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## Effect of yoga training on selected psychological and physiological variables of women students

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### Abstract

The impartial of this study was to explore the yoga training on selected psychological and physiological variables of women players, totally 30 women students to participate in this study. Treatment group I underwent yogic training, group II acted as control group. All thirty subjects were inducted for pre and posttest on achievement motivation and breath holding time. The yoga training was given to the experimental group for 5 days per week (Monday to Friday) for the period of eight weeks. The control group was not given any sort of training except their routine work. The achievement motivation (Standardized questionnaires' in points) and breath holding time (breath holding test in seconds) were assessed before and after training period. The result from 't' test and inferred that 8 weeks yoga training treatment produced identical changes over achievement motivation and breath holding time of women students. Further, the findings confirmed the yoga training is suitable protocol to bring out the desirable changes over achievement motivation and breath holding time of women students.

**Keywords:** Yogic practices, achievement motivation breath holding time, and women students

### 1. Introduction

Whatever our age, yoga can enhance our lifestyle. Learning yoga develops self-discipline and can enhance their physical and mental health. Asanas are good for developing coordination and help to improve concentration and memory. Regular practice can enable young people to keep their natural flexibility for many years. It can help teenagers to keep their youthful flexibility and give them the inner strength to say no to negative influences. Older people often find that gentle yoga exercises allow them to retain mobility and may relieve problems such as arthritis and poor circulation. There are some ways for the elimination of waste matter produced in the body by daily physical activities and functioning of the digestive system through eyes, ears, mouth, nose, anus, genitals and skin. Most of the diseases are the result of the absence of sufficient and regular elimination of waste matter such as urine and stool from the body. Asanas help the process of elimination of waste matter from the body and keep the body in perfect sound health. Yoga increase functional ability of all systems of the body, cardiovascular efficiency, respiratory efficiency, breathe holding time, vital capacity, intake of oxygen, vision and hearing ability, neuro-muscular coordination, pain tolerance, energy level, immunity power and EEG – alpha waves. Yoga decreases pulse rate, respiratory rate, blood pressure, reaction time and EMG activity. Yoga Increases self-control, self-actualization, wellness, kinesthetic awareness, concentration, memory power, achievement motivation, attention, learning efficiency and psychological stability. Yoga decreases anxiety, aggression, emotion and depression. (Sivananda, 1981) <sup>[22]</sup>.

### 2. Materials and Methods

To achieve the purpose of the study 30 women students at the age group of 18-24 years were selected from VOC College of thoothukudi district. The selected subject was randomly assigned into two equal groups, consist of fifteen each, namely Yoga training group (N=15) and Control group (N=15). The respective training was given to the experimental group the 5 days per weeks (Monday to Friday) for the training period of eight weeks. The control group was not given any sort of training except their routine.

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The evaluated breath holding time (breath holding test) the unit of measurement was in seconds, achievement motivation were measured by standardized test the unit of measurement was in points. The parameters were measured at baseline and after 8 weeks of yoga training were examined. The intensity was increased once in two weeks based on the variation of the exercises. The training programme was lasted for 45 minutes for session in a day, 5 days in a week for a period of 8 weeks duration. These 45 minutes included warm up for 10 minutes, 25 minutes specific skill training with pranayama and warm down for 10 minutes. The equivalent in yoga training is the

length of the time each action in total 5 day per weeks. (Monday to Friday)

### 3. Statistical Analysis

The collected data on achievement motivation and breath holding time due to the combination of yoga training was statically analyzed with “t” test to find out the significant improvement between pre& posttest if any. In all case the criterion for spastically significance was set at 0.05 level of confidence ( $p < 0.05$ ).

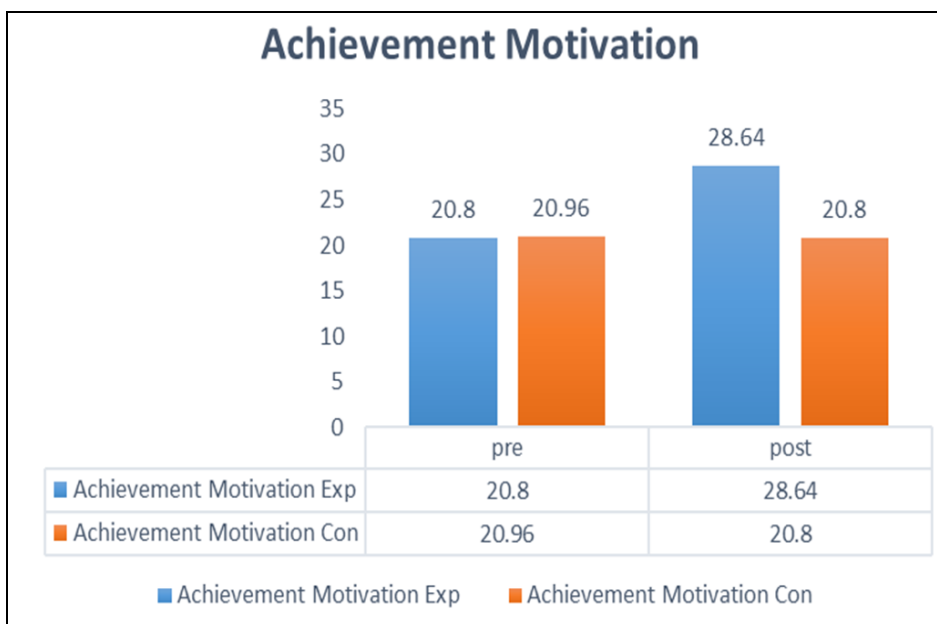
**Table 1:** Computation of ‘T’ ratio on achievement motivation of softball players on experimental group and control group (Scores in Centimeters)

Group	Test	Mean	Std. Deviation	T ratio	
Achievement Motivation	Experimental Group	Pre test	20.80	2.77	6.81*
		Post test	28.64	2.07	
	Control Group	Pre test	20.96	3.80	0.29
		Post test	20.80	3.76	

\*significant level 0.05 level (degree of freedom 2.14, 1 and 14)

Table 1 reveals the computation of mean, standard deviation and ‘t’ ratio on achievement motivation of experimental and control group. The obtained ‘t’ ratio on achievement motivation were 6.81 and 0.29 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at

the 0.05 level of significance. Since the experimental group ‘t’ values were greater than the table value of 2.14, it was found to be statistically significant. The control group ‘t’ value is less then table value of 2.14 it was found to be statistically insignificant.



**Fig 1:** Bar diagram showing the mean value on achievement motivation of women students on experimental group and control group

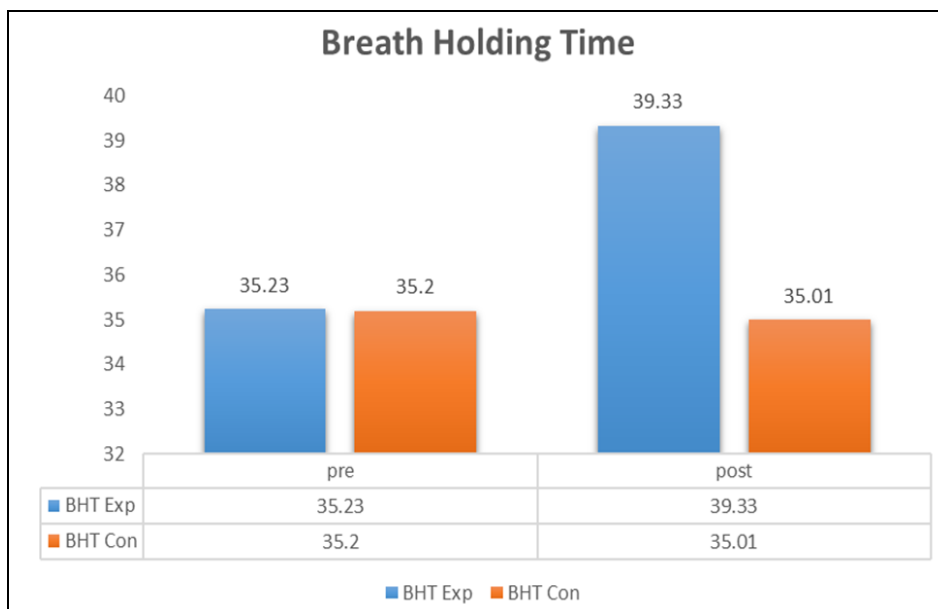
**Table 2:** Computation of ‘T’ Ratio on breath holding time of softball players on experimental group and control group (Scores in Percentage)

Group	Test	Mean	Std. Deviation	T ratio	
Breath Holding time	Experimental Group	Pre test	35.23	1.02	24.64*
		Post test	39.33	1.30	
	Control Group	Pre test	35.20	0.99	1.82
		Post test	35.01	0.68	

\*significant level 0.05 level (degree of freedom 2.14, 1 and 14)

Table 2 reveals the computation of mean, standard deviation and ‘t’ ratio on Breath Holding time of experimental and control group. The obtained ‘t’ ratio on Breath Holding time were 24.64 and 1.82 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level

of significance. Since the experimental group ‘t’ values were greater than the table value of 2.14, it was found to be statistically significant. The control group ‘t’ value is less then table value of 2.14 it was found to be statistically insignificant.



**Fig 2:** Bar diagram showing the mean value on breath holding time of women students on experimental group and control group

#### 4. Discussion on Findings

The present study investigated the effect of yoga training on the selected variables are achievement motivation and breath holding time of the women students. The results of this study indicated that yoga training is more efficient to bring out needed changes over the achievement motivation and breathe holding time of the women students.

Suresh *et al.*, (2021) <sup>[23]</sup> found due to yoga training given to the experimental group on breath holding time when compared to control group.

Priya *et al.*, (2018) <sup>[7]</sup> facilitates the overweight girls to perform a skill with perfect technique and less expenditure of energy which leads to enhanced performance and reduced risk of injury.

Mishara *et al.*, (2015) <sup>[24]</sup> revealed that the yoga training had significantly improved the aerobic capacity.

Villemeure *et al.*, (2003) <sup>[25]</sup> showed how the subjective evaluation of an odors pleasantness was directly related to the emotional experience of pain.

Boehde *et al.*, (2005) <sup>[14]</sup> examined chemical chirality in relation to subjective and physiological response and found the odor hedonics could explain most of the results. For example, the more pleasant (-) limonene was judged to be the less calm participants felt, and the more stimulating it was judged to be more skin temperature decreased. Note, however that the effects are not predictable as one would assume that the more pleasant an odor was the more calming it would be, and the more stimulating it was the more it would increase ANS response.

The result from this study are very encouraging and it demonstrates the benefits of yoga training. The women students are not only using dance exercises to improve their mobility but also to improve the enactment. Also, the results support that improvement in mobility can occur 8 weeks of yoga training.

#### 5. Conclusions

1. Based on the result of the study it was concluded that the yoga training have been significantly changes in achievement motivation of women students.
2. It was concluded that the combination of yoga training have been significantly changes in breath holding time of women students.

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