



WEIGHT CONTROL THROUGH YOGIC PRACTICE: A 12 WEEKS PROSPECTIVE STUDY FOR DEAF AND DUMB CHILDREN

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Abstract

The purpose of this study was to analyze the yoga practice for weight control for deaf and dumb children. The study was conducted on thirty two deaf and dumb school boys studying Government Deaf and dumb School, Pudukkottai, Tamilnadu, India were selected as subjects. Subjects were randomly assigned equally into two groups, Group –I underwent Yogic Practice Group (n = 16) and Group II (n=16) acted as control Group. The training period was limited to 6 weeks. The data was collected from the experimental and control groups were statistically examined with Analysis of covariance (ANCOVA). Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin fold showed significant difference between the groups.

Key words: *Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold, Triceps Skin fold*

INTRODUCTION

Yoga is a physical, mental and spiritual discipline which originally comes from India, and is an integral part of Hinduism. It is actually a broad subject, which various styles, philosophies and traditions, each one of which emphasizes different methods and has different priorities. Raja Yoga, for example, focuses almost exclusively on mental discipline and meditation, whereas the more popular Hatha Yoga focuses more on the purification and perfection of the physical body, and promotes the use of the various postures and stretching exercises which people in the west most associate with the practice of Yoga, and which can be used to promote good health without any great knowledge of the underlying philosophy, and is even popular amongst people whose own beliefs

run contrary to those of traditional Hindu Yogis.

Yoga has proved to be beneficial to all that have practiced it. Today, it is yoga that is considered as the best alternative therapy for many illnesses. However, the main purpose of yoga is to improve the quality of life of the people who practice it by improving both physical and mental health. Yoga, in fact, has been proven especially helpful to the handicapped or differently able people as they are popularly called. Yoga has never recognized any barriers of age, sex, religion, or creed. Yoga can quite simply be performed by anyone those who suffer from chronic illnesses, those who are missing limbs, and those who have just had a surgery.

Excess weight gain has become a phenomenon in today's age, when lifestyles

have become sedentary, and food more liberal with extra calories. Today our children prefer T.V. (any medal) over their friends and play, merely a reflection of their parents who also somewhere prefer T.V. over socializing or even over spending time with their children (if they spend some time surely some running around will help burn some calories). These are only a few factors, which have resulted in increasing amount of people with the problem of excess weight or obesity.

Stress, wrong food habits (i.e. irregular timings for food, unhealthy (junk) food), lack of exercise, thyroid problem etc. could be some of the reasons resulting in weight gain. To lose weight, it is important to do so, not just by doing diets, or exercise programs, which are too tedious, which may yield results but which do not keep you that way. Sometimes after sudden loss of weight the skin sags making one feel worse. The best approach is to lose weight gradually and for good. Yoga offers a good solution to this problem. Yoga tones the body in a uniformed manner, unlike any "weight loss program" which claims to decrease ones girth by this much inches and waist by this much, leading to side effects. Yoga can be practiced at any age to keep the body supple.

Obesity and plumpness has become an inevitable part of our fast-studded lives. With the increasing intake of junk food the belly's has been increasing corresponding to depleting energies. Adopting yoga as a tool for decreasing weights is a sheer option as it considers all aspects of obesity (mental, physical and emotional). It results in an agile, efficient and slim person and suits to any person of every age. It helps achieving control over minds and behaviors including eating habits of a person, thus, resulting in permanent with "no side-effects".

It is always advisable to study the reasons and symptoms of obesity before shedding sweats for losing them. It provides

an advantage, to a person, of having better understanding of his body and avoids him repeating the mistakes as he did earlier. The reasons of obesity lies in the lack of workouts corrupted eating habits (junk food, fats coated food, eating between 2 meals), psychological pressures (depression, frustration, and anxiety), and hereditary tendency and endocrine glands problems. Once getting aware of the reason for the condition, yoga can support well to the reducing obesity. It has important role to play in the treatment of obesity and its techniques effects the internal glands as well as mental conditions of a person.

METHODOLOGY

The study was conducted on thirty two school boys studying Government Deaf and dumb School Pudukkottai Tamilnadu, India. Subjects were randomly assigned equally into two groups were selected as subjects, their age were ranged between 14-16 years. Group –I underwent Yogic Practice Group (n = 16) and Group II (n=16) acted as control Group. The training period was limited to 6 weeks. Experimental group practiced following asana and Pranayama during the training.

D ASANA

- 1) Uttanpadasana (double legs raising).
- 2) Sarvangasana (The shoulder stand)
- 3) Halasana (The Plough).
- 4) Matsyasana (The Fish).
- 5) Chakrasana (The Wheel).
- 6) Ustrasana (The Kneeling Wheel).
- 7) Suptvezrasana (The Kneeling Pose).
- 8) Ardhamatsyenderasana(The half Spinal Twist).
- 9) Padmasana (The Lotus).
- 10) Vazerasana (The Kneeling).

II) PRANAYAMS

- 1) Anuloma Viloma.
- 2) Surya Bhedana.
- 3) Chandra Bhedana.
- 4) Shitali
- 5) Sitkari.

The students were taught yogic practices (for six week) through training programme under strict supervision of the researcher and deaf and dumb teacher. All the two groups were tested on selected criterion variables such as Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin fold prior to and immediately after the training programme. Body Weight was assessed by weighting machine, Forearm Circumference and Thigh Circumference were assessed by Steel Measuring tape, and Biceps and Triceps were assessed by Skin fold caliper.

RESULTS AND DISCUSSION

The data collected from the experimental group and control group prior and after experimentation on selected variables were statistically examined by analysis of covariance (ANCOVA) was used to determine differences, if any among the adjusted post test means on selected criterion variables separately. The level of significance was fixed at .05 level of confidence to test the 'f' ratio obtained by analysis of covariance on selected criterion variables.

Table – I

**THE SUMMARY OF MEAN FOR THE PRE AND POST TEST DATA ON
SELECTED VARIABLES OF YOGIC PRACTICE GROUP
AND CONTROL GROUP**

Criterion variables	Mean	Yogic Practice Group	Control group
Body Weight	Pre test	40.21	40.13
	Post test	39.71	40.11
Forearm Circumference	Pre test	17.5	17.88
	Post test	16.94	17.92
Thigh Circumference	Pre test	34.43	34.56
	Post test	34.27	34.68
Biceps Skin fold	Pre test	4.01	4.02
	Post test	3.90	4.03
Triceps Skin fold	Pre test	6.92	6.92
	Post test	6.89	6.93

Table – I shows that mean, of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin between the pre and post tests means of Yogic Practice Group were greater than the Control Group. It was concluded that Yogic Practice Group had significant improvement in the performance of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold

and Triceps Skin. However control group had no significant improvement in the performance of selected variables.

The analysis of covariance of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin of Yogic Practice Group and control group have been analyzed and presented in Table – II.

Table – II

**ANALYSIS OF COVARIANCE ON CRITERION VARIABLES OF
EXPERIMENTAL AND CONTROL GROUPS**

Criterion Variable	Adjusted Post Test means		Source of variance	Sum of square	df	Mean squares	'f' - ratio
	Yogic Practice Group	Control group					
Body Weight	39.66	40.15	B	1.89	1	1.89	10.02*
			W	5.47	29	0.19	
Forearm Circumference	17.13	17.73	B	2.84	1	2.84	11.94 *
			W	6.9	29	0.24	
Thigh Circumference	34.02	34.5	B	1.82	1	1.82	15.00*
			W	3.52	29	0.12	
Biceps Skin fold	3.91	4.02	B	0.09	1	0.09	182.1*
			W	0.02	29	0	
Triceps Skin fold	6.89	6.93	B	0.02	1	0.02	42.29*
			W	0.01	29	0	

* Significant at .05 level of confident.

Table value required for significance at .05 level with df 1 and 29 is 4.18

From table – II, the obtained value of 'f' - ratio for Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin, for adjusted post test means were more than the table value of 4.18 for df 1 and 29 required for significant at 0.05 level of confidence. The results of the study indicated that significant differences exist among the adjusted post test means of experimental and control groups on the development of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin.

CONCLUSION

From the analysis of the data, the following conclusions were drawn.

1. Significant differences were found between Yogic Practices group and Control group in the selected criterion variables such as Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin after six weeks of Yogic Practice.

2. The Yogic Practice Group improved significantly on Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin, when compared to the control group.

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