise for 6 weeks under the supervision of investigator. The age of the subjects ranged from 18-20 years. Physiological variables such as Vital Capacity and Resting Pulse Rate after the training period (6 weeks). Analysis of covariance [ANCOVA] was used to find out the significant difference if any, between control and experimental groups on selected Physiological variables of College men students. The level of confidence was fixed at 0.05 levels to test the significance. From the results of the study it was concluded that there was a significant difference in Vital Capacity and Resting Pulse Rate between Control and Experimental groups of College Men Students.

**Keywords:** Vital capacity and resting pulse rate

### Introduction

In the present world given a great importance and prominence to sports and games. People all over the world are of the idea that the development of a country is significantly notable and related to the development of sports and games in the country <sup>[1]</sup>. The mechanics of yogic exercise require that oxygen be brought in by the lungs and transferred to the blood vessels. Oxygen rich blood is then pumped by the heart to the muscles. The muscles utilize oxygen for muscle contraction <sup>[2]</sup>. Through routine yogic activity, the body becomes more efficient at processing oxygen. Examples of yogic activity include running, jogging, biking, rowing and walking. In fact any exercise that incorporates large muscle groups raises the heart rate, breathing rate and body temperature is yogic in nature <sup>[3]</sup>. Physical fitness is highly influenced by human health. A nation's true wealth lies not in its lands and waters, not in its forests and mines, not in its flocks and herds, not in its rupees but in its healthy and happy men, women and children <sup>[4]</sup>.

Yogic exercise and fitness can be contrasted with anyogic exercise, of which strength training short-distance running are the most salient examples <sup>[5]</sup>. The two types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle.

In most conditions, yogic exercise occurs simultaneously with yogic exercises because the less efficient anyogic metabolism must supplement the yogic system due to energy demands that exceed the yogic system's capacity <sup>[6]</sup>. What is generally called yogic exercise might be better termed "solely yogic", because it is designed to be low- intensity enough not to generate lactate via pyruvate fermentation, so that all carbohydrate is yogically turned into energy <sup>[7]</sup>.

### Correspondence

**Dr. J Samuel Jesudoss**

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Physical Education, Chennai.  
Tamil Nadu, India

**Table 1:** Criterion Variable

S. No	Criterion Variable	Test Items
1.	Vital Capacity	Spirometer
2.	Resting Pulse Rate	Radial Pulse

**Results**

The descriptive analysis of data collected physiological variables after six weeks of yogic exercise is presented in table -2

**Table 2:** Analysis of Covariance for the Adjusted Post Test Means Value of Experimental and Control Groups on Selected Dependent Variables

Variables	Experimental Group	Control Group	SOV	SS	df	MS	F-ratio
Vital Capacity	2618.66	2487.32	Between	801609.1	1	801609.1	203.44*
			within	106386.3	27	3940.23	
Resting Pulse Rate	68.32	74.28	Between	257.65	1	257.65	51.72*
			Within	134.501	27	4.98	

\*significant at 0.05 level of confidence.

The findings of the study shows that significant difference existing between on Vital capacity and Resting Pulse Rate n Yogic exercise and control groups on Vital capacity and Resting Pulse Rate, since the obtained 'F' ratio of 31.46, 421.70, 203.44 and 51.72 respectively were greater than the required table value of 4.21 for significance at 0.05 level of confidence for df of 1 and 27. Hence it is concluded that six weeks of yogic exercise can produce significant changes on, vital capacity and resting pulse rate of college men students.

**Discussion**

Studies have shown that there was significant improvement on, vital capacity and resting pulse rate due to the effect of yogic exercise.

**Conclusions**

The result of this study demonstrated that, yogic exercise has significant impact on vital capacity and resting pulse rate. Hence it is suggested that the adaptation changes of yogic exercise are very dynamic and variable to each individual. For long lasting change, there needs to be a systematic administration of sufficient stimulus, followed by an adaptation of the individual and then the introduction of a new progressively greater stimulus.

**References**

1. Author's Guide, Our Physical Activities, Bombay: Printing Works, 1955.
2. Beashel, Paul, John Taylor. The World of Sports Examined, United Kingdom: Nelson Publication, 1996.
3. Bucker, Charles A. Foundation of Physical Education, Saint Louis: C.V. Mosby Company, 1964.
4. Dawer Victor P, Robert P. Pengrazi, Dynamic Physical Education for Elementary School Children, New York: Macmillan Publishers, 1989.
5. Goldberg, Barry. Sports and Exercise for Children with Chronic Health Conditions, Champaign Illinois: Human Kinetics Publishers, 1986.
6. Carl Kilafs E, Daniel D. Arnbein, Modern Principles of Athletic Training (St. Louis: The C.V. Mosby Company, 1963, 63
7. David Clake H, Harrison Clarke H. Research Processors in Arts Education, Recreation and Health (Englewood Cliffs, N.J: Prentice Hall, Inc. 1970, 140.