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Effect Of Yogasana Practice On Physical Fitness Variables Of College Obese Students

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Abstract:
Yoga is a discipline to improve or develop one's inherent power in a balanced manner. It offers the means to attain complete self-realization. The literal meaning of the Sanskrit word Yoga is 'Yoke'. Yoga can therefore be defined as a means of uniting the individual spirit with the universal spirit of God. According to Maharishi Patanjali, "Yoga is the suppression of modifications of the mind". Physical fitness is not only of the most important keys to healthy body. It is the basis of dynamic and creative intellectual activity. The relationship between soundness of the body and the activities of the mind is subtle and complex. Much is not understood. But we do know what the Greeks knew that intelligence and skills can only function at the peak of their capacity when the body is healthy and strong; that hardly spirits and tough minds usually inhabit sound bodies. The present study is an outcome of the effect of asana practice on physical fitness variables among college obese students. As the study is intended to focus mainly on the impact of asana practice, twenty male obese students between the age group of seventeen to twenty five years, from Ramakrishna Mission Vidyalaya College of Arts & Science, Periyanaickenpalayam, Coimbatore, Tamilnadu, were selected as subjects for this study. The subjects were divided into two equal groups namely control group and experimental group. Based on the review of past studies and in consultation with the experts in the field of study it was decided to explore the improvement of physical fitness variables. The pre and post means of each group't' test were used to find out significant difference between the control and the experimental groups. The study showed that there was a significant improvement in the yogasana practice in physical fitness variables such as Endurance, Explosive Power and Flexibility of college obese students.

Keywords: *Yogasana practice, Physical Fitness, Endurance, Explosive Power and Flexibility*

1.Introduction

Yoga is a discipline to improve or develop one's inherent power in a balanced manner. It offers the means to attain complete self-realization. The literal meaning of the Sanskrit word Yoga is 'Yoke'. Yoga can therefore be defined as a means of uniting the individual spirit with the universal spirit of God. According to Maharishi Patanjali, Yoga is the suppression of modifications of the mind.

'Asana' means staying or abiding. Asana is one way in which a person can experience the unity of body and mind. Asana is defined as that which is comfortable and easy, as well as firm. In the west, asana is commonly called "posture". Yogic posture (asana) is prescribed for the purpose of comfort and firmness during meditation and the practice of pranayama.

Physical fitness is not only of the most important keys to healthy body. It is the basis of dynamic and creative intellectual activity. The relationship between soundness of the body and the activities of the mind is subtle and complex. Much is not understood. But we do know what the Greeks knew that intelligence and skills can only function at the peak of their capacity when the body is healthy and strong; that hardly spirits and tough minds usually inhabit sound bodies.

2.Methodology

As the study was intended to focus mainly on the impact of asana practices, the college obese students between the age group of seventeen to twenty five years, they were studying in Ramakrishna Mission Vidyalaya College of Arts & Science, Periyanaickenpalayam, Coimbatore, were selected as a subjects for this study. The subjects were divided into two groups namely control group and experimental group from the equal sample of twenty college obese students were selected, thus constituting a total sample size of forty subjects. The experimental group under went the asana practices for six weeks, five days in a week from 6.00 am to 7.00 am. The control group did not under go any training programme.

Based on the review of past studies and in consultation with the experts in the field of study it was decided to explore the improvement in physical fitness variables in male students as subjects, by administering the yogasanas practices with pre and post evaluation.

2.1.Selection Of Variables

The research scholar reviewed the available scientific literatures pertaining to this study from books, journals, periodicals, magazines and research papers. Based on the consideration of feasibility, the following variables were selected:

- Endurance
- Explosive power
- Flexibility

S.No	Criterion variables	Test items	Unit of measurement
1.	Endurance	Cooper's Run / Walk test	Seconds
2..	Explosive Power	Standing Broad Jump	Centimeters
3.	Flexibility	Sit and Reach Test	Centimeters

Table 1: Physical Fitness Components and Measuring Technique

S. No	Components	Name of the Practices	Duration (in min)
1	Prayer	Om Chanting	3 Min
2	Preparatory Practices	Suryanamaskar	7 Min
3	Asanas	Tadasana, Padahasthasana, Trikonasana Vajrasana, Ustrasana, Uttanpatasana, Shalabasana, Halasana, Bhujangasana, Sarvangasana, Matsyasana, Dhanaurasana, Shashangasana, Vajrasana, Yogamudrasana, Paschimattanasana, Garudasana, Natarajasana, Shavasana.	40 Min
4.	Relaxation	Yoga Nidra	7 Min
5	Closing prayer	Om Chanting	3 Min
			60 MIN

Table 2: Yogasana Training Schedule

2.2.Statistical Technique

To find out the significance between the pre and post test means of control and experimental groups the‘t’ test was applied for evaluation of the college obese students of physical fitness variables.

3.Results

Comparison of physical variables in pre and post training periods and the effect of asana practice of college obese students

The Calculation of mean, standard deviation, standard error of mean, mean difference, and‘t’ value of physical fitness variables between the pre and post periods of the experimental and the control groups of college obese students were furnished in table 3

Variable	Group	Test	Mean	SD	σ DM	MD	‘t’ ratio
Endurance	**Exp. Group**	**Pre-test**	2545.00	233.33	52.17	72.00	2.43*
		Post-test	2617.50	246.16	55.04		
	Control Group	**Pre-test**	2537.50	300.38	67.16	17.50	1.27
		Post-test	2520.00	288.09	64.42		
Explosive Power	**Exp. Group**	**Pre-test**	2.00	0.26	0.05	0.24	6.42*
		Post-test	2.24	0.25	0.05		
	Control Group	**Pre-test**	1.94	0.32	0.07	0.01	0.19
		Post-test	1.93	0.33	0.07		
Flexibility	**Exp. Group**	**Pre-test**	7.90	0.89	0.20	0.61	12.88*
		Post-test	8.51	0.91	0.20		
	Control Group	**Pre-test**	7.81	0.91	0.20	0.00	0.09
		Post-test	7.81	0.88	0.19		

Table 3:Computation Of ‘T’ Ratio Between The Pre And Post Tests On Physical Fitness Variables Of Experimental And Control Groups Of College Obese Students
**Significance at 0.05 levels*

The table III show that the obtained mean and standard deviation values in physical fitness variables of endurance, explosive power and flexibility of pre test and post test scores of experimental groups were 2545.00 $\pm$ 233.33 & 2617.50 $\pm$ 246.16, 2.00 $\pm$ 0.26 & 2.24 $\pm$ 0.25 and 7.90 $\pm$ 0.89 & 8.51 $\pm$ 0.91 respectively, the standard error of mean difference is 52.17, 0.05 and 0.20 and mean difference is 72.00, 0.24 and 0.61 the

obtained't' ratio is 2.43, 6.42 and 12.88. The required table value is 2.09 at 0.05 level of confidence for the degree of freedom 1 and 19. The obtained't' ratio was 2.43, 6.42 and 12.88 is higher than the table value. It is found to be significant in physical fitness variables of endurance, explosive power and flexibility.

The obtained mean and standard deviation values in physical fitness variables of endurance, explosive power and flexibility of pre test and post test scores of control group were 2537.50 $\pm$ 300.38 & 2520.00 $\pm$ 288.09, 1.94 $\pm$ 0.32 & 1.93 $\pm$ 0.33 and 7.81 $\pm$ 0.91 and 7.81 $\pm$ 0.88 respectively, the standard error of mean difference is 64.42, 0.07 and 0.19 and mean difference is 17.50, 0.01 and 0.00 the obtained't' ratio is 1.27, 0.19 and 0.09. The required table value is 2.09 at 0.05 level of confidence for the degree of freedom 1 and 19. The obtained't' ratio was 1.27, 0.19 and 0.09 is lesser than the table value. It is found to be insignificant in physical fitness variables of endurance, explosive power and flexibility.

It is inferred from the results of the study that the yogasana practice brought significant improvement in physical fitness variables of college obese students among the experimental group as compared to the control group.

4.Discussion And Findings

The results of the study indicate that the yogasana practice brought significant improvement in all the physical fitness components of the endurance, explosive power and flexibility. The experimental group was compared to the control group of the college obese students.

4.1.Discussion On The Hypotheses

The hypothesis stated that the yogasana practice in physical fitness variables such as Endurance, Explosive power and Flexibility would not bring any significant changes in the college obese students.

Findings of the study showed that there was a significant improvement in the yogasana practice in physical fitness components such as Endurance, Explosive power and Flexibility of the college obese students. Hence, the hypothesis was rejected.

5.Conclusion

The preponderance of the research evidence shows that the yogasana practices on selected physical variables. In the light to the limitations and experimental conditions of

this study, the following conclusions were drawn from the results presented in the previous chapter.

- The experimental group had significant improvement on selected Physical variables such as endurance, explosive power and flexibility in experimental group, as a result of six weeks of Yogasana practices.
- The control group had insignificant improvement on all the selected physical fitness variables for the absence of yogasana practices.

6.Recommendations

From this study the following recommendations have been made for future investigation.

- The study may be conducted on selected bio chemical and anthropometric variables.
- The study may be conducted for the different age groups.
- The similar study may be conducted for the female students.

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