

## TRADITIONPRANAYAM TRAINING ASSESSMENT ON PHYSIOLOGICAL PARAMETERS

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DOI: <https://doi.org/10.55968/ijems.v12i02.273>

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The aim of the study is to assess the effects of pranayam training tradition on certain physiological parameters among school going children. Two hundred school children (age range 13-16 years) registered in the class 6th to 10th, selected randomly to participate in the study. Subject was divided in two groups' 100N control and 100N experimental groups. Physiological Parameters measures were obtained at baseline and at the end of pranayam training programme. Student's (T) test was followed out to examine pre- and post-test values. Data noted that pranayam exercises were associated with significant decreases ( $p < 0.05$ ) in Cardiovascular endurance and Breath hold capacity with significant increases ( $p < 0.05$ ) values. The authors' statistics demonstrate considerable physiological changes significantly affected by pranayam exercises in school going children. Examining relationships connected with the effects of training on physiological aspects add new dimensions that can help in assessing, directing and developing pranayam training programmes.

**Keywords:** Pranayam, Cardiovascular Endurance And Breath Hold Capacity

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<b>Manuscript Received</b> 2023-02-08	<b>Review Round 1</b> 2023-02-28	<b>Review Round 2</b> 2023-03-22	<b>Review Round 3</b> 2023-04-18	<b>Accepted</b> 2023-05-15
<b>Conflict of Interest</b> NIL	<b>Funding</b> NO	<b>Ethical Approval</b> YES	<b>Plagiarism X-checker</b> 7	<b>Note</b>
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## Introduction

Yoga is supreme among the gifts of Vedic sages, it is a knowledge, which is free of disputes and controversies, it is an art which is multidimensional, and it is a science, which assures abundant happiness even when there is a paucity of resources. The Eight limbs of yoga mentioned in Patanjali's system such as Yama, Niyama, Asana, Pranayam, Pratyahara, Dharma, Dyane, Samadhi. Pranayam is also known as Yogic Breathing Process, it is a conscious way of active breathing control practices and important function of Yoga teaching. The Pranayam practice gives physical and spiritual sustenance to guide life steam efficiently. Pranayam is the fourth part of the eight fold yoga. An easier way of understanding and realizing the dimensions of consciousness is to study and realize the different aspects of pranayam in the body through yogic techniques such as pranayam. Since pranayam is the force within the breath and the body it is the most amenable to study. The present study was focus on the effect of pranayam training tradition on certain physiological parameters among school going children, the training programme plays important role in evaluation and assessment of health status. Regular monitoring of physiological variables during training at pre and post stages of health and fitness may provide valuable information to coaches for training and selection of player's in the school age group of 13-16 from the school students. This study will be designed to investigate the effect of pranayam training tradition on certain physiological parameters among school going children.

## Methodology & Procedure

This study was designed to evaluate the effects of 6 weeks daily practice of pranayam training tradition on breath holding capacity and cardio-vascular endurance among school going students. 200 school students aged 13 to 16 years studying in sixth to high school was selected. Healthy student with no history of present and past illness was selected. The selected subjects was randomly divided into two groups i.e. Experimental group (Group A) and Control (Group B).

*Image Enclosed as Annexure 01*

### Research Design

It is pre and post test control group design,

In this study group was divided into experimental group (Group A) and a control group (Group B). Group A was given the pranayam training and Group B was following their daily occupation. The design of the experiment was planned in three phases.

*Image Enclosed as Annexure 02*

### Administration of Test

#### BREATH HOLDING CAPACITY

**Equipment:** - Stop Watch

**Procedure:** - Breath holding capacity was determined by noting the maximum time in seconds that the subject was holds his/her breaths after breathing in fully.

**Scoring:** Minimum of three trials was given with rest period of three minutes between the trials. Highest of three similar best performances was taken.

#### CARDIO-VASCULAR ENDURANCE

Cooper Test (12-minute Run & walk Test)

**Procedure:** - The test was required the subject was run as possible in 12 minutes. The assistant was given command "GO" and started the stop watch and the subject commenced the test. The assistant was kept the subject informed of the remaining time at the end of each lap (400 m), the assistant was bellowed the whistle.

**Scoring:** After the test over, record the distance the subject covered to the nearest 10 meters for an evaluation of the subject performance the total distance covered.

#### PRANAYAM TRAINING

*Training Schedule Enclosed as Annexure 03*

#### Statistical Analysis

All the values obtained before and after performing pranayam. The 't' test was used to compare pre and post training values. The level of significant difference set at 0.05.

## Results

In the table found that the mean value of control group for their cardiovascular endurance (Pre= 1594.6 and Post= 1593.5) respectively, the 't'-value was calculated ('t' is 0.59, significant

At 0.05 level of confidence) and the mean value of control group for their Breath hold capacity (Pre= 35.6 and Post= 35) respectively, the 't'- value was calculated ('t' is 1.81, significant at 0.05 level of confidence) It means there is insignificant difference shows at control group Pre and post test of CVE and BHC parameters among school going students.

**Table 1 Mean, SD and 't' value of CVE and BHC Parameters among school going students of control group**

Table Enclosed as Annexure 04

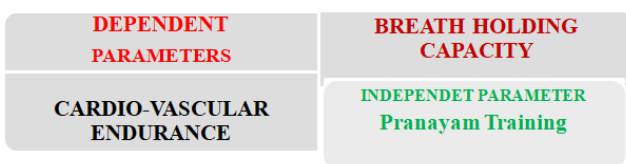
In the table establish that the mean value of experiment group for their cardiovascular endurance (Pre= 1715.3 and Post= 1879.8) respectively, the 't'- value was calculated ('t' is -25.63, significant at 0.05 level of confidence) and the mean value of experiment group for their Breath hold capacity (Pre= 36.5 and Post= 45.1) respectively, the 't'-value was calculated ('t' is -10.39, significant at 0.05 level of confidence) It means there is significant difference shows at experiment group Pre and post test of CVE and BHC parameters among school going students.

**Table 2 Mean, SD and 't' value of CVE and BHC Parameters among school going students of Experiment group**

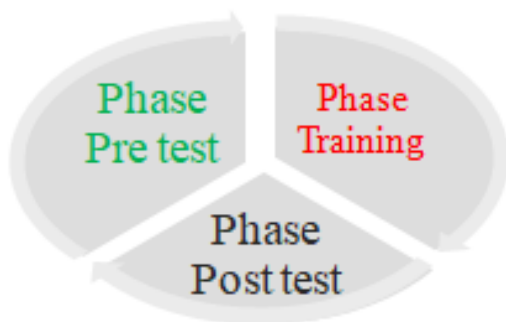
Table Enclosed as Annexure 05

**Annexure**

Annexure 01



Annexure 02



Annexure 03

Weeks	Yoga Intro	Practical yoga	Pranayam	Total duration
First	10 min	20 minutes (Surya Namaskar, Bhujangasana, Dhanurasana, Chakrasana, Shavasana)	15 minutes (Kapalbhati, Anulom-Vilom, Bhastrika,Ujjayi) Every day session ended with Om Chanting	45 min
Second	05 min	10 minutes (Halasana, Chakrasana Sarvangasana, Shavasana)	30 min Do	45 min
Third	-	05 min (Sarvangasana, Shavasana)	40 min - Do-	45 min
Fourth	-	-	45 min - Do-	45 min
Fifth	-	-	45 min - Do-	45 min
Sixth	-	-	45 min - Do-	45 min

Annexure 04

	Control Group			
	CVE		BHC	
	Pre	Post	Pre	Post
Mean	1594.6	1593.5	35.6	35.0
SD	236.8	235.1	10.3	10.1
'T' value	0.59		1.81	

Annexure 05

	Experimental Group			
	CVE		BHC	
	Pre	Post	Pre	Post
Mean	1715.3	1879.8	36.5	45.1
SD	279.4	265.8	14.0	13.4
'T' value	-25.63		-10.39	

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