STAR
Research Journal

Available online at www.starresearchjournal.com (Star International Journal)
PHYSICAL EDUCATION
UGC Journal No: 63023

EFFICACY OF YOGIC PRACTICES AND JACOBSON'S PROGRESSIVE MUSCLE RELAXATION TRAINING ON SELECTED PHYSIOLOGICAL VARIABLES AMONG POST GRADUATE OBESE WOMEN STUDENTS

Dr. J. JACKSON SUTHAR SINGH

Asst. Professor, YMCA College of Physical Education, Chennai, Tamilnadu, India.

ABSTRACT

The purpose of the study was to find out the effect of Yogic Practices and Jacobson's Progressive Muscle Relaxation Training on Selected Physiological Variables among Post Graduate Obese Women Students. For the purpose of the study 60 Post Graduate Obese women Students were divided into two groups based on their BMI, one as Experimental and Second as control group. The selected subjects were measured of their Physiological variables namely BMI and cardio respiratory fitness. The experimental group underwent the interventional training programme for 12 weeks, thrice a week on alternative days. The control group was not exposed to any experimental treatment. The collected data on Physiological Variables were statistically analyzed using independent 't' ratio. Only the post test scores were compared and 0.05 level was fixed as level of significance which was considered as appropriate for the study. The results of this study proved that there were significant reduction in BMI and improvement on cardio respiratory fitness among Post Graduate Obese Women Students due to the effect of Yogic Practices and Jacobson's Progressive Muscle Relaxation Training.

KEYWORDS: Yogic Practices, Relaxation Technique, Obese Women.

INTRODUCTION

Today, the subject of obesity is of much concern to millions of people all over the world. Not only has it sparked a lot of talk, but it has also begun to be ranked as a serious risk comparable to certain diseases. In fact, some doctors even call obesity itself a disease. The number of people who are obese is rising rapidly worldwide, making obesity one of the fastest developing public health problems. The World Health Organization (WHO) has described the problem of obesity as a "worldwide epidemic". besity, in absolute terms, is an increase of body adipose tissue (fat tissue) mass. In a practical setting it is difficult to determine this directly. Therefore, obesity is typically assessed by BMI (body mass index) and in terms of its distribution via the waist circumference. In addition, the presence of obesity needs to be evaluated in the context of other risk factors such as medical conditions that could influence the risk of complications (Pooja Malhaotra 2007).

Physical Fitness is the capacity to carry out reasonably well, various forms of Physical activity, without being unduly tired and includes qualities important to the individual's health and wellbeing. (Uppal, 2004). Physical Fitness is a combination of qualities that enable a person to perform well in vigorous physical activities. Physical Fitness is the ability to do the day today activities without getting undue fatigue. Cardio Respiratory Fitness refers to the ability of the circulatory and respiratory systems to supply oxygen to skeletal muscles during sustained physical activity. Regular exercise makes these systems more efficient by enlarging the heart muscle, enabling more blood to be pumped with each stroke, and increasing the number of small arteries in trained skeletal muscles, which supply more blood to working muscles. Exercise improves the respiratory system by increasing the amount of oxygen that is inhaled and distributed to body tissues. Body mass index (BMI= weight in kg / height in m^2) or Quetelet Index is a statistical measure of the weight of a person scaled according to height. It was invented between 1830 and 1850 by the Belgian polymath Adolphe Quetelet during the course of developing social physics. The nation's responsibility of promoting health could be enhanced by a new discipline called yoga. Yoga is recognized as one of the important and valuable gifts of our culture which is one of the six systems of Indian philosophy.

Through yoga, physical, mental, intellectual characteristics develop in a harmonious and integrated fashion to meet the all-round challenge at the modern technological era with its hectic speed. Today the focus is more on Yoga's practical benefits. There is a definite difference between Yoga and stretching and normal exercises. Traditional exercises are oriented towards a certain goal, such as the doing a number of sit-ups or push-ups. Adding yoga in a routine training programme helps to develop strength, flexibility, Concentration, Cardiovascular health, Stress, Tension and tightness. The most significant benefit of adding yoga to be a training program is its effect on performance. Jacobson's Progressive muscle relaxation technique consists of systematically relaxing the major muscle groups of the body with instructions to study the difference between relaxation and tension. It is called as progressive muscle

relaxation technique as the exercise. Proceed from hands to head and from head down towards the rest of the body. The individual is bound to feel progressively more and more relaxed.

PURPOSE OF THE STUDY

The purpose of the study was to find out the effect of Yogic Practices and Jacobson's Progressive Muscle Relaxation Training on Selected Physiological Variables among Post Graduate Obese women Students

HYPOTHESIS

It was hypothesized that Yogic Practices and Jacobson's Progressive Muscle Relaxation Training would have significant influence on BMI and cardio respiratory fitness among Post Graduate Obese Women Students.

METHODOLOGY

For the purpose of the study 60 obese individuals, who were students of Chennai city colleges were selected as subjects. They were between 21 and 25 years of age. They were treated as obese based on their BMI scores. The height and weight of all the subjects were measured before the study to find out the BMI of the individuals. The selected subjects were divided into two equal groups as Experimental and Control group, 30 subjects in each group, based on their BMI scores. The research design of the study was equated group design. The experimental group underwent 12 weeks of Yogic Practices and Jacobson's Progressive Muscle Relaxation Training (thrice a week on alternative days for one hour). The control group was not exposed to any experimental treatment.

PRANAYAMA

Kapalbhati Pranayama(Frontal Brain Cleansing Breath), Bhastrika Pranayama (Bellows Breathe), Ujjayi Pranayama (The Psychic Breath)

ASANAS

Bhujangasana, Hasta Utthanasana, Shalabhasana, Dhanurasana, Paschimottansana, Ardha Mastsyendrasana, Vipareeta Karaniasana, Ushtrasana, Halasana

MEDITATION

Silent meditation, Om kar meditation, Breathing meditation. At the end of the 12 weeks both the experimental and control group were tested on their BMI and cardio respiratory fitness. BMI of the subjects were assessed through BMI= weight in kg / height in m^2. Cardio respiratory fitness of the subjects was assessed through COOPER'S 12 minutes run and walk test.

STATISTICAL TECHNIQUE

Only the post test scores of the subjects on BMI and Cardio respiratory fitness were compared through't' ratio.

RESULTS OF THE STUDY

TABLE I
SHOWING POST TEST MEAN SCORES, DIFFERENCE BETWEEN MEAN, SD AND OBTAINED T VALUE ON BMI

Groups	Mean	Mean difference	SD	Obtained t value
Experimental	**23.74**	**3.72**	**1.19198**	**15.33***
Control	**27.46**		**1.752083**	

Required t value at .05 level = 1.984

The obtained t ratio between experimental and control groups on BMI was 15.33, which was greater than the required table value of 1.984. It shows that there was a significant improvement on the experimental group.

TABLE II
SHOWING THE OF POST TEST MEAN SCORES, DIFFERENCE BETWEEN MEAN, SD AND OBTAINED T VALUE OF CARDIO RESPIRATORY FITNESS

Groups	Mean	Mean difference	SD	Obtained t value
Experimental	**1311.8**	**10**	**5.95561817**	**20.21***
Control	**1301.8**		**6.28896**	

Required t value at .05 level = 1.984

The obtained t ratio between experimental and control groups on cardio respiratory fitness was 20.21, which was greater than the required table value of 1.984. It shows that here was a significant improvement on the experimental group.

CONCLUSION

It was concluded that the effect of Yogic Practices and Jacobson's Progressive Muscle Relaxation Training showed significant reduction in BMI and significant improvement on cardio respiratory fitness among Post Graduate Obese Women Students.

REFERENCES

1. Allsen,P.E., J.M,Harrison, and B.Vance. Fitness for Life: an Individualized and Co.1982.
2. Cooper, K.H. The aerobics Program for Total Wellbeing, Newyork:Mount Evans Enlewood, Co, Morton Publishing Company,1988.
3. Hoeger, W.W.K. Life time Physical Fitness & Wellness: A Personalized program.
4. Jacobson E (1997) Progressive Muscular Relaxation Technique cited by swaminathan and kaliappan psychology for effective living; The madras psychology society, Chennai.
5. Satyananda saraswati swami (1976). ' Yoga Nidra' Bihar school of yoga.
6. Werner W.K Hoeger, Sharon A. Hoeger, Fitness and Wellness, Morton Publishing company, New York , 2000.
7. Yoga for Every athlete-Secrets of an Olympic Coach, Aladar kagler, Jaico Publishing House, Mumbai (2001).
8. Yoga the Science of Holistic Living, Vivekananda Kendra Yoga Prakasan Trust, Chennai.