

IMPACT OF THE ASTANGA YOGA PRACTICES ON FLEXIBILITY AND STRESS OF THE EMPLOYEES

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ABSTRACT - The purpose of the study is to find out the impact of the astanga yoga practices on general health status and wellbeing of the employees. To achieve this purpose a sample of 40 employees are selected at random from the Chennai city from the age group of 30-40 years. They are divided into two equal groups. Experimental group is the astanga yoga practices group, and the other acted as a control group, the pre test is conducted to all the two groups in sit and reach test for the flexibility and Dr.Latha Sathish Questionnaire for the Stress. The Astanga yoga practices are given to the experimental group for the period of 12 weeks for five days per week. The training load is fixed based on the pilot study, but the control group is not given any type of training. After 12 weeks of training the post test is taken from all the subjects. The pre and post test is conducted for the flexibility and stress at the end of the each session and the data is recorded. Analysis of covariance is used to test the significance. The results of the study reveals that the efficiency of the flexibility and stress is improved significantly ($p>0.05$).

Keywords: astanga yoga practices, flexibility and stress.

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1. INTRODUCTION

Irrespective of age, all kind of people are affected by stress, mental disorder, diabetes, BP and so on due to the competitive and mechanical life. Particularly, our employees are affected much than the other kind because of their responsibility who has to take care of the business of the various fields in a very competitive environment and also have to deal with the different types of customers. Two main things for the employees. 1. Performance 2. Concentration, First quality is for the performing well, employees have to sit prolonged time, it leads to some physical problem, second thing is concentration it is more important to handle money transaction because the money involvement is more. More over the employees need to face different types of customers. Since it is a time bounded work automatically it leads to stress, tension and aggression etc, which leads to

some psychological problem. So, the researcher select the general health status & wellbeing of employees for the study.

A healthy life is the most important for a happy life. The modern pace of life hardly gives time to take care of the health. But ancient Indian wisdom says that the true fulfillment of life begins with the good health.

Good health is the key to a happy life for both men and women but in a fast and demanding life of men, health unfortunately takes a backseat whereas it should be of a prime concern. In these competitive times, health is put on the back-burner until it becomes too serious to ignore. For a healthy life, numerous things have to be set in order. Watching the calories, good exercises and healthy food is absolutely essential. (Dr. Maoshing Ni, 2008)

Health is defined by the World Health Organization of the United Nations as the "State of complete physical, mental and social well being and not merely the absence of disease and infirmity."

Every human being has one's own understanding of stress, because of the demands of the adaptability do evoke the stress phenomenon. Selye (1974) beautifully summarized the nature of stress in the following words:

"Everybody knows what stress is and yet nobody knows what it is."

The term "stress" has been used in so many different contexts that there is confusion regarding the exact meaning of the term. Few definitions of stress are given below; and they are useful according to the scope and clarity.

Yoga is one of the six orthodox systems of Indian philosophy. Yoga is the union of the jivatma with the paramathma. It is collated, coordinated and systematized by Patanjali in his classical work, the Yoga Sutras, which consists of 195 terse aphorisms in which it is stated that yoga is a state where all the activities of the mind are channelized in one direction; or the mind is free from distractions. The word Yoga is derived from the Sanskrit root Yuj meaning to bind, to unite, join, and attach and yoke, to direct and concentrate one's attention on, to use and apply. It also means the union or communion. It means the disciplining of the mind, intellect, the emotions, the will,

which that yoga presupposes; it means a poise of the soul which enables one to look the life in all its aspects evenly.

Yoga is not merely doing an asana by the body, through the body, and for the body. The sadhakas learn to unite one part of the body with another part of the body, the body with the mind, the body with the breaths and senses, also the breath with the mind and senses and this takes one to the self realization path. It is the unification which justifies the definition of the word yoga which means, 'to unite'. (B.K.S Iyengar,2004).

2. PURPOSE OF THE STUDY

The purpose of the study is to find out the impact of the astanga yoga practices on general health status and wellbeing of the employees.

3. METHODS AND MATERIALS:

The sample for the present study consists of 40 employees from the Chennai city. The subjects are selected using random sampling method. Their age ranged from 30 - 40 years. They are divided into two groups namely Experimental group and control group (n=40), and sit and reach test for the flexibility and Dr. Latha satish Questionnaire for the stress is administrated to them. Experimental group is under the practice of astanga yoga practices for the period of 12 weeks in the morning at 6.30 to 7.30 for the period of 12 weeks . The training programme is administered for sixty minutes per session. The control group did not engage in any special activities. The load is fixed based on the pilot study. The pre test and post test are taken before and after the experimental training programme. The test is conducted sit and reach test for flexibility and Dr. Latha satish Questionnaire for the stress on the each end of the training and data is recorded. Analysis of covariance is used as a test of significance.

Experimental Group: Yogic practices as Table - I below

TABLE - I YOGIC PRACTICES

S.No	Yogic practices	Duration	Repetition	Set	Rest between practice	Rest between set	Frequency per week
1	Sitilikarana vyayama (loosening exercises)	5 min	2	2	5 to 10 sec	30 – 60 sec	5 days in a week
2	Suryanamaskar	6 min	2	2	10 to 15 sec		
3	Padmasana	3 min	2	2	5 to 10 sec		
4	Ardha Katichakarasana	3 min	2	2	5 to 10 sec		
5	Padahastasana	3 min	2	2	5 to 10 sec		
6	Vipareetakarani	3 min	2	2	5 to 10 sec		
7	Bhujangasana	3 min	2	2	5 to 10 sec		
8	Chandra & surya anuloma & viloma	3 min	2	1	5 to 10 sec		
9	Nadishodana pranayama	3 min	2	1	5 to 10 sec		
10	Bhramari & pranayama	3 min	2	1	5 to 10 sec		
11	Savasana	10 min	1	1	-		

Group II: Control Group (No Practice)

4. RESULTS:

The data pertaining to the variables under the study is examined by analysis of covariance for each criterion variables separately in order to determine the differences between the groups at the different stages.

Table II

ANALYSIS OF COVARIANCE FOR THE PRE AND POST TESTS DATA ON THE FLEXIBILITY OF ASTANGA YOGA PRACTICES GROUP AND CONTROL GROUP

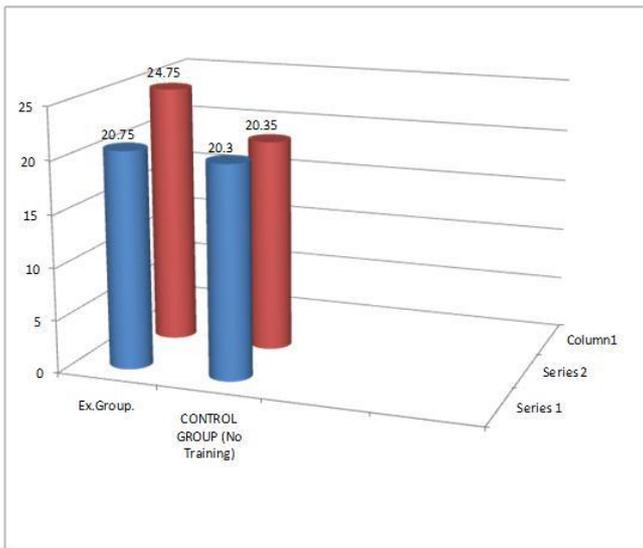
	YOGIC PRACTICES GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	df	MEAN SQUARES	OBTAINED F
Pre Test Mean	20.75	20.30	Between	2.02	1	2.02	0.36
			Within	211.95	38	5.58	
Post Test Mean	24.75	20.35	Between	193.60	1	193.60	76.39*
			Within	96.30	38	2.53	
Adjusted Mean	24.74	20.36	Between	189.99	1	189.99	73.33*
			Within	95.86	37	2.59	
Mean Diff	4.00	0.05					

*significant.

Table value for df 1 and 38 is 3.21 Table value for df 1 and 37 is 3.22.

The obtained adjusted mean values are presented through the bar diagram in the figure

FIGURE - 1
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF THE FLEXIBILITY



5. DISCUSSIONS ON THE FINDINGS OF THE FLEXIBILITY

Taking into consideration of the pretest means and posttest means the adjusted posttest means are determined and analysis of covariance is done and the obtained F value 73.33 is greater than the required value of 3.22. Hence it is accepted that the Yogic practices training significantly improve the wellbeing of employees of the employees.

The post hoc analysis of the obtained ordered adjusted means proved that there is significant differences existed between the Yogic practices group and Control group on the internet addiction level. This prove that due to 12 weeks of Astanga yoga practices is significantly improved the wellbeing of employees.

6. RESULTS:

The data pertaining to the variables under the study is examined by analysis of covariance for each criterion variables separately in order to determine the differences between the groups at the different stages.

Table II

ANALYSIS OF COVARIANCE FOR PRE AND POST TESTS DATA ON STRESS OF ASTANGA YOGA PRACTICES GROUP AND CONTROL GROUP

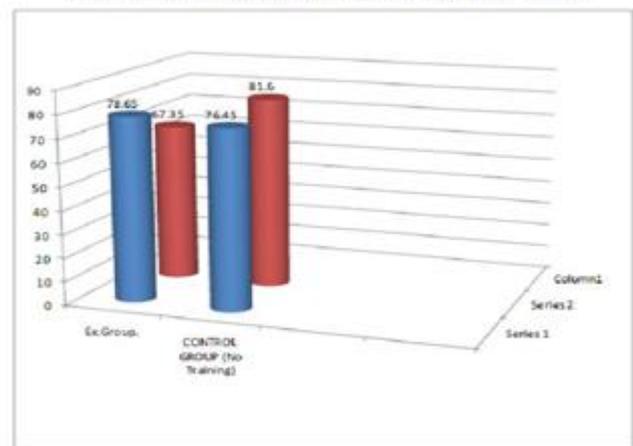
	YOGIC PRACTICES GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	df	MEAN SQUARES	OBTAINED F
Pre Test Mean	78.65	76.45	Between	48.40	1	48.40	0.07
			Within	25521.50	38	671.62	
Post Test Mean	67.35	81.60	Between	2030.63	1	2030.63	4.06*
			Within	18987.35	38	499.67	
Adjusted Mean	66.58	82.37	Between	2488.01	1	2488.01	14.14*
			Within	6508.40	37	175.90	
Mean Diff	11.30	5.15					

*significant.

Table value for df 1 and 38 is 3.21 Table value for df 1 and 37 is 3.22.

The obtained adjusted mean values are presented through bar the diagram in the figure 2.

FIGURE - 2
BAR DIAGRAM ON ORDERED PRE AND POST MEANS OF STRESS



7. DISCUSSIONS ON THE FINDINGS OF STRESS

Taking into consideration of the pretest means and posttest means the adjusted posttest means are determined and the analysis of covariance is done and the obtained F value 14.14 is greater than the required value of 3.22. Hence it is accepted that the Yogic practices training significantly improved the wellbeing of employees.

The post hoc analysis of the obtained ordered adjusted means proved that there is significant differences existed between the Yogic practices group and Control group on the wellbeing of employees. This proved that due to 12 weeks Astanga yoga practices is significantly improved the wellbeing of employees.

8. CONCLUSION OF THE RESEARCH

It is observed that the pre-test results show no significant differences between the control and experimental groups. While the post test results of the control and experimental groups are analyzed statistically and revealed that, there is a significant mean difference in favor of experimental groups.

In the analysis of co-variance the flexibility and stress among the control and experimental groups, a significant difference is seen and which is the source light on the applicable effect of twelve weeks of yogic practices. From the statistical analysis it is clear that the both training programmes have its own effects. Yogic practices show more effects in decreasing the stress and increased in flexibility when compared to the control group.

9. REFERENCES:

- [1] Sharma, P.D. (1984), **Yogasana and Pranayama for Health** Bombay, India: Navneet Publication, PP. 10-11.
- [2] Strukic, P.J, (1981). **Basic Physiology**, New York: Spring Ervellong Inc., P.23.
- [3] Swami Kuvalayananda, (1977), **Asana**, (India: Lonavala: Kaivalyathama)
- [4] Swamy Satyanand Saraswati, (1996) **AsanaPranayama Mudra Bandha**, (Bihar, India: BiharSchool of Yoga, Yoga Publications Trust, pp. 9 – 12.
- [5] Shri Yardi M.R : The yoga of patanjali Bhandarkar oriental research institute, Poona, India L 1979.
- [6] Thirumalaisamy.R, "Statistics in physical education"Karaikudi: senthil publication, 1988: p.58. Shirley Telles,et.al, 1994) short communication autonomic changes during "om" meditation Vivekananda Kendra Yoga Research Foundation, Bangalore, India.
- [7] Naveen K. et.al, () Randomized Trial of Yoga as a Complementary Therapy for Pulmonary Tuberculosis Yoga Research Papers published by SVYASA
- [8] Nagendra . H.R. "the basis for an integrated approach in yoga therapy"
- [9] Dr S Suthakar, Dr Sundar Raj Urs DP Shivakumar, 2016, Effect of Selected Yogic Exercises on Cardiovascular Endurance and Lung Capacity of Secondary School Children, IJESC, 6, 6 PP. 7286-7289.
- [10] Dr S Suthakar, Dr Sundar Raj Urs DP Shivakumar, 2016, Effect of selected yogic exercises on selected physiological variable of secondary school children., International Journal of Physical Education, Sports and Health, 4-114.
- [11] S.Suthakar and Dr.A.Pushparajan,2014, Effects of Silambam and Karate with Yogic Training on Agility and Arm Explosive Power of Collegiate Male Students., International Journal of Innovative Research and Development, ISSN 2278-021
- [12] Dr. S Suthakar and Dr. Sundar Raj Urs DP Shivakumar, 2016. Effect of selected yogic exercises on selected physiological variable of secondary school children, 2016/6/23,International Journal of Physical Education, Sports and Health, 3, 4, 114-116
- [13] DP Shivakumar, S Suthakar, Sundar Raj Urs, 2016. Effect of Selected Yogic Exercises on Cardiovascular Endurance and Lung Capacity of Secondary School Children, 2016/6, International Journal of Engineering Science, 7286.
- [14] Dr. S. Suthakar, Nayak Darshana Habbu, 2016. Effects of the Combination of Plyometric and Specific Training with Skill Training in the Development of Anaerobic Capacity, Leg Explosive Power and Over All Playing Ability of the Volleyball Players, 2016/8, International Journal of Recent Research and Applied Studies, 3, 8(19), 83-87
- [15] Dr. S. Suthakar Muniraju M. G, 2016. Effects of the Short Term Resistance and Regular Resistance Training in the Development of Lower Body Strength, Leg Explosive Power and Shooting Ability on the Male Basketball Players, International Journal of Recent Research and Applied Studies, 3, 8,(12), 51-54