

IMPACT FACTOR : 5.7631(UIF)

# REVIEW OF RESEARCH UGC APPROVED JOURNAL NO. 48514

ISSN: 2249-894X



VOLUME - 7 | ISSUE - 11 | AUGUST - 2018

# COMPAIRATIVE STUDY OF SKY YOGA AND AEROBICS ON STRESS MANAGEMENT

Vijaya Prabha V.<sup>1</sup> and Dr. M. Jothilaksmi<sup>2</sup> <sup>1</sup>Ph.D. Scholar, Bharathiar University & Faculty, Department of Human Excellence, Kumaraguru College of Technology, Coimbatore, Tamil Nadu. <sup>2</sup>Research Guide & Assistant Professor, Department of Yoga for Human Excellence, WCSC Vision - SKY Research Centre, Aliyar, Pollachi, Tamil Nadu.

### ABSTRACT

The study has been conducted to find SKY yoga or aerobics which is the best one in reducing the stress level of College students. A sample of 90 students was selected randomly from age 17-21 years for the study. In the subjects there were 60 boys and 30 girls for the study. These subjects were segregated into 2:1 ratio of boys and girls in experiment Groups I and II and control group of 30 numbers each. Experiment Group I was administered SKY yoga, whereas experiment Group II was administered Aerobics. The control group was kept in active rest. The pre and post-test surveys were conducted before and after the study for all



three groups. The data collected before and after the study period were statistically analysed using analysis of covariance tested at0.05 level of significance to determine the significant difference among the groups. The pre-test mean scores of stress experimental Group I, experimental Group II, and control group is 107.97, 107.37, and 107.17, respectively. The post-test means showed differences after 12 weeks of SKY Yoga for experimental Group II, and control group is 58.67, 72.77, and 103.33, respectively. Result found that SKY Yoga on College students significantly has a positive impact on the stress management of the subjects.

**KEY WORDS:** SKY Yoga, Aerobics, Stress management, Reducing, Impact.

#### **INTRODUCTION**

Yoga develops the ability to harmonize and integrate the thoughts, desires, emotions, feelings and aim of an individual. Update in yoga helps in realizing the real potential of a person both in terms of his/her physical and intellectual capabilities. Health is very important to human. Healthy body is the first step to lead of better and blissful life and healthy body to have a better faculty of Mind. Body considered as an important role in the process of self-development. Mind effected some problem is stress. Stress create and inducing the diseases. Now-a-days college student effected in lot of stress.

# **STATEMENT OF THE PROBLEM**

In the modern world people follow new thinks for that, they leaving the ancient art and practices. Now-a-days teenagers face many stress and distraction by the surroundings. To inculcate the value of the ancient art that is yoga which will pay a way to teenage group.

### **HYPOTHESIS**

• There were significant differences on selected psychological variables of stress due to the practices of SKY Yoga and Aerobics than the Control group.

### **Delimitations**

- 1. The study was delimited to 90 college students within 60 boys and 30 girls.
- 2. The study was delimited to in Coimbatore City College only.
- 3. Age of the subjects ranged from 17 21 years only.
- 4. The independent variables were SKY yoga and Aerobics only.
- 5. The study was delimited to Personality Psychological variables only.
- 6. The training period were delimited to 12 weeks only.

# Limitations

- 1. The factors like diet, environmental, climatic conditions, and socio-economical backgrounds are not considered.
- 2. The day today routine work is not considered.
- 3. The factors like lifestyle, body structure, personal habits, drug, hereditary and motivational factors are not considered for this study.
- 4. The subject's routine work was not controlled and their possible influence on this result of the study is noted as limitation.

# **REVIEW OF RELATED LITERATURE**

**Sasikala, T.S. (2013)** found out, Effect of Simplified Physical Exercises with Kayakalpa Practices and SKY meditation on Selected Biochemical and Psychological variables among Middle aged women', had revealed that (i) HDL significantly increased (ii) LDL significantly decreased (iii) Aggression and stress decreased (iv) Self-concept increased, due to the treatment of Simplified Kundalini Yoga. Three groups each having 15 subjects from the total subjects of 45 formed. Experimental Group-I was given only Simplified physical exercise of Simplified Kundalini yoga. Experimental Group-II was given Simplified physical exercise with Kayakalpa practices and SKY meditation of Simplified Kundalini Yoga. No treatment was given to Control Group. Analysis of co-variance (ANCOVA) was applied to determine the significance of mean difference between three groups. Group-II which was given Simplified physical exercise and SKY meditation of Simplified physical exercise of Simplified Kundalini Yoga has shown significantly more than Group-I which was given only Simplified physical exercise of Simplified Kundalini Yoga has shown significantly more than Group-I which was given only Simplified physical exercise of Simplified Kundalini Yoga.

#### **Selection of Subjects**

For the study purpose 90 college students studying in Coimbatore were selected randomly. In the subjects there were 60 boys and 30 girls. Their age ranged between 17 to 21 years.

# **METHODOLOGY**

The subject of 90 college students was selected for this project. They undergone pre-test on psychological variable of stress. The subjects were dividing into three groups with 2:1 ratio of boys and girls in each group. Experimental group I they have been given practice of SKY Yoga for five days a week for 12 weeks. Experimental group II practices Aerobics for five days a week for 12 weeks. And the control group were not given any kind of training. The post-test had taken after the 12 weeks of training.

### **Selected Variables for Experiment**

Dependent Variables: Stress

**Purpose:** To measure the subjects with stress.

Equipment: Stress Questionnaire by Dr. Latha Sathish Manifest Stress Inventory.

**Description:** The questionnaire developed by Latha (1988) consists of 52 items arranged from mild stress, moderate to severe stress. This lists the life experiences based on the amount of "change' or 'adjustments' one has to make to life rather than the undesirability f events themselves. It also has a Control Index, where the subject has to record whether he/she had complete, partial or no control over the experienced stressful

situation. The scale was tried out on a sample of 80 subjects. The item reliability value was 0.86. Test reliability on a sample of 30 subjects was found to be 0.96 (P < 0.01). The content validity based on judges rating was 0.86.

**Scoring:** The questionnaire with 52 items is divided into 3 categories of stressors according to its severity in affecting an individual normal life.

- 1. The items from No.1 to No.7 are classified as Mild stressors. The score is obtained by adding the 'Yes' response.
- 2. Items from No.18 to No.35 represent moderate stress and items No.36 to No.52 represent stress of severe type. The scores for both the categories are arrived by adding. The 'yes' response. Thus, the possible number of Yes responses is 52. This score under this category ranges from 0 to 52.
- 3. The Control index was decided by giving a weightage of 1,2 or 3 makes against 'Yes' items scored as complete control, partial and no control respectively. The index ranges from 0 to 156.

# **Level of stress**

0-17Mild stress 18-35 Moderate stress 36-52 Severe Stress **Control Index** 0-51 complete control over stress 52-105 partial control over stress 106-156 no control over stress **Independent Variables:** SKY yoga & Aerobics.

#### **Aerobics:**

Aerobics is a form of the physical exercise with the combination of stretching and strength training. The aerobic exercise is sustained activity involving the major muscle groups, such as swimming, running, or brisk walking. The heart and respiratory rate rapidly increase, and more oxygen is circulated through the body. This kind of exercise strengthens the cardiovascular system and increases the overall strength and stamina. It is practiced in a group with the combination of music but it is also could be practiced solo and also without musical accompaniment. The aerobics promote human health and its fitness.

#### **Results of the Study**

The data collected before and after the study were statistically analysed using ANCOVA for psychological variable of Stress was measured through stress Questionnaire developed by Latha Sathish. The results on the effects of SKY yoga and Aerobics on Stress among College students is presented in Table-1.

Table 1. computation of Mean and Analysis of Covariance of Stress (Scores in Marks)									
Tests	Ex.Gr.	Ex.Gr.	Control	Source of	df	Sum of	Mean	Obtained	
	1	II	Group	Variance		Squares	Squares	<b>'F'</b>	
Pre Test	107.97	107.37	107.17	Between	2	10.40	5.20	0.04	
Mean				Within	87	11774.10	135.33		
Post Test	58.67	72.77	103.33	Between	2	31282.42	15641.21	34.93	
Mean				Within	87	38952.7	447.73		
Adjusted	58.42	72.84	103.50	Between	2	31791.58	15895.79	38.28*	
Post Test				Within	86	35707.29	415.20		
Mean									
Mean Diff	49.30	34.6	3.84						

#### Table 1: Computation of Mean and Analysis of Covariance of Stress (Scores in Marks)

\*Significant at 0.05 level.

Table-1 shows that the pre-test mean scores of Stress of Experimental Group I SKY yoga was 107.97, Experimental Group II Aerobics was 107.37 and control group was 107.17. The post-test means showed differences due to 12 weeks of SKY yoga and Aerobics and mean values recorded were 58.67,72.77and 103.33 respectively.

The obtained F-value on pre test scores 0.04 was lesser than the required F value of 3.22to be significant at 0.05 level. This proved that there was no significant difference between the groups at initial stage and the randomization at the initial stage was equal.

The post test scores analysis proved that there was significant difference between the groups as the obtained F value at 34.93 was greater than the required F-value at 3.95. This proved that the differences between the post-test mean at the subjects were significant. Taking into consideration the pre and post test scores among the groups, adjusted mean scores were calculated and subjected to statistical treatment. The obtained F-value at 38.28 was greater than the required F-value at 3.95. This proved that there was Significant differences among the means due to 12 weeks of SKY yoga and aerobics on the Psychological variable Stress.

Since significant improvement were recorded. The results were subjected to post hoc analysis using Scheffe's Confidence Interval test. The results were presented in Table-2.

	Adjusted Post-test n				
SKY yoga Group - (I)	Aerobics Group - (II)	Control Group - (III)	Mean Difference	Confidence Interval	
58.42	72.84		14.42*		
58.42		103.50	45.08*	13.11	
	72.84	103.50	30.66*		

# Table 2: Scheffe's Post-Hoc Test for Stress

Table-2 depicts that there is significant difference between SKY yoga and control group, Aerobics group and control group, SKY yoga and Aerobics. The obtained adjusted mean values were presented through bar graph.





Available online at www.lbp.world

#### DISCUSSION

The results presented in Table-2 showed that the obtained adjusted means on scores on Stress among SKY yoga was58.42 followed by Aerobics group with the mean value of 72.84 and control group mean value of 103.50. The difference among pre test scores Post test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and F values obtained were 0.04, 34.93 and 38.28respectively. It was found that obtained F value on pre-test score was not significant at0.05 level of confidence as the obtained value was lesser than the required table value and post test Scores was significant at 0.05 level of confidence as the value was greater than the required table F value of 3.95.

The post hoc analysis through Scheffe's confidence test proved that due to 12 weeks treatment the SKY yoga group there was significant decrease in stress levels than control group and the differences were significant at 0.05 level. The post hoc analysis between the experimental Group-I and Group-II proved that there was a significant difference. The result of this study on Stress was in line with the study conducted by Dr. Latha Sathish (1997).

#### CONCLUSION

Within the limitation and delimitations set for the present study and considering the results obtained, the following conclusion were drawn.

For the purpose of this study it was hypothesized that the SKY yoga (Experimental Group I), Aerobics (Experimental Group II) would improve the selected Psychological variables as compared to control group (Group III).

The Psychological Variable Stress was significantly reduced due to 12 weeks of SKY yoga (Experimental Group I), Aerobics (Experimental Group II) among college students when compared to the control group.

### SUGGESTION FOR FURTHER RESEARCH

- Similar study can be undertaken on other age groups.
- Similar study can be undertaken for college girls suffering with menstrual problem also.
- Similar study can be done for other problems also.
- Similar study can be done with one more group of Asanas applications alone

# REFERENCES

- 1. Robert Weinberg & Daniel Gould. (2014). Foundations of Sport and Exercise Psychology with Web Study Guide (5<sup>th</sup> Edition). Online study Guide, ISBN 9780736095143.
- 2. Thathuvagnani Vethathiri Maharishi Yoga for Modern Age (13<sup>th</sup> Edition). 2012. Erode: Vethathiri Publications.
- 3. Chiriac, S. et al. (2002). The beneficial effect of physical training in hypertension. Rev Med Chir Soc Med Nat Iasi. 107(2): 258-263.
- 4. www.ncbi.org.in
- 5. www.topendsports.com