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## Effects Of Asanas And Pranayama Practices On Mood State Anxiety And Stress Of Working Middle Aged Women

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### **Abstract:**

*The purpose of this study was to find out the effects of asanas and pranayama practices on mood state, anxiety, and stress of working middle aged women. The study was conducted at Vethathri Maharishi Trust in sirumugai. The sample consisted of sixty middle aged women age ranged between 35 and 50 years. They were divided into two equal groups, consist of 30 each and named as control groups and experimental group. The investigator did not make any attempt to equate the groups. The control group was not given any treatment and the experiment group was given asanas and pranayama training programme was given six days per week for a period of 8 weeks. All the subjects were subjected for a pre-test and post test. Psychological variables of mood scale, anxiety and stress assessed by standard questionnaires. The data collected from the subjects were statistically analysed by using  $t'$  to find out significant difference among experimental groups of psychological variables if any. The result indicates that eight weeks asanas and the pranayama training programme significant produced changes in mood state, anxiety, and stress.*

**Key words:** Asanas, Pranayama, Mood state, Anxiety, Stress,

### **1.Introduction**

Women's physical education and sports have been affected not only by the place of physical education in a particular society, but also by the place that women held in any society. The social status of women even in the so-called progressive nations is not good because of prejudices and taboos. Nevertheless, during recent years the situation in general has changed.

The earlier social handicaps were purdah, early marriage, inferiority complex, inconvenient dress, jewellery, parental attitude and the idea that physical culture and games unsex the girls. These factors are still a hurdle to the liberation of women and their increasing participation in games and sports. However, a healthy change is slowly but steadily coming. (Singh, 1990)

The word yoga derived from the Sanskrit root 'yuj' meaning to bind, join, attach and yoke, to direct and concentrate one's attention on, to use and apply. It also means union or communion. Yoga was collated, co-ordinated and systematised by Patanjali in his classical work, the yoga sutras, which consists of 185 terse aphorisms. (Iyengar, 2008) Pranayama is the fourth limb of Patanjali's Raja Yoga, which was first outlined in his Yoga Sutras. It is also an important part of Hindu asceticism and a vital part of any yoga practice. Prana is the vital energy (breath) in all of us; pranayama is the control of that vital energy. Control of the breath means refusing to breathe as people normally do. Under normal circumstances, breath is non-rhythmic and shallow. However, in pranayama, the breath is deep, even, and controlled by the practitioner (Mircea, 1958).

Prana is the vital force inside each living being. Pranayama is not simply the breathing, but the control of the muscular force activating the lungs. There are three kinds of breathing: normal, deep and controlled yogic breathing. With normal breathing the absorption of prana is in normal quantity. When, breathe deeply, the volume absorbed increases and with controlled yogic breathing it is able to store a large quantity of prana in the brain and nervous centres. This stored of prana builds up resistance to contagious diseases. (Anada, 2006).

## 2.Methodology

This study was designed to determine the effects of eight weeks asanas and pranayama training on selected psychological parameters of working middle aged women. The total sample consisted of sixty middle aged women age ranged between 35 and 55 years. They were divided into two equals groups, consist of 30 each and named as control groups and experimental group. The investigator did not make any attempt to equate the groups. The control group was not given any treatment and the experiment group was given Asanas and pranayama training programme was given six days per week for a period of 8 weeks.

Sl.no	Psychological Variables	Standard Questionnaires
1	Mood state	Brunel Mood Scale (Terry <i>et.al.</i> 2003)
2	Anxiety	Beck Anxiety Inventory (Beck A.T, 1990)
3	Stress	Perceived Stress Scale (Cohen. S, 1983)

Table 1: Standardized Test And Criterion Measures

Name of the Asanas	Duration of Asanas in each session*	
Surya Namaskar (12 poses – each pose being maintained for 5 sec without gap)	2 min (2 rounds)	Adding 1 round for every 2 weeks
Standing Asanas Vrikshasana Ardhakati Chakrasana Ardha Chakrasana Trikonasana	1 min 1 min (each side) 30 sec 1 min (each side)	Adding 10 seconds to all the asanas for every 2 weeks
Sitting Asanas Vajrasana Paschimottanasana Ustrasana Gomukhasana	2 min 1 min 30 sec 2 min (each side)	
Prone Position Asanas Makarasana Bhujangasana Salabasana Dhanurasana	2 min 2 min 30 sec 30 sec	
Supine Position Asanas Pavanamuktasana Navasana Matsyasana Sarvangasana	2 min 1 min 30 sec 2 min	

Table 2: Asanas Training Schedule

\*5 To 10 Seconds Gap Between Each Asanas  
Swami Vyas Dev Ji (1970)

Name of the Pranayama	Duration of Pranayama in each session*	
Sectional breathing (Three sections)	6 min (Each sections 2 min)	Adding 10 sec for each section in every 2 weeks
Kapalpathi	3 min (3 rounds)	Adding 1 round for every 2 weeks
Bhastrika	3 min (3 rounds)	
Anuloma-Viloma	2 min (3 rounds)	
Nadi Shuddhi Pranayama	6 min (6 rounds)	
Surya Bedhana Pranayama	3 min (6 rounds)	
Bhramari Pranayama	3 min (3 rounds)	

Table 3: Pranayama Training Schedule  
\*5 - 10 Seconds Gap Between Each Pranayama  
Iyengar (2010).

### 3. Analysis Of The Data And Results Of The Study

The data collected on psychological variables due to influence of asanas and pranayama training were statistically processed and discussed here. The following table illustrates the 't' ratio for the difference between pre and post test of experimental group.

Variables	Mean	Std. Deviation	Mean diff.	SME	't' ratio	Table Value
Mood state	pre	62.63	3.44	5.57	.827	2.045
	post	57.07	4.26			
Anxiety	pre	32.47	4.06	3.37	.273	
	post	29.10	4.57			
Stress	pre	27.43	1.98	2.53	.171	
	post	24.90	1.92			

Table 4: Computation Of 'T' Ratio Between Experimental Groups  
\*Significant At 0.05 Level Of Confidence (2.045)

The table reveals that computation of 't' ratio between experimental group of Psychological variables of working middle aged women. The obtained pre and post test 't' ratio of experimental group were 6.73, 12.32 and 14.80 respectively. Since, the obtained 't' ratio were greater than the required table value of 2.045, It was found to be statistically significant for the degree of freedom 1 and 29 at 0.05 levels of confidence.

The result clearly indicates that eight weeks of asanas and pranayama practice significantly reduces in mood state, anxiety and stress of working middle aged women.

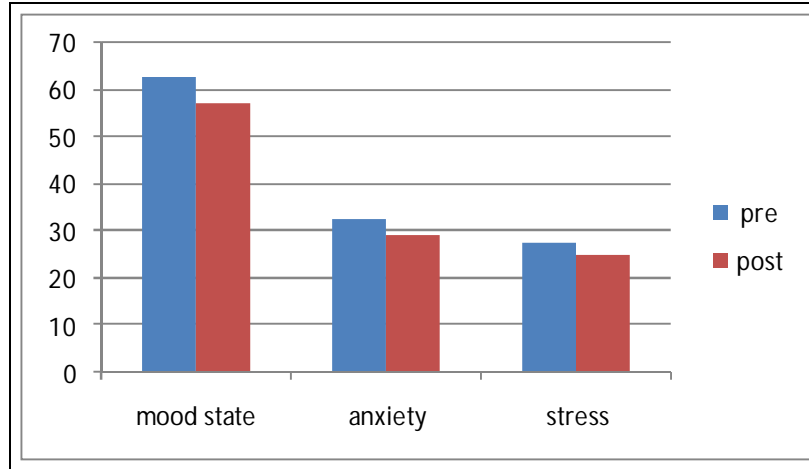


Figure 1: Bar Diagram Shows The Mean Values Of Pre And Post Test On Experimental Groups

Variables		Mean	Std. Deviation	Mean diff.	SME	't' ratio	Table Value
Mood state	pre	62.20	2.67	.300	.26	1.16	2.045
	post	61.90	3.10				
Anxiety	pre	32.07	3.85	.467	.36	1.30	
	post	32.53	2.81				
Stress	pre	26.97	2.16	.300	.26	1.14	
	post	27.27	2.12				

Table 5: Computation Of T' Ratio Between Control Groups  
\*Significant At 0.05 Level Of Confidence (2.045)

The table reveals that computation of 't' ratio between control group of Psychological variables of working middle aged women. The obtained pre and post test 't' ratio of control group were 1.16, 1.30 and 1.14 respectively. Since the obtained 't' ratio on control group variables was lesser than the required table value of 2.045, It was found to be statistically not significant for the degree of freedom land 29 at 0.05 levels of confidents.

The result clearly indicates that eight weeks of asanas and pranayama practice of the control group has not been significant changes in mood state, anxiety and stress of working middle aged women.

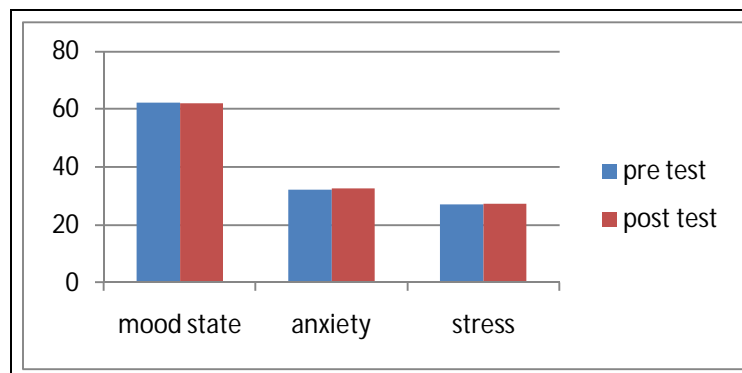


Figure 2: Bar Diagram Shows The Mean Values Of Pre And Post Test On Control Groups

#### 4. Discussion Of Finding

The present study experimented the effect of asanas and pranayama practices on mood state, anxiety and stress of working middle aged women. The result of this study indicated that the asanas and pranayama practiced significantly changes on psychological variables such mood state, anxiety and stress. The findings of the present study had similarity with the findings of the investigations referred in this study.

The results of the present study indicate that APT produced significant changes in mood state, anxiety and stress of working middle aged women over 8.88%, 10.38% and 10.87% respectively when comparing the pre test with a post test. However, there were no significant changes over mood state, anxiety and stress of the control group.

Javnbakht. *et al.* (2009) two months yoga class for anxiety disordered women significantly decreased the level of anxiety.

Gupta *et al.* (2006) a period of ten days yoga based life style for hyper tensive patients to feel a remarkable reduction in anxiety.

Sindal (2007) pranayama training leads to observable reduction in level of stress of bus drivers.

Modification of mood and reduction of stress in psychiatric inpatients is possible through yoga asanas (Lavey *et al.* (2005).

The shirazian women, who engaged with asanas and pranayama training shown remarkable modification over anxiety and depression. (Rahimi and Bavanqan 2010).

The results of the present study indicates that the asanas and pranayama training programmes is reduces in mood state, anxiety and stress of working middle aged women.

The discrepancy between the results and the results of previous studies might be attributed to several reasons, such as the training experience level of the subjects, the training programme, the intensity used and the duration of the training programme.

#### 5. Conclusion

Based on the result of the study the following conclusion were derived

It was concluded that eight weeks of asanas and pranayama practice significantly reduced in mood state of working middle age women.

Eight weeks of asanas and pranayama practice significantly reduces in anxiety.

Eight weeks of asanas and pranayama practice significantly reduced in stress of working middle age women.

Further, it was concluded that asanas and pranayama practice is appropriate training for reducing mode state, anxiety and stress of working middle age women.

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