

A Study of the Effect of Yogic Exercise on Physiological Variables of Undergraduate Students

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Abstract – The reason for the examination was to research the impact of yogic exercise on physiological variable to be specific lung capacity and heartbeat pace of college students, other goal of the investigation was to improve the physiological degree of college students. 30 female subjects were selected randomly from undergraduate female students of Govt. Degree College, Gonda, Aligarh (U.P.). Standard and progressive matrices organizational physiological variables (Lung capacity and Pulse rate) were measured for the assessment of yogic exercise programme. To discover noteworthy the impact of yogic exercise program on lung capacity and heartbeat pace of undergrad students 't' test was utilized as statistical device. The worth level was set at 0.05. The result showed that yogic exercise had a significant effect on undergraduate physiological variables. Practice of chosen yogic exercise program likewise improved physiological graduated students.

Key Words: Yogic Exercise, Physiological Variables, Lung Capacity, Pulse Rate.

INTRODUCTION

Yoga is a huge number of years of physical and spiritual research that has been drilled. This includes antiquated hypotheses, disclosures and thoughts about the association between mind and body currently being checked by the current drug. Significant work has been done to investigate the medical benefits of meditation (Pranayam) and yogic practice in contemplation. The information is group into two categories – physiological and psychological effects. What's more, scientists have disputed these results with the effects of ordinary exercise.

Yoga is a practice that can be rehearsed by anyone who pays no attention to age, gender and well-being, based on general physical and spiritual rules that function in the same way for all humanity. Yogic exercise is a kind of mental-centered body movement, and yogic exercise can help a person improve his or her health and control over different emotions like lust, love, affection, anger and provide firm control over body and mind, especially to overcome most of dangerous diseases. Consequently, in the present situation, countless people in the majority of countries feel the importance of yoga. In all parts of the globe it is generally known that yoga is not only the enhanced development of the mind, socio-control and good part of the spirit, but also care.

Having regard to the testimony of superstars as the documented physiological benefits of regular yoga work out, even the most motivated people think that it is difficult to find time to actualize any of the helpful yoga activities that are available to them, with different classes ranging from 45 to an hour, it is often difficult to combine daily or weekly yoga exercises, given the period of time. It is practically outlandish for the vast majority to cut time for yoga or adaptability preparing with a timetable that is as of now pressed morning to night.

OBJECTIVES OF THE STUDY:

1. To find out more about the subjects ' yogic exercise program.
2. To evaluate the impact of the yogic exercise program regarding the matter's physiological factors (lung capacity and heartbeat rate).
3. To improve the physiological level of the undergraduate students.

Delimitations:

1. The subjects for the study were selected from the undergraduate students from Govt. College, Gonda, Aligarh (U.P.).

2. The investigation will be delimited to the accompanying physiological factors:
 - a. Lung Capacity
 - b. Pulse Rate

MATERIAL AND METHODS

Subject:

Thirty female undergraduate students are selected randomly from Govt. Graduate College, Gonda, study Aligarh. The subjects' age varied between 18 and 21 years. In order to know the effect of yogic exercise, selected physiological variables, i.e. lung capacity and pulse rate, were measured.

Variables and Instruments:

The duration of yogic exercise program was of 10 weeks in which understudies were prepared for 5 days out of each week and 30-45 minutes day by day. Remembering the target of the examination that yogic exercise program was set up in such a manner which help to improve the chose physiological factors. In yogic exercise programme different reasons i.e., Surya Namaskar, Shavasana, Tadasana, Dhyana, Vajarasana, Bhujangasana and Paranayama were included.

Physiological Variables:

Name of Variable	Testing instrument	Unit
1. Lung Capacity	Spiro Meter	Milliliters
2. Pulse Rate	Manual method	No. of Pulse beat / minute

Procedure:

A pre-test with respect to the measurement of the physiological variable (lung capacity, pulse rate) was associated on the selected subjects at the first stage of the study to the degree that experimental treatment of yogic exercises was conducted for 10 weeks as planned and then post-test was performed to assess the same physiological variables with the aid of accurate measurement tools to evaluate the significance.

Statistical technique:

The 't' experiment was utilized at 0.05 degree of importance to estimate the impact of yogic exercise on the physiological factors of college understudies.

RESULT

The 't' test was applied to assess the significant differences between the Lung Capacity and Pulse Rate pre-test and post-test means. The obtained 't'

ratio was tested for the significant difference at 0.05 level. The findings pertaining to it are presented in Table 1 & 2.

Table-1

Significant difference in Lung Capacity of the undergraduate students between Pre-test and Post-test scores.

Test	Mean	S.D.	't' Ratio
Pre-Test	25.80	3.16	18.84
Post-Test	29.27	3.42	

*Significant at 0.05 level, 't' 0.05 (29) = 2.045

Table-1 shows that the calculated 't' 18.84 is more than the 't' (2.045) tabulated. Hence it may be considered that there was significant difference found between pre-test and post-test means of Lung Capacity score of undergraduate students.

The scores are also illustrated in the figure-1

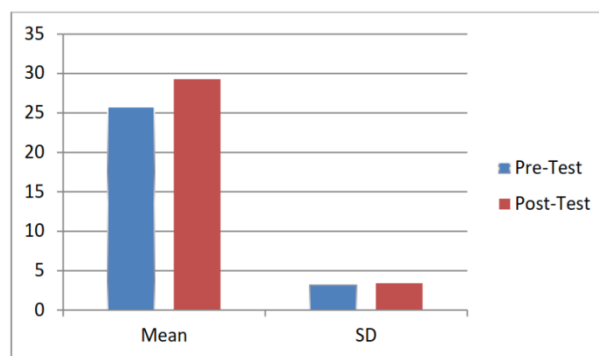


Figure-1

Table-2

Significant difference in Pulse Rate of the undergraduate students between Pre-test and Post-test scores.

Test	Mean	S.D.	't' Ratio
Pre-Test	68.54	4.16	15.52
Post-Test	65.44	3.43	

Significant at 0.05 level 't' 0.05 (29) = 2.045

It is observed from Table-2, that the calculated 't' 15.52 is more than the tabulated 't' (2.045). Hence it may be considered that there was significant difference found between Pre-test and Post-test means of pulse rate score of undergraduate students.

The score are also illustrated in the Figure-2

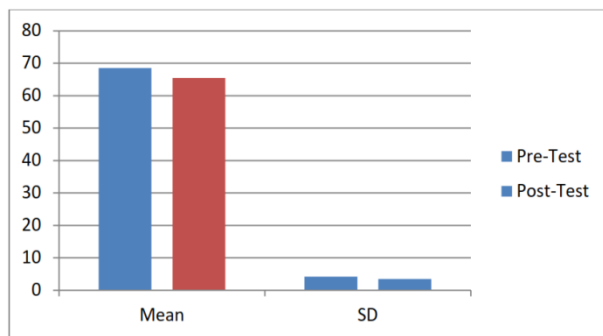


Figure-2

DISCUSSION

Considerable dissimilarity was found in Lung Capacity and resting Pulse Rate which showed that positive impact of yogic work out on physiological variance of under graduate students. The study findings are in line that findings of Lohan and Rajesh (2002), Mohan (2003), who showed that adult physiological variables could be changed by yogic practices.

CONCLUSIONS

The investigation result was two collapsed as the information of the physiological part were determined for three unique objectives. The principal target of the investigation was to discover a superior yogic exercise program for the subjects. The outcomes according to the **M. Saroja (2010)** studies, which uncovered a superior yogic exercise program on chosen physical, physiological and bio-synthetic factors among the matured.

The second target of the exploration was to decide the distinction in meaning on the influence of the yogic exercise program on the physiological variables of the subject (Lung Capacity and Pulse Rate). The finding confirmed by studies conducted by SushilLega (2010), which showed that have significant impact of yoga to individuals ' cardiovascular function.

The study's third goal was to boost the undergraduate students ' physiological level through yogic exercises. As to the impact of yogic practice among individuals on selected physical, physiological and biochemical factors, the result was significant, and this was verified by M. Saroja Review (2010).

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