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## Influence of yogic practices on depression, anxiety and stress among private school teachers

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### Abstract

The purpose of this study was to find out the influence of yogic practices on depression anxiety and stress among private school teachers. To achieve the purpose of the study, 20 female private higher secondary school teachers were randomly selected from Chennai. The age group of the subjects ranged from 35 to 45 years. The selected subjects were randomly assigned into experimental group and control group. The experimental group underwent 12 weeks of yogic practices 6 days a week. The yogic practices included loosening exercises, Suryanamaskar, specific asanas, pranayama and meditation for the duration of 45 minutes. Control group didn't undergo any such practices. All the subjects of experimental and control groups were assessed on level depression, anxiety and stress using DASS-21 questionnaire (Depression Anxiety and stress Scale -21) before and after the 12 weeks of study period. The obtained data were analyzed using Analysis of Co-variance (ANCOVA) to analyze the significance between the group, between the pretest and posttest for each of the selected variables. The results showed that the twelve weeks yogic practices significantly reduced depression anxiety and stress among private school teachers.

**Keywords:** Yogic practices, teachers, stress, anxiety, depression, women

### Introduction

Yoga is a Sanskrit word which means unity of mind, body and spirit, which has been used 5000 years ago and recently it receives much attention from Western countries. (Barnes *et al.* 2004) [1]. Yoga is one of the ancient traditional system helps to heal, rejuvenate and prevent most of the ailments with regular practices. Combinations of yogic practices improves blood circulation all over the body, thereby improves body function, strengthen the body, and brings awareness to body, mind and breath and gives deep relaxation. (Funderburk *et al.* 1977 & Singh *et al.* 1982). In recent years, several medical and scientific studies on yoga that it is beneficial for some diseases which includes multiple sclerosis (Oken B S *et al.* 2004) [9], osteoarthritis (Garfinkel *et al.* 1994) [8], asthma (Freitas *et al.* 2013) [6], irritable bowel syndrome (Taneja *et al.* 2004) [7], hypertension (Chu *et al.* 2016) [2], lymphoma (Cohen *et al.* 2004) [3], drug addiction (Shaffer *et al.* 1997) [10], and mental health issues (Duan-Porter *et al.* 2016) [5]. Teaching is a physically and mentally challenging occupation, as the teacher uses a lot of energy in their daily work in the classroom in addition to their personal and familial commitments, which is considered as a continuous source of stress as teaching was considered as one of the most stressful jobs, It was proved that stress, anxiety and depression were significantly higher among female private school teachers those who are with inadequate salary, higher teaching experience, higher qualifications, higher workload, job demands, job change, lack of support from co-workers, friends and family, and poor relationship with colleagues (Desouky *et al.* 2017) [4]. In this study, author evaluated depression, anxiety and stress of private school teachers before and after 8 weeks of yogic practices.

### Purpose of the study

The purpose of this study was to find out the influence of yogic practices on depression anxiety and stress among private school teachers.

### Hypothesis

It was hypothesized that twelve weeks of yogic practices would have significant influence of yogic practices on Depression Anxiety and Stress among private school teachers.

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**Methodology**

The purpose of the study was to find out the influence of yogic practices on depression anxiety and stress among private school teachers. The subjects were randomly selected from an apartment of gated community in Chennai. The researcher consulted the secretary of the apartments and advertised 12 weeks free yoga program for school teachers and identified twenty (20) private school teachers and their age was ranged between 35 and 45 years from a population of 50. All the women were explained the objectives of the study and consent letter were obtained. Further, the selected subjects were randomly divided into 2 groups namely experimental group (n<sub>1</sub>= 10) and control group (n<sub>2</sub> = 10). The research design of the study was random group design. The experimental group underwent 12 weeks of yogic practices 6 days a week. The yogic practices included loosening exercises, specific asana, pranayama and meditation for duration of 45 minutes. Control group didn't undergo any such practices.

**Table 1:** Yogic practices programme

Sl. No	Programme	Duration
1.	<b>Loosening exercise</b>	5 minutes
2.	<b>Surya Namaskar</b>	5 minutes
3.	<b>Asanas</b>	
	a. Tadasan	20 minutes
	b. Trikonasan	
	c. Padahastasan	
	d. Gomukasan	
	e. Sedu Bandasan	
	f. Bhujangasan	
	g. Ustrasan	
	h. Sarvangasan	
	i. Halasana	
	j. Matsyasana	
	k. Dhanurasana	
l. Savasana		
4.	<b>Pranayama</b>	
	a. Anulom Viloma	5 minutes
	b. Ujjayi	
	c. Brahmari	
5.	<b>Meditation</b>	
	1. Omkar- 3 times 2. guided meditation	10 Minutes

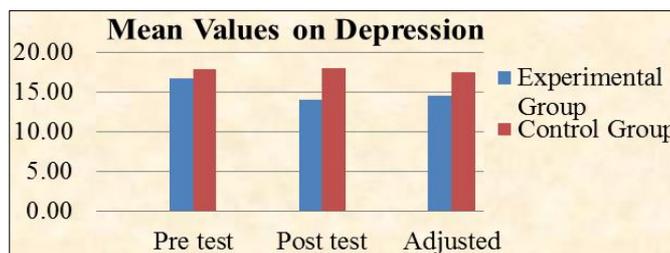
The yogic practices were given for six days a week and the practice was given during evening hours between 4.00 pm and 4.45 pm for a period of 45 minutes. In the initial stage of practice, for first one week, the Practice was given for only 30 minutes. Then the Practiced time was gradually increased and reached 45 min at the beginning of 4 week, and continued till 12 weeks. All the subjects of experimental and control groups were asked to fill up the DASS-21 (Depression Anxiety Stress Scale-21) questionnaire before and after 8 weeks of yogic practices. Sahebi *et al.* (2005) examined the validity and reliability of this questionnaire and Cronbach's alpha was calculated 0.7, 0.66 and 0.76 for depression, anxiety, and stress, respectively in the study of "validation of depression anxiety and stress scale for an Iranian population". The collected data were analyzed through Analysis of Covariance statistical technique. The level of significance was fixed at 0.05.

**Table 2:** Showing the results of Analysis of Covariance on Depression

Test	EXP. Gr	CG	SV	SS	df	MS	F
Pre test	16.80	17.90	Between	6.05	1	6.050	2.25
			Within	48.50	18	2.69	
Post test	14.10	18.10	Between	80.00	1	80.00	21.24
			Within	67.80	18	3.77	
Adjusted	14.60	17.60	Between	39.88	1	39.88	24.80
			Within	27.336	17	1.61	

Table F ratio of 4.41 with (1, 18) degrees of freedom \*Significant at 0.05 level

The obtained F value of adjusted posttest means 24.80 was greater than the required F value 4.41 at 0.05 levels. The statistical analysis using ANCOVA revealed that there was a significant difference between control group and experimental group on Depression. The results of the present study revealed that 8 weeks of yoga practice decreases the Depression.



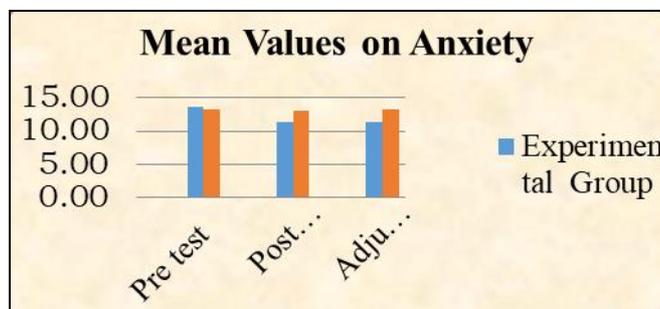
**Fig 1:** Showing the pretest, posttest and adjusted posttest mean values of Depression

**Table 3:** Showing the results of Analysis of Covariance on Anxiety

Test	EXP. Gr	CG	SV	SS	df	MS	F
Pre test	13.70	13.30	Between	0.80	1	0.800	0.65
			Within	22.20	18	1.23	
Post test	11.40	13.10	Between	14.45	1	14.45	15.03
			Within	17.30	18	0.96	
Adjusted	11.29	13.21	Between	17.69	1	17.69	27.53
			Within	10.921	17	0.64	

Table F ratio of 4.41 with (1, 18) degrees of freedom \*Significant at 0.05 level

The obtained F value of adjusted posttest means 27.53 was greater than the required F value 4.41 at 0.05 levels. The statistical analysis using ANCOVA revealed that there was a significant difference between control group and experimental group on Anxiety. The results of the present study revealed that 8 weeks of yoga practice reduces the Depression.



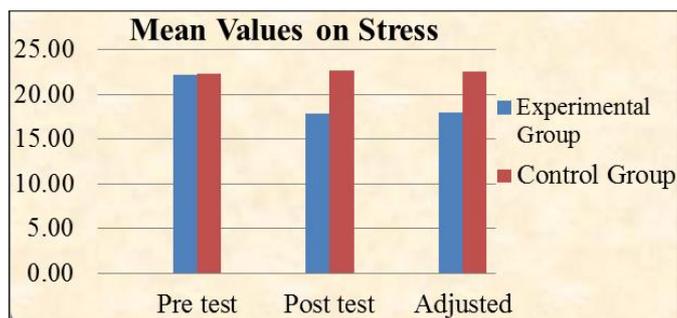
**Fig 2:** Showing the pretest, posttest and adjusted posttest mean values of Anxiety

**Table 3:** Showing the results of Analysis of Covariance on Stress

Test	EXP. Gr	CG	SV	SS	df	MS	F
Pre test	22.20	22.30	Between	0.05	1	0.050	0.02
			Within	59.70	18	3.32	
Post test	17.90	22.60	Between	110.45	1	110.45	16.12
			Within	123.30	18	6.85	
Adjusted	17.95	22.55	Between	105.66	1	105.66	28.88
			Within	62.192	17	3.66	

Table F ratio of 4.41 with (1, 18) degrees of freedom \*Significant at 0.05 level

The obtained F value of adjusted posttest means 28.88 was greater than the required F value 4.41 at 0.05 levels. The statistical analysis using ANCOVA revealed that there was a significant difference between control group and experimental group on Stress. The results of the present study revealed that 8 weeks of yoga practice reduces the stress.



**Fig 3:** Showing the pretest, posttest and adjusted posttest mean values of Stress

The results of the present study in line with the findings of Shohani, Masoumeh *et al.* 2018 & Desouky *et al.* 2017<sup>[4]</sup> who found yoga practices reduce depression, anxiety and stress. The adjusted posttest mean value from the tables reveals that the depression, anxiety and stress were significantly reduced for the experimental group after 8 weeks of yogic practice.

### Conclusion

Yogic practices had an effect on reducing Depression Anxiety and Stress among private School teachers.

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