INFLUENCE OF SKY YOGA AND AEROBIC EXERCISE ON BMI AMONG WORKING WOMEN

Dr. N. DEVI
Asst. Professor,
WCSC- Vision SKY Research Centre,
Aliyar.

ABSTRACT

Purpose:

To achieve the variation in Body Mass Index after practicing SKY yoga and Aerobic exercise. The influence on Body Mass Index can be viewed through the physiological variable.

Methodology:

For this study, 90 working women in the sundharapuram mill were selected as subjects at random and they have been divided into three groups with 30 subjects in each, namely Experimental Group I which undergoes SKY yoga, Experimental group II which undergoes Aerobics exercises and Control group were kept in reflection without no training. The training period was 16 weeks and training was conducted only for 5 days per week.

Results:

The results of the study showed that there is a significant improvement in the Body Mass Index of the Experimental Group subjects to the Controlled group. Through SKY yoga and aerobic practices, they're able to assist them to manage their problems due that their Body Mass Index getting improved.

Conclusion:

It concluded that Body Mass Index got improved with the help of management the Anxiety and unhappiness in work-life balance.

Keywords: Body Mass Index, Anxiety, SKY Yoga, Experimental, Aerobic exercise.

INTRODUCTION:

Yoga is a scientific exploration of the inner self that eventually brings about a metamorphosis in the seeker and leads to self-realization. Yoga is a leading light for a practitioner into gaining mastery over the self and comprehending the purpose of life. Women are responsible for bearing children, yet they are malnourished and in poor health. Women are always overworked and are bound to complete all of the domestic work. Most Indian women are uneducated. Although the country's constitution says women have equal status to men, women are powerless and are mistreated inside and outside the home **[7]**.

In addition, even if a woman is educated, especially in the poorer regions, there is no hope for a job. When women are not educated and cannot hold prestigious jobs, they take on the most physically difficult and undesirable jobs.

Body activity maintains body fitness and that improves overall health. Exercise has the ability to reduce the risk of any disease. Practicing regular exercise, one works all the different parts of the body that includes muscles, abdomen, and pelvis. This show mental health improves based on physical health **[5]**.

OBJECTIVES OF THE STUDY

Women have the role of partner, siblings, children, family, employer, co-workers or employer, and lack of social supporters. Now day women face lots of stress and depression in their life. In the competitive world, women are equally complemented to men and even braver than men. In this research, aim is bliss health gives a strong mind. Health is a very important role in human life **[6].**

STATEMENT OF THE PROBLEM

The purpose of the study is to find out the ways to be stress-free for working women, the influence of Simplified Kundalini yoga and aerobic exercise on selected Physiological variables through BMI among working women suffering from stress problem.

REVIEW OF RELATED LITERATURE:

Nidhi Choudhary, *et al.* (2012) studied the Effect of a yoga program on glucose metabolism and blood lipid levels in adolescent girls with Polycystic Ovary Syndrome. The object of the study was to assess the efficacy of yoga therapy on glucose metabolism and blood lipid values in adolescent girls with Polycystic Ovary Syndrome (PCOS). They

used methodology in this study a prospective, randomized, interventional controlled trial recruited 90 adolescents aged between 15 and 18 years who met the Rotterdam criteria for PCOS. A yoga group practiced suryanamaskara, asanas, Pranayama and meditation 1 hour per day each day for 12 weeks while another group practiced conventional physical exercises. The Mann-Whitney U test was used to compare score changes between the 2 groups. They found the results in this study were the changes in fasting insulin, fasting glucose, and homeostasis model assessment of insulin resistance were significantly different in the 2 groups ($P<0.05$). Except for high-density lipoprotein cholesterol, the changes in blood lipid values were also significantly different ($P<0.05$). The changes in body mass index, waist circumference, hip circumference, and waist-to-hip ratio, however, were not significantly different ($P>0.05$). They have derived the conclusion from this study was yoga was found to be more effective than conventional physical exercise in improving glucose, lipid and insulin value, including insulin resistance values, in adolescent girls with PCOS independent of anthropometric changes **[1].**

Senthilvadivu (2013) assessed the effect of Manavalakalai Yoga on selected physiological and psychological variables on women employees. The sample selection consists of two phases. In phase 1, women were selected using purposive sampling technique. The General Health Questionnaire, Agnihotry Rekha Self Confidence Questionnaire and Resilience Questionnaire were administered as pre test. This phase also includes measuring of Body Mass Index and Blood Pressure. In phase 2, among the women who fall under low psychological wellbeing are categorized into experimental group and control group. The samples are randomized into 15 students each using simple random sampling method. These two groups are taken for post test after intervention. The training will be provided only to the experimental group. A quasi-experiment is an empirical study used to estimate the causal impact of an intervention on its target population. Quasi-experimental research designs share many similarities with the traditional experimental design or randomized controlled trial, but they specifically lack the element of random assignment to treatment or control. Analysis of co-variance was applied. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study. The Manavalakalai yogic practices group had shown significant improvement in all the selected physiological and psychological variables. The experimental group had shown significant improvement in all the selected physiological and psychological than the control group **[2]**.

Sarsh Jane F Stewart et al (2019), studied the "The Role of BMI Group on the Impact of Weight Bias Versus Body Positivity Terminology on Behavioural Intentions and Beliefs about obesity. Participants (n = 332) were randomly allocated to two conditions to receive a vignette depicting an image of a person with obesity using either weight bias (n = 164) or body positivity (n = 168) terminology. Participants were divided into three groups based upon their BMI category (normal weight n = 173; overweight n = 92; obese n = 64). They then completed measures of behavioral intentions, obesity illness beliefs, and fat phobia. Although there were several differences in beliefs by BMI group, the results showed no differences between weight bias or body positivity terminology on any measures. There were, however, significant BMI group by condition interactions for beliefs about obesity relating to personal control and treatment control. *Post hoc* tests showed that weight bias resulted in reduced personal control in the obese BMI group compared to other participants. Weight bias also resulted in higher personal control over obesity in normal weight individuals compared to body positivity. People with obesity reported higher treatment control when exposed to weight bias compared to overweight participants, whereas normal weight participants reported greater treatment control when exposed to body positivity compared to both other groups. To conclude, the impact of weight bias and body positivity information is not universal and varies according to the BMI of the audience and the outcome being measured; whereas people of normal weight may benefit from weight bias there is no evidence that obese people benefit from body positivity. Implications for the prevention and treatment of obesity are discussed **[3].**

HYPOTHESIS

It hypothesized that there would be significant differences in selected physiological variables of BMI due to the practices of SKY Yoga and Aerobics exercise than the subjects in the Control group.

SIGNIFICANCE OF THE STUDY

This study is having the following significance.

1. The study can support college women and help them to thrive in academics.
2. This study was exclusive then it is a relative study of SKY yoga and modern aerobics on BMI improvement.
3. The results exposed that people take part in some type of practice to preserve their blissful healthy and stress release in the current society**.**
4. This study can find on college men and benefits them to succeed in academic.

DELIMITATIONS

The following are the delimitations of this study:

1. The study was delimited to 90 working women.
2. The study was delimited to cotton mill working women only.
3. The subject's ages ranged from 20 - 25 years only.
4. The independent variables were SKY yoga and Aerobics exercises only.
5. The study was delimited to physiological variables only.
6. The training period was delimited to 16 weeks only.

LIMITATIONS

1) The study is focused only on physiological BMI level.
2) External factors like environmental, climatic conditions, socio-economical background etc., are not to be considered.
3) The routine work was not considered.
4) The subjects are advised to practice the technique in stressful and depressed situations.
5) The mood of the subjects at the time of the training period was also not taken into consideration.

SELECTION OF SUBJECTS

For the study, 90 working women in sundharapuram cotton mill were selected as subjects at randomly. Their age ranged from 20 to 25 years.

METHODOLOGY:

The subject taken for the study they are divided into three groups of thirty subjects in each randomly, namely Experimental Group I given SKY yoga, Experimental group II given Aerobics exercise and Control group were not given any practice and kept them in observation for this study. The training period has been conducted for 16 weeks and for five days in a week.

SELECTED VARIABLES FOR EXPERIMENT
INDEPENDENT VARIABLES (Physiological Variables)

BODY MASS INDEX

Being overweight or obese increases our risk of developing high blood pressure. In fact, our blood pressure rises as your body weight increases. Losing even 10 pounds can lower our blood pressure and losing weight has the biggest effect on those who are overweight and already have hypertension. Overweight and obesity are also risk factors for heart disease. And being overweight or obese increases our chances of developing high blood cholesterol and diabetes two more risk factors for heart disease. BMI measures are used to determine if someone is overweight or obese. These are body mass index (BMI), and waist circumference. BMI is a measure of our weight relative to our height. It gives an approximation of total body fat and that's what increases the risk of diseases that are related to being overweight. But BMI alone does not determine risk. For example, in someone who is very muscular or who has swelling from fluid retention, BMI may overestimate body fat. BMI may underestimate body fat in older persons or those losing muscle. That's why waist measurement is often checked as well. Another reason is that too much body fat in the stomach area also increases disease risk. A waist measurement of more than 35 inches in women and more than 40 inches in men is considered high.

Purpose:

Height, weight and demographic information

Equipment:

Calibrated and certified balance beam scale and stadiometer.

Procedure:

The subjects were weighed in indoor clothing, without shoes and with pockets empty. Subjects were asked to provide to demographic data, including age measurement formal.

Measurement Formal

BMI = (Weight in Kilograms / (Height in Meters x Height in Meters)

BMI Categories:

- Underweight = <18.5
- Normal weight = 18.5–24.9
- Overweight = 25–29.9
- Obesity = BMI of 30 or greater

DEPENDENT VARIABLES

The practices followed by experimental group are.

i. SKY yoga
ii. Aerobics exercise

DATA INTERPRETATION BMI

The statistical analysis of the data collected from the pre-test and post-test on BMI of experimental I, II and control group have been presented in Table I

Table I
Analysis of Covariance for the pre and post test data on BMI of SKY yogic practices group, Aerobics group and control group

TEST	SKY	AEROBICS	CONTROL	Df	SS	MOS	F value
Pre	26.07	23.98	23.89	2	91.43	45.71	0.346
				87	1379.8	15.860	
Post	24.74	23.42	24.08	2	25.87	12.93	1.14
				87	980.49	11.27	
Adjusted	23.60	23.95	24.68	2	17.41	8.70	6.92*
				86	108.09	1.256	

In table -I, the results of one-way ANCOVA for both pre and post test scores of physiological variables BMI is presented. From the table it can be seen that the calculated F value of 0.34 for pre-test for BMI between the groups are insignificant indicating that the random sampling is successful. The obtained F value of 6.927 for adjusted test of BMI between the experimental groups and control group were greater than the table value of 3.1 indicating that it was significant at 0.05 level. It reveals that there is significant change on BMI as a result of the experimental training.

Since the result has revealed that there was a significance difference, the hypothesis is accepted.

To determine which of the paired means had a significant difference, the Scheffe's test was applied as Post hoc test and the results are presented in Table II.**Table II**

Scheffe's test for the differences between the adjusted post-test paired means on BMI

Groups			Mean	CD
SKY	AEROBICS	CONTROL		
23.6073	23.9558		0.3484*	1.6921*
23.6073		24.6834	1.0760*	
	23.9558	24.6834	0.7275*	

Table II shows that the adjusted post-test means differences in the Simplified kundalini yoga Group and aerobics Group, simplified kundalini yoga Group and Control Group, and Walking Group and Control Group are

0.348, 1.076, and 0.727 respectively. The value of 1.692 is greater than significant differences at a .05 level of confidence.

It is concluded from the results of the study that there is a significant difference in BMI between the adjusted post-test means of the Simplified kundalini yoga Group and Aerobics Group, simplified kundalini yoga Group and Control Group, Aerobics Group, and Control Group. The improvement of BMI was significantly higher for the Simplified kundalini yoga Group than Aerobics Group and Control Group.

It shows that the Simplified kundalini yoga Group is better than Aerobics Group and Control Group on BMI.

The mean and adjusted values of pre and post test of the Simplified kundalini yoga Group, Aerobics Group and Control Group on BMI are graphically represented in the Figure -I.

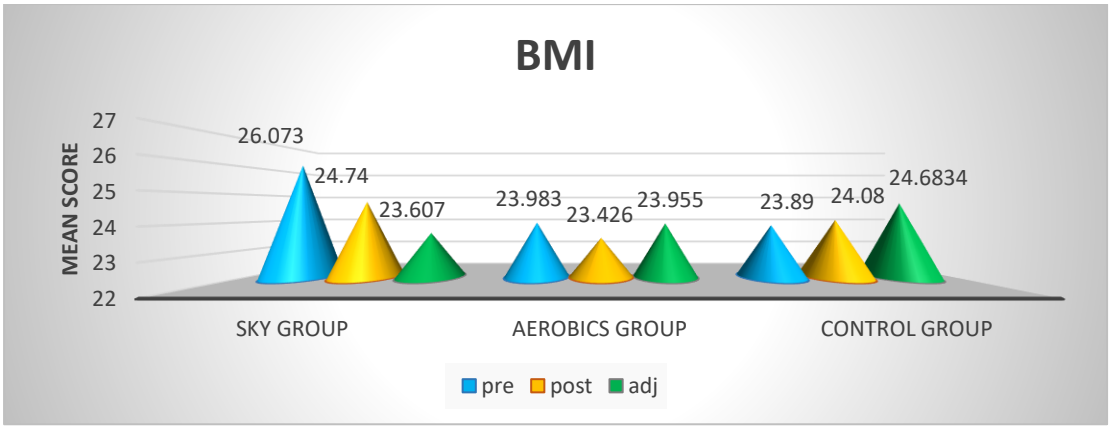

Figure – I Graphical Representation on Pre -Test, Post - Test and Adjusted Post -Test Means on BMI of Control Group and Experimental Groups

Interpretation:

From the results of study, it seen that the impact of the SKY yoga is much more than the Aerobics on BMI bring that to normal. This is since the SKY yoga have impacting their mind than the body so when you train a body which comes to control of mind is most essential task one it is then all becomes normal one. Aerobics just concentrate on losing the weight and work out but I'll not in gaining the weight for the under BMI level person **[4].**

The factors which impacted the BMI due to the SKY yoga are:

- Control of mind to body
- Knowing the own
- Analysis their body

These are the key factors plays a major role in the BMI **[8]**.

CONCLUSIONS

After the completion of the study, the following conclusions were made.

- The experimental group I (SKY yoga), and experimental group II (Aerobics) were shown an impact on Body Mass Index of working women than the control group under the physiological test.
- The result indicates that the Body Mass Index could significantly get increased in the post test of experimental groups when compared to the post-test control group after the 16 weeks of SKY yoga and Aerobics practice. When compared pre and post-test in SKY impacted 5.11 % more and aerobics impacted 2.32 % on Body Mass Index.
- The SKY yoga group shown greater results than the Aerobics group in Body Mass Index. The working women who practiced SKY yoga had higher improvement in Job satisfaction. There is also improvement in work-life balance and stress levels.

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