

EFFECT OF SELECTED YOGA ASANAS ON BODY MASS INDEX OF ENGINEERING COLLEGE OBESE WOMEN STUDENTS

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ABSTRACT

The purpose of the study was to find out of effect of yogic exercises on body mass index (B.M.I.) of college men students in Aurangabad city (M.S.). To achieve the purpose of this study, forty undergraduate college men students were selected as subjects from Aurangabad city of Maharashtra state and their age ranged from 18 to 21 years. The true randomized group design was used in which forty undergraduate college men were divided into two groups of twenty each named as experimental group and control group. The subjects were tested prior to and after the six weeks of experimentation. The obtained data from the experimental and control groups initial and final readings were statistically analyzed with analysis of student t test. The level of confidence which was fixed at 0.01 level of confidence and result reveals that the experimental group had achieved significant improvement on body mass index (B.M.I.) of undergraduate college men obese student's, when compared to control group. It was also observed that the six weeks of yoga asana exercises program have significantly improved the body mass index (B.M.I.) of undergraduate college obese men students.

KEY WORDS: *Yogic exercises, Body mass index (B.M.I.), obese women, engineering college students.*

INTRODUCTION

Yoga is a traditional method of meditation developed by the saints of ancient India. Yoga was effective method of controlling their mind and bodily activities. It is an art of successful living. It is a way of healthy living at all levels. It is a tool for positive change of soul and body. It is the sovereign remedy for all worldly miseries. It is the science of creativity and personality development. It is a voyage of discovering truth or knowing the reality. It is a utilitarian commodity. Yoga is a total experience of human life. Thus, yoga is as old as civilization. Yoga is as old as

mankind. Yoga is creation of wellness life. Yoga is intimate and ultimate. Over two thirds of adults are overweight and nearly one quarter obese. Obesity is a chronic state of being overweight. It's a life threatening condition and current research has shown that obesity is the leading cause for the increased health threats those persons of the developed world. Health is our birthright and to remain healthy, it is not necessary to depend upon any health centre physician or medication. It is entirely in our hands to keep healthy. However, in the present day conditions keeping good health is becoming more and more difficult and diseases are proliferating.

METHODOLOGY

The purpose of the study was to find out of effect of selected yoga asanas on body mass index of college obese men students in Aurangabad city. To achieve the purpose of this study, forty undergraduate college men were selected as subjects from Vivekanand College of Aurangabad city of Maharashtra state and their age ranged from 18 to 21 years. The true randomized group design was used in which forty college men were divided into two groups of twenty each named as experimental group and control group. The experimental groups was taking selected yogic exercise as uttanpadasana, padmasana, parvatasana, matsyasana, vajrasana, pascimotanasana, ardhmatsyendrasana, bhujangasana, salabhasana, pavanmuktasana, halasana, sarvangasana, tadasana, trikonasana, shavasana, anlom velom, bhramari pranayam, and ujjai om chanting. During the training period, the experimental groups underwent their respective programme three days per week over six weeks. Every day the work lasted for 50 to 60 minutes approximately including warming up and warming down periods. The subjects were tested prior to and after the six weeks of experimentation. Body mass index was measured by BMI index. BMI is also referred to as 'body mass indicator'. BMI is an internationally used measure of body mass index (B.M.I.). The obtained data from the experimental and control groups initial and final readings were statistically analyzed with student t test. The level of confidence which was fixed at 0.01 level of confidence.

Metric BMI Formula

The metric BMI formula accepts weight measurements in kilograms & height measurements in either cm's or meters.

Table -1
Calculate BMI Formula

$$\text{BMI} = \frac{\text{Weight (Kg)}}{\text{Height (M}^2\text{)}}$$

Table - 2
BMI Weight Status Categories

Sr. No.	BMI	Weight Status
1.	Below 18.5	Underweight
2.	18.5 -24.9	Normal
3.	25 - 29.9	Overweight
4.	30 – 34.99	Obesity (Class First)
5.	35 – 39.99	Obesity (Class Second)
6.	40 above	Extreme Obesity

STATISTICAL PROCEDURE:

As per the research design the collected data were analyzed by employing statistical test of t-test. Further the result have been interpreted and discussed logically to conclude. The level of $p \leq 0.01$ was considered significant. This investigation by Table and graph.

Table – 3

Table shows the mean, standard deviation, mean difference and t-value of body mass index between Pre and Post test of control and experimental group.

Sr. No.	Group		N	Mean	S.D.	M.D.	T value
1.	Control	Pre test	20	23.08	1.31	0.5	1.65
		Post-test	20	23.03	1.31		
2.	Experimental	Pre test	20	23.48	1.43	0.81	1.72
		Post-test	20	22.65	4.72		

**Significant at 0.01 level*

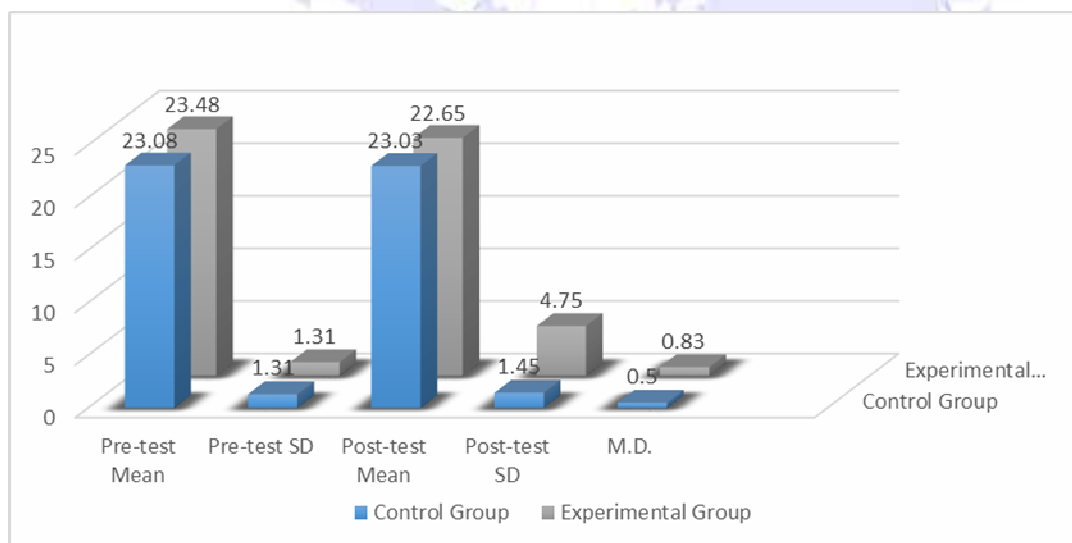
RESULTS AND DISCUSSION

Table-3 presents the results of body mass index of subjects shows the pre and post-test Mean and SD values of control group of 28.8 ± 1.31 and 23.03 ± 1.31 and experimental group pre and post-test mean and SD of respectively 23.48 ± 1.45 and 22.65 ± 4.75 was significant initiate. The t-value 1.74 as shown in the table above was found statistically significant ($P < .05$). It has been observed that yogic exercises have significantly enhanced for body mass index.

The following graphical representation figure - 1 explained the mean, standard deviation, mean difference and t-value of both experimental group and control group on body mass index with respect to before and after yogic exercise for engineering college students.

Figure - 1

Graphical representation of data pre-test and post-test of body mass index (B.M.I.).



CONCLUSIONS

Based on the results of the study, it is concluded that there was a significant difference between control group and experimental groups of subject's body mass index. The experimental group had achieved significant improvement on body mass index (B.M.I.) when compared to control group. This experimental study suggests that, daily yoga practice helps to improve body mass index (B.M.I.) of women obese students.

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