



# Effect of Yogic Training on Vital Capacity of College Students

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## Abstract

Yoga is helpful to bring natural changes in every single human being of the world and that would prove to be a great revolution. It offers us a conscious process to solve problems such as depression, unhappiness, diminishing, energy level, emotional conflicts, fat etc. It helps to evoke the hidden potentialities of human beings in a systematic and scientific way so that human beings can go up intellectually and can prepare themselves to face the challenges of the modern technological era with its hectic speed and live happily without disturbance. This study is designed to evaluate the effect of a 6 weeks (except Sunday) daily practice of Yogic training on respiratory parameter by university students. Students aged 18-25 years have been taken from CBLU, Bhiwani. Healthy students who were not suffering from any ailments selected for this study. The Respiratory parameter were measured before and after the practice of Yogic training. The analysis of data reveals the following outcomes: In Yogic training group pre vital capacity mean shows that 3.91 and post vital capacity exemplifies that 4.08 and as far as the pre mean of control group vital capacity is concerned that is 3.89 and post mean is 3.92. So the researcher finds the significant vital capacity variables and gets a positive result.

**Key Words:** Yogic training, respiratory parameters.

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## Introduction

'Health is wealth' the whole world knows about the importance of this saying and value of health. One another saying also helpful is defining the education 'Live and let live'. Each and every person knows that without health nothing can be achieved or gained in life. "Yoga is also one of the important exercises to improve, to maintain health and healthy life style. In the present fast growing world of science and technology, the human elements are treated as ever before. Its goals are distant, minimal and dissatisfying. The mechanism of modern living, the force restriction of physical activity leading to a century life, an increased amount of leisure, time, all these factor shave resulted in a tremendous increase of public and professional interest in physical activity and health" (Sachan, 2021). People seem to be "turning on" to the idea that one looks and feels better and stays healthier by being physically more active. (yoga vidhya gurukul, 2013)

"Today Yoga, being a subject of varied interests, has gained worldwide popularity. Recent research trends have shown that it can serve as an applied science in a number of fields such as education, physical education and sports,(Health and family welfare, psychology and medicine and also one of the valuable means for the development of human resources for better performance and productivity) However, it has generally been believed that yoga is a spiritual science having emancipation as its goals and hence cannot be treated only as a therapy". (Khosravi, 2015)

## Methodology

### Research Design

The purpose of the study is to find out the effect of yogic training on selected respiratory variables on school college level students in Haryana. To achieve this purpose 60 college students, those who studied in different colleges affiliated with Chaudhary Bansi

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Lal University, Bhiwani were selected as subjects at random from the all colleges. All the subjects were residents of Haryana. The age of the subjects were ranged from 18 to 25 years. They were divided into two equal groups of thirty each as one experimental groups and one control groups, in which group-I (n=30) underwent yogic training men group for six weeks (exclude Sunday), group-II (n=30) acted as control group for men who did not participate any special training apart from the regular day to day activities.

**Objectives of the Study**

To measure the effect of yogic training on vital capacity of college students, those who studied in

different colleges affiliated with Chaudhary Bansi Lal University, Bhiwani.

**Materials and Methods**

60 healthy college students of 18 to 25 years of age were selected for the study. Random sampling method was used for the selection.

Experimental research method was applied by the researcher in the study.

The duration of experimental period was six weeks. The pre tests were conducted before the practice.

The post tests were conducted after the practice.

Descriptive Statistics of Vital Capacity for male yogic training group-

**Table 1: Descriptive statistics of the data measured in the post testing vital capacity**

Different Groups	Mean	Std. Deviation	N
Male yogic group	4.08	0.097	30
Male Control group	3.91	0.12	30
Total	4.01	0.11	60

Table no.1 indicates the data values of descriptive statistics of experimental male yogic group & male control group for respiratory parameter of vital capacity, which shows that the mean and S.D. values

of Male Yogic group and the Control Group (male control group) are found to be 4.08±0.097, and 3.91±0.12 respectively. Total the same is 4.01±0.11

**Table 2: Descriptive statistics of the data measured in the post-testing after adjustment with the initial difference vital capacity**

Different Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male yogic group	4.00a	.011	3.92	4.02
Male Control group	3.92a	.011	3.91	3.93

Covariates appearing in the model have evaluated at the following values: pre vital capacity = 3.94  
 The mean and standard error of different post-

testing Groups after adjustment have been shown in table 2. Which is for male yogic training Group 4.00 & 0.011, and Control Group 3.92& 0.011.

**Table 3: Ancova table for the post-test data of vital capacity**

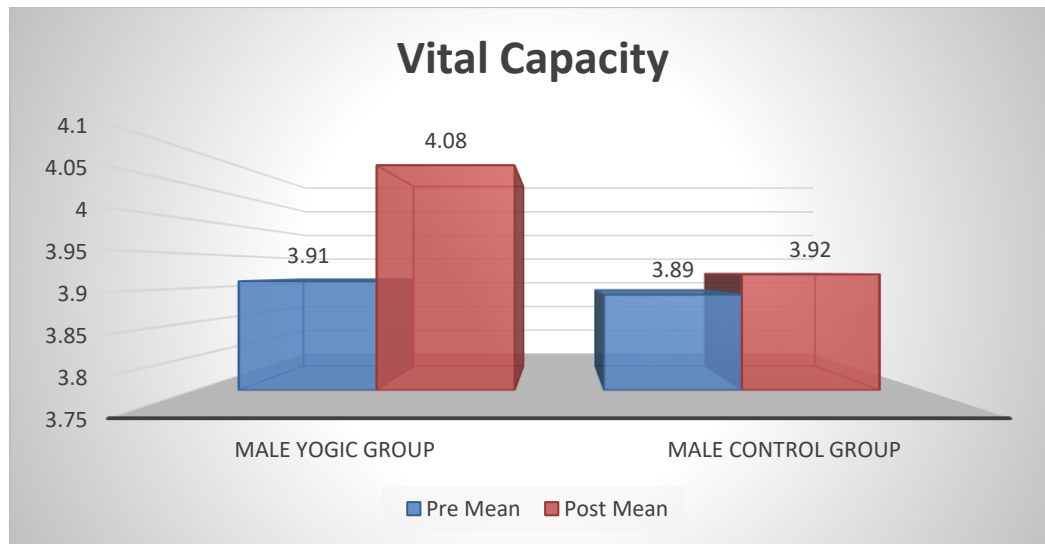
Source	Sum of Squares	Df	Mean Square	F	Sig.(p-value)
Pre-Vital Capacity	1.91	1	1.91	372.91	.00
Treatment Group	.56	1	.31	58.53	.000
Error	.71	58	.006		
Corrected Total	3.37	59			

Table no. 3 indicates the values test of difference between the subject effects, which shows that there



are a significant difference in pre test values of respiratory parameter of vital capacity for the two selected Groups, as the value has found to be 372.91, which proves to be the base of Analysis of Co-

Variance. Also, a significant difference is found between the post test values of the experimental and Control Group as the value has found to be 58.53, which is significant at 0.05 level.



**Figure 1: Bar Diagram Showing the mean value of Vital Capacity among Male Yogic Group and Male Control Group**

### Discussion

In the present study a significant effect has disappeared on vital capacity after conducting 6 weeks regular practice of yogic training. The output of other studies shows a positive effect in vital capacity and in contrast of this the present study has shown positive effects on human respiratory system. This present study has given above stated outcome. In order to improve vital capacity in students yogic practices can be applied. Thus in a nutshell in this study it is proved beyond doubt that the regular practice of yogic training for six weeks is advantageous to increase the vital capacity in order to overcome other respiration diseases. The results of this study and their explanations justify the incorporation of yoga as a part of our lifestyle is necessary to be healthy and also will help to human beings preventing from age related physical fitness problems.

### Conclusion

This research paper has achieved the expected and fruitful result which has been assumed by the researcher a positive effect of yogic training on vital capacity. So, if such yoga started in Universities and Colleges would be helpful to improve the health graph of students.

It may be summarized that the Yogic practices having positive effect on vital capacity, hence

validated for experimentation Yogic training specifically as well as in general.

The conducted study further increased the scope of experimentation yogic paradigm for physical fitness tests domains. Hence, enriched the academic and scientific practices and book of knowledge.

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### Recommendation

The positive result has found in the present study so that yogic training can be implemented to all universities and Colleges to improve the respiration level and to increase fitness level of the students. A one hour practice daily may help to achieve the expected focus level of mind which is required for better works and studies. Through daily practice one can maintain good physical and mental health for a long period.

### References

- Amaldas Brahmachari, "Yoga and Contemplation", Shantivanam Ashram, Tahnirpalli, Tiruchirappalli, Tamilnadu India, 1994, p. 17.
- MV. Rajapurkar, "Pranayama - Modulator of Cerebral Functions (A hypothesis)", Yoga Mimamsa, Jan 1999, 33(4): 42-60.
- A.C. Bhaktivedanta Swami Prabhupada, "Bhagavad-Gita As It Is", Bhaktivedanta Book Trust International, Ch.II.48, www.Krishna.com.
- Sivapriya, D., Malani, S., & Thirumeni, S. (2010). Effect of Nadi Shodhana Pranayama on Respiratory Parameters in School Students. Recent Research in Science and Technology, 2(11).



- Kinabalu, K. (2005). Immediate effect of 'nadi-shodhana pranayama' on some selected parameters of cardiovascular, pulmonary, and higher functions of brain. *Thai journal of physiological sciences*, 18(2), 10-16.
- Khanam, A. A., Sachdeva, U., Guleria, R., & Deepak, K. K. (1996). Study of pulmonary and autonomic functions of asthma patients after yoga training. *Indian journal of physiology and pharmacology*, 40(4), 318-324.
- Joshi, L. N., & Gokhale, L. V. (1992). Effect of short term pranayam, practice of breathing rate, & ventilator functions of lung. *Indian J Physiol Pharmscol*; 1992; 36 (2): 105, 108.
- Dhungel, K. U., Malhotra, V., Sarkar, D., & Prajapati, R. (2008). Effect of alternate nostril breathing exercise on cardiorespiratory functions. *Nepal Med Coll J*, 10(1), 25-27.
- Vyas, R., & Dikshit, N. (2002). Effect of meditation on respiratory system, cardiovascular system and lipid profile. *Indian journal of physiology and pharmacology*, 46(4), 487-491.
- Sachan, A., Rina, D., & Janu, N. the effect of anuloma viloma pranayama and yogic asana on resting pulse rate and stress of school going children in jaipur.
- Bharshankar, J. R., Bharshankar, R. N., Deshpande, V. N., Kaore, S. B., & Gosavi, G. B. (2003). Effect of yoga on cardiovascular system in subjects above 40 years. *Indian journal of physiology and pharmacology*, 47(2), 202-206.
- 12 Sharma, P., Verma, M. K., Sachan, A., & Verma, A. (2022). Role of Emotion and Feelings in Coronary Heart Diseases among Males & Females: A Comparative Study. *Journal of Positive School Psychology*, 6(2), 5296-5301.
- 13 Verma, A., Sachan, A., Verma, M. K., Sharma, P., & Raju, D. (2022). An analysis of six weeks training of suryanamaskar (sun salutation) on flexibility of healthy children. *International Journal of Early Childhood*, (01), 2295-2299.
- 14 Sachan, A. (2021). Surya Namaskar: Its Techniques and Health Benefits. *Indian Journal of Natural Sciences*, 12, 67.

