



## EFFECT OF PRANAYAMA PRACTICES WITH AND WITHOUT DEEP RELAXATION TECHNIQUE ON BREATH HOLDING TIME AMONG SCHOOL GIRLS

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### Abstract:

The purpose of this study was to find out the effect of pranayama practices with and without deep relaxation technique on breath holding time of school girls. To achieve the purpose of this study, forty-five school girls studying in and around Kanchipuram District, Tamil Nadu, India were selected as subjects and they were divided into three equal groups of fifteen each. Group I underwent pranayama practices with deep relaxation technique, Group II underwent pranayama practices without deep relaxation technique and Group III acted as control. Group I and Group II underwent their respective training programmes for three days per week for twelve weeks and Group III acted as control in which they didn't undergo any special training programme apart from their daily curricular activities. The selected subjects were tested on the selected criterion variable namely breath holding time at prior and immediately after the training programme. The analysis of covariance was used to find out the significant differences, if any, at prior and immediately after the training programme among groups on breath holding time. Whenever the obtained 'F' ratio for adjusted post test was found to be significant, the Scheffe's test was applied as post hoc test to determine the paired mean differences, if any. The level of confidence was fixed at .05 level which was considered as an appropriate.

**Key Words:** Pranayama Practices With and Without Deep Relaxation Technique, Breath Holding Time, School Girls

### Introduction:

Yoga is beneficial for everyone, but especially so for teenagers, as this can be difficult years, both emotionally and physically. Yoga can help teens find inner peace, confidence as well as ensure physical fitness. Yoga is a safe and potentially effective practice that can help children and teens cope with physical and mental conditions and help improve emotional and behavioral well-being.

Yoga energizes relaxes, strengthens and promotes correct breathing. After the physical postures one feels benefited by a more positive outlook, enthusiasm and a general sense of self-awareness.

The pranic or energy sheath comprises the prana vayus, nadis and the chakras. Hence it is also called the "vital sheath" or "vital body". Prana the vital breath which man lives by, is the bridge between the gross and subtle bodies as well as between the other koshas. Any malfunction in this sheath is noticed as afflictions of the breath, sensory issues and nervous problems, therefore, pranayama is the most effective remedy.

### Methodology:

The purpose of this study was to find out the effect of pranayama practices with and without deep relaxation technique on breath holding time of school girls. To achieve the purpose of this study, forty-five school girls studying in and around Kanchipuram District, Tamil Nadu, India were selected as subjects and they were divided into three equal groups of fifteen each. Group I underwent pranayama practices with deep relaxation technique, Group II underwent pranayama practices without deep relaxation technique and Group III acted as control. Group I and Group II underwent their respective training programmes for three days per week for twelve weeks and Group III acted as control in which they didn't undergo any special training programme apart from their daily curricular activities. Breath holding time was selected as criterion variable. All the subjects of three groups were tested on breath holding time at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the "F" ratio obtained by the analysis of covariance, which was considered appropriate. The Scheffe's test was applied as post hoc test to find out the paired mean difference, if any.

### Training Programme:

For pranayama practices with deep relaxation technique group and pranayama practices without deep relaxation technique group underwent their respective training programme for twelve weeks for three days per week. Training was given in the morning session. The training session includes warming up and limbering

down. Every day the workout lasted for 45 to 60 minutes approximately. The subjects underwent their respective training programmes as per the schedules under the strict supervision of the investigator. During experimental period control group did not participate in any of the special training.

**Analysis of the Data:**

The influence of pranayama practices with deep relaxation technique and pranayama practices without deep relaxation technique on breath holding time was analysed separately and presented below. The analysis of covariance on breath holding time of the pre and post test scores of pranayama practices with deep relaxation technique group and pranayama practices without deep relaxation technique group and control group have been analyzed and presented in table 1.

Table 1: Analysis of Covariance of the Data on Breath Holding Time of Pre and Post Tests Scores of Pranayama Practices With Deep Relaxation Technique, Pranayama Practices Without Deep Relaxation Technique and Control Groups

Test	Pranayama Practices With Deep Relaxation Technique Group	Pranayama Practices Without Deep Relaxation Technique Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
<b>Pre Test</b>								
Mean	41.93	42.67	43.27	Between	13.38	2	6.689	0.73
S.D.	0.98	0.87	0.93	Within	383.20	42	9.12	
<b>Post Test</b>								
Mean	48.86	45.80	41.40	Between	422.58	2	211.29	12.83*
S.D.	1.17	1.15	1.12	Within	691.73	42	16.47	
<b>Adjusted Post Test</b>								
Mean	48.81	45.80	41.45	Between	396.90	2	198.45	11.81*
				Within	689.105	41	16.81	

\* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 42 and 2 and 41 are 3.222 and 3.226 respectively).

The table 1 shows that the adjusted post-test means of pranayama practices with deep relaxation technique group, pranayama practices without deep relaxation technique group and control group on breath holding time are 48.81, 45.80 and 41.45 respectively. The obtained "F" ratio of 110.81 for adjusted post-test means is greater than the table value of 3.226 for df 2 and 41 required for significance at .05 level of confidence on breath holding time.

The results of the study indicated that there was a significant difference between the adjusted post-test means of pranayama practices with deep relaxation technique group, pranayama practices without deep relaxation technique group and control group on breath holding time.

Since, three groups were compared, whenever the obtained 'F' ratio for adjusted post test was found to be significant, the Scheffe's test to find out the paired mean differences and it was presented in table 2.

Table 2: The Scheffe's Test for the Differences between Paired Means on Breath Holding Time

Pranayama Practices With Deep Relaxation Technique Group	Pranayama Practices Without Deep Relaxation Technique Group	Control Group	Mean Differences	Confidence Interval Value
41.45	48.81	-	7.36*	2.73
41.45	-	45.80	4.35*	2.73
-	48.81	45.80	3.01*	2.73

\* Significant at .05 level of confidence.

The table 2 shows that the mean difference values between pranayama practices with deep relaxation technique group and pranayama practices without deep relaxation technique group, pranayama practices with deep relaxation technique group and control group and pranayama practices without deep relaxation technique group and control group 7.36, 4.35 and 3.01 respectively on breath holding time which were greater than the required confidence interval value 2.73 for significance.

The results of this study showed that there was a significant difference between pranayama practices with deep relaxation technique group and pranayama practices without deep relaxation technique group, pranayama practices with deep relaxation technique group and control group and pranayama practices without deep relaxation technique group and control group on breath holding time.

**Results:**

- There was a significant difference among pranayama practices with deep relaxation technique group and pranayama practices without deep relaxation technique group and control group on breath holding time.
- There was a significant reduction in breath holding time due to pranayama practices with deep relaxation technique and pranayama practices without deep relaxation technique.

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