



The effect of suryanamaskar and mantra chanting on anger among stressed men

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Abstract

As uncontrolled stress leads to multiple complications, it has to be reduced by adopting life style modifications like yoga. Suryanamaskar, a form of yoga relieves anxiety by “mind body connection”. The purpose of the study was to compare the effect of Suryanamaskar with and without mantra chanting on anger among stressed men. Study included three groups each comprising of 10 men with elevated stress level. The experimental group I, which had undergone the Suryanamaskar practices without mantras, group II which had undergone Suryanamaskar practices with mantras and the control group which had not undergone any kind of interventions during the training programme of six weeks. Pre and post training session anger scores were measured using State and Trait Anger Inventory 1973. The data were statistically analyzed by Analysis of Co-variances (ANCOVA). Scheffe’s post hoc test was used to find out paired mean differences. There was a reduction in anger score after the training period in both the experimental groups when compared to the controls, of which there was a marked reduction in the group that practiced Suryanamaskar with mantra chanting.

Keywords: Suryanamaskar, mantra chanting, stressed men, anger reduction,

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Introduction

Suryanamaskar and chanting mantra is part of Indian religious culture for several decades. Suryanamaskar also called as sun salutation is now being adopted and practiced in many parts of the world [1]. Several studies have documented the beneficial effects of yoga training in various psychosomatic disorders. Suryanamaskar is an integral part of modern yoga training, performed either in a slow or rapid manner [2].

Selye (1974) has summarized the nature of stress as: “Everybody knows what stress is and yet

nobody knows what actually it is.” Stressors relate to any factor within the individual or from the external environment which is conducive to stress. Stressors are either episodic or chronic which cause disruption of autonomic nervous and endocrine systems. To get relieved from stress individual’s biophysical equilibrium would prepare themselves either to “fight or flight”. According to Chida Y et al anger is an emotional state that consists of feelings that vary in intensity from mild irritation or annoyance to intense fury, and aggressiveness as a verbal or physical behavioral pattern manifest in yelling, intimidation or physical assaults. It is well known that stress associated with anger tends to increase aggressive behavior, affecting interpersonal relationships. Anger remains an important cause irrational behavior among youths like smoking, alcoholism and road traffic accidents [3]. Unrelieved chronic stress leads to various psychological, behavioral changes [4,5]. Anger is one such outcome of anxiety in stressed individuals.

Several studies have documented the effect of suryanamaskar on direct vitalizing of the solar

energy in the body namely pingala nadi. And a regular practice of Suryanamaskar helps in regulation of pingala leads to a balanced energy system at both mental and physical levels [6]. With limited study on combined effect of Suryanamaskar and chanting mantra, present study was designed to evaluate the effect of Suryanamaskar with and without mantra practices on selected psychological variables among stressed men.

Material and methods

Adult men in the age group of 30 to 40 years with willingness to participate and complete the training programme, from Melakotaiyur and Mambakkam areas near Chennai city were recruited for this study. Subjects with hypertension, Diabetes mellitus, endocrine and psychiatric disorders, smokers and alcoholics were excluded from the study. Informed consent was obtained from the subjects. Stress level of the subjects was assessed by stress questionnaire developed by Dr. Latha Satish (1997) [7]. Filled up questionnaires were analyzed and the stress level was determined. Out of these stressed men, we selected 30 subjects by random sampling method.

The subjects were divided into experimental group I, experimental group II and control group with 10 subjects in each group. The experimental group I was imparted 45 minutes of practices of Sitalikarana vyayama, Suryanamaskar without mantras and the experimental group II was imparted 45 minutes of practices of Sitalikarana vyayama, Suryanamaskar with mantras. The practice session

was conducted in the early morning on alternated days for a period of six weeks under the supervision and guidance of the scholars, while no practices were imparted to the control group.

As this was a training session, it was difficult to blind. The load was fixed based on the pilot study. The pre and post session anger scores were measured using Speilberger's State and Trait Anger Inventory 1973. It is a 44 items four-point frequency scale authenticated for anger measurement [8]. The collected data were analyzed using commercial statistical software SPSS, which includes Analysis of Co-Variates (ANCOVA). Scheffe's post hoc test was used to find out paired mean differences. The reliability of such scores has been already established by various studies conducted earlier.

Result

The Anger score was measured using State and Trait Anger Scale. The Table-II shows the variance of anger score among experimental group 1 (EXP I), experimental group 2 (EXP II) and Control group (group 3) of men with stress.

From Table-II it is very clear that obtained F-ratio 51.86 greater than the table value 3.38. Hence it was significant at 0.05 level of confidence for the degree of freedom 2 and 26. The results of our study showed a reduction in post session anger score in the experimental group I and group II when compared to the control group. Among the two groups there was a significant reduction of anger scores in the experimental group II.

Table 1: Showing methodology of training suryanamaskar schedule. The 12 steps of the suryanamaskar are as follows

No	Posture name (asana)	Breathing (pranayama)	Mantra
1	Hastauttanasana	Fully Inhale	Hum Hram Mitraya Namah
2	Padahastanasana	Fully Exhale	Aum Hrim Ravaye Namah
3	Ashwa Sanchalanasana	Fully Inhale	Aum Hrum Suryaya Namah
4	Dandasana	Fully Exhale	Aum Hraim Bhanave Namah
5	Sasankasana	Fully Inhale	Aum Hroum Khagaya Namah
6	Astanga Namaskara	Breathout (Bahyakumbaka)	Aum Hrah Pusne Namah
7	Bhujangasana	Fully Inhale	Aum Hram Hiranyagarbhaya Namah
8	Parvatasana	Fully Exhale	Aum Hrim Maricaye Namah
9	Same as 5	Inhale & Exhale	Aum Hrum Adityaya Namah
10	Same as 3	Fully Inhale	Aum Hraim Savitre Namah
11	Same as 2	Fully Exhale	Aum Hraim Arkaya Namah
12	Pranamasana	Fully Inhale	Aum Hram Bhaskaraya Namah

TABLE 2: Analysis of co-variance of the means of two experiment groups and the control group in anger

MEANS	EXP I	EXP II	CONTR OL	Source of Variance	Sum of Square	Degree of freedom	Mean Square	F-ratio
Pre test	72.600	72.900	71.800	Between	6.466667	2	3.233333	0.110102
				Within	792.9	27	29.36667	
Post test	64.000	58.100	71.100	Between	847.40	2	423.7	25.4333
				Within	449.80	27	16.65926	
Adjusted	63.91	57.85	71.43	Between	918.2967	2	459.1484	51.86388
Post test				Within	230.1767	26	8.852951	

*Table value 3.38, Significant at 0.05 level

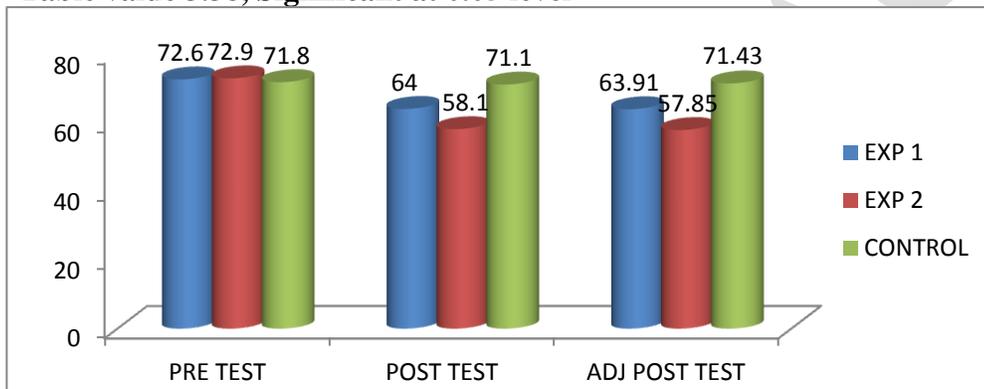


Figure.1: Analysis of co-variance of the means of two experiment group and the control group in anger

Table 3: Scheffe's post-hoc test for anger

Experimental group-1	Experimental group-II	Control group III	Mean difference	Required Class Interval
63.91	57.85	-	6.05	3.86
63.91	-	71.43	7.52	
-	57.85	71.43	13.57	

Discussion

Uncontrolled stress is manifested by certain emotional affects such as rage, anger.

Limbic system is the seat of emotions which demarcates individual from rage to calm nature. Meditation and yoga can act via the limbic system to lead a healthy life. Studies have

documented that Suryanamaskar practices with mantras promoted mental well being by reducing anxiety [6]. From our study we could infer that practicing Suryanamaskar with mantras can reduce anger in stressed men.

Several studies have documented the effects of Suryanamaskar on weight reduction and cardio-pulmonary fitness [9]. Suryanamaskar practices with mantras can be implemented not only as part of a program to decrease frustration and anger, but also as a way to assist in attaining other goals in our life .

Since chronic stress leads to various cardiovascular morbidities and mortalities it has to be monitored and reduced at the initial stage itself [10]. Yoga, a form of Complimentary and Alternate Medicine (CAM) is the first line of management for stress related disorders [11]. Yoga practices are non invasive, non toxic and widely practiced form of CAM.

Suryanamaskar is a component of yoga alleviates stress by enhancing autonomic stability [12]. Uncontrolled stress is dominated by sympathetic over activity, adrenaline surge and its multiple effects. Regular practice of Suryanamaskar with mantra shifts the sympathetic predominance to parasympathetic activity thereby stabilizing various physiological, biochemical and psychological parameters [13, 14].

The effect of Suryanamaskar in anxiety reduction is evident from the results of our study. There is a marked reduction in anger score of stressed men who practiced Suryanamaskar with mantra. This reduction is due to the mind body connection achieved by the yoga practices.

Conclusion

From our study we can conclude that performing Suryanamaskar with mantra chanting alleviates anxiety in stressed men which is evident from the reduced anger score. Practicing Suryanamaskar can be promoted among stress prone personalities such as executives, professionals etc. More studies can be taken up to evaluate the effect of such yoga practices in other physiological, psychological and biochemical parameters.

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