



EFFECT OF SELECTED PRANAYAMA PACKAGE ON FORCED VITAL CAPACITY OF COLLEGIATE MEN

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Abstract

The purpose of the study was to find out the effects of selected pranayama package on Forced Vital capacity of collegiate men.. For this study 60 healthy untrained subjects were selected on random basis. The students were selected from various colleges from Pondicherry, India. The subject's age were ranged between 18 to 23 years. The selected subjects were divided into four groups, each group consist of fifteen (15) subjects. Group I underwent to practice vitalizing pranayama, group II underwent balancing pranayama and group III underwent cooling pranayama and group IV acted as a control group. The duration of the training period was stipulated to 12 weeks for 5 days per week (45 minutes). Control group was kept under control without any training. The forced vital capacity was measured by using dry Spirocek tests. Prior to and after the end of practice period all the subjects were tested on forced vital capacity. The 'F' ratio value was statistically analyzed and tested for significant difference at 0.05 level of confidence.

Keywords: Pranayama, Forced Vital Capacity, College Men.

INTRODUCTION

Yoga is a path towards total harmony of body, mind, and spirit. The word Yoga comes from the Sanskrit word *yuj*, which means union. Union of the individual consciousness with the universal consciousness. Yoga is not merely a form of exercise for the body. It is an ancient wisdom - for a healthier, happier, and more peaceful way of living - which ultimately leads to union with the Self. It is an inherent desire in humans to be happy. The ancient sages, through inquiry about life, were able to reach a state of consciousness in which the secrets of healthier, happier, and meaningful living were revealed to them.

Yoga is one of the most ancient arts which help us to bring a kind of harmony among our mind, body and spirit. It belongs to all human beings not an individual religion. The continued to practice of yoga will make our whole environment as a beautiful garden and leads our mind to peace and our body to fit. The Kundalini moves by way of six psychics to skull, called Sahasrara, which is described as a lotus with a thousand petals. A true yogi should raise his Kundalini power through the nadi Sukshumana from one chakra to another until it reached the Sahasrara, So that his life attaining. The complete salvation to reach the position one must learn to control his body, mind and bring them under his control. He can control everything even the rhythm of his heart beat and he can live without food, water and even the air for breathing. Yogi have achieved super human control over their bodies. Thus many Indians and some foreigners perform yogic exercises only for their spiritual and physical development not for any special religious purpose.

PRANAYAMA

Pranayama is a breath-control technique. In Sanskrit, pran means life and ayama means way. Pranayama can help you regulate your system, alter your mood and ensure longevity. The main aspects of Pranayama are inhalation, exhalation and retention. Pranayama always begins with inhalations and exhalations. This strengthens the lungs and balances the nervous system, preparing the body to hold the breath [retention]. Practicing Pranayama on a regular basis regulates energy flow to the 72 thousand nadis [channels through which consciousness flows] in our body, helping us improves our wellbeing.

Prana is the universal principle of energy or force. It is the sum total of all energy that is manifest in the universe, all the forces in nature and powers which are hidden in men and which lie everywhere around us. This prana remains in a subtle, motionless, unmanifested, undifferentiated state during the cosmic pralaya, dissolution. When the vibration is set up, prana moves and acts upon akasha, space, and brings forth the various forms. The macrocosm, brahmanda, and microcosm, pindanda, are combinations of prana and akasha.

All forces, all powers and prana spring from the fountain or common source, known as atman. Heat, light, electricity, magnetism are manifestations of prana. It may be in either a static or a dynamic state. It is found in all forms from the highest to the lowest, from the ant to the elephant, the unicellular amoebae to man, from the elementary forms of plant life to the developed forms of animal life.

Major Types of Pranayama

- Nadi Sodhana

- Shitali Pranayama
- Ujjayi Pranayama
- Kapalabhati Pranayama
- Digra Pranayama
- Bhastrika Pranayama
- Bahya Pranayama
- Bhramari Pranayama
- Udgat pranayama
- Anuloma & Viloma Pranayama
- Agnisar Kriya

HYPOTHESIS

It was hypothesized that there would be significant differences among the effect of pranayama packages on forced vital capacity of collegiate men.

METHODOLOGY

SELECTION OF SUBJECTS

The purpose of the study was to find out the effects of selected pranayama package on Forced Vital capacity of collegiate men.. For this study 60 healthy

untrained subjects were selected on random basis. The students were selected from various college from Pondicherry, India. The subject's age were ranged between 18 to 23 years. The selected subjects were divided into four groups, each group consist of fifteen (15) subjects. Group I underwent to practice vitalizing pranayama , group II underwent balancing pranayama and group III underwent cooling pranayama and group IV acted as a control group. The duration of the training period was stipulated to 12 weeks for 5 days per week (45 minutes). Control group was kept under control without any training. The forced vital capacity was measured by using dry Spirochek tests³. Prior to and after the end of practice period all the subjects were tested on forced vital capacity.

STATISTICAL ANALYSIS

The analysis of covariance applied to find the significant difference and the Scheffe's test were used when the "F" ratio is significant to find the paired means difference.

TABLE-I
ANALYSIS OF VARIANCE ON PRE AND POST TESTS AND ANALYSIS OF COVARIANCE ON ADJUSTED POST TEST MEANS OF VITALIZING PRANAYAMA GROUP, BALANCING PRANAYAMA GROUP, COOLING PRANAYAMA GROUP AND CONTROL GROUP ON FORCED VITAL CAPACITY (SCORES IN LITERS)

	VPG	BPG	CPG	CG	SOV	SOS	df	MS	'F'
Pre-test Mean	2.46	2.59	2.68	2.22	B:	1.78	3	0.59	2.63
S.D	0.41	0.36	0.41	0.66	W:	12.61	56	0.23	
Post-test Mean	3.21	3.17	3.12	2.09	B:	13.37	3	4.46	40.30*
S.D	0.19	0.19	0.23	0.56	W:	6.19	56	0.11	
Adj.Post Test Mean	3.24	3.12	3.02	2.22	B:	8.93	3	2.98	53.93*
					W:	3.04	55	0.05	

* Significant at 0.05 level.

Required table value at 0.05 level of significant for 3&55 degree of freedom 2.77.

The table shows the pre test mean value of vitalizing pranayama group is 2.46, balancing pranayama group is 2.59, cooling pranayama group is 2.68 and control group is 2.22. The 'F' value of pre test is 2.63 which are lesser than the required table value of 2.77, and there is no significant change in pre test. The post test mean value of vitalizing pranayama group is 3.21, balancing pranayama group is 3.17, cooling pranayama group is 3.12 and control group is 2.09. The 'F' value of

post test is 40.30 which is higher than the table value of 2.77, hence it shows significant change in post-test. The adjusted post test mean value of vitalizing pranayama group is 3.24, balancing pranayama group is 3.12, cooling pranayama is 3.02 and control group is 2.22. The 'F' value of adjusted post test is 53.93 which is higher than the table value of 2.77, thus there is a significant change in adjusted post test.

TABLE-II
ORDERED SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN THE ADJUSTED MEANS OF
VITALIZING PRANAYAMA GROUP, BALANCING PRANAYAMA GROUP, COOLING
PRANAYAMA GROUP AND CONTROL GROUP ON FORCED VITAL CAPACITY

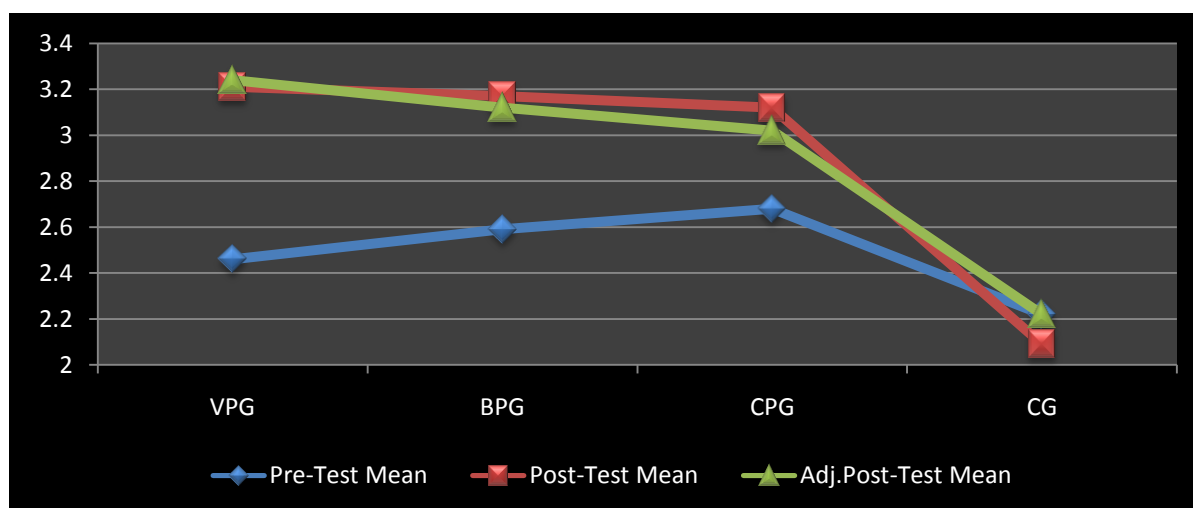
VPG	BPG	CPG	CG	M.D	'P'
3.24	3.12	-	-	0.12	0.98
3.24	-	3.02	-	0.22	0.85
3.24	-	-	2.22	1.02	0.00*
-	3.12	3.02	-	0.10	0.98
-	3.12	-	2.22	0.09	0.00*
-	-	3.02	2.22	0.80	0.00*

*The mean difference is significant at the 0.05 level.

The above Scheffe's table shows the mean difference value of vitalizing pranayama group and cooling pranayama group is 1.02, balancing pranayama group and control group is 0.09 and cooling pranayama

group and control group is 0.80 which are significant at 0.05 level, and there is no significant changes between the experimental groups, but experimental groups shows significant with the control group.

FIGURE-1
GRAPHICAL REPRESENTATION ON FORCED VITAL CAPACITY OF PRE TEST, POST TEST AND
ADJUSTED POST TEST MEANS OF VITALIZING PRANAYAMA GROUP, BALANCING
PRANAYAMA GROUP, COOLING PRANAYAMA
GROUP AND CONTROL GROUP



DISCUSSION ON FINDINGS

The outcome of the study is observed that there is no significant changes in forced vital capacity pre test means between the intervention groups and control group. However the forced vital capacity has significant changes in post and adjusted post tests between the Intervention groups and control group after twelve weeks of pranayama package. The result concludes twelve weeks practice of pranayama package improve the forced vital capacity.

CONCLUSION

The study concludes the experimental groups have exposed significant progress on forced vital capacity due to the selected pranayama packages such as vitalizing pranayama, balancing pranayama and cooling

pranayama. The conclusion drawn through the outcome of the research is In pranayama package practice of college men, all the experimental groups on forced vital capacity showed significantly improved when compared with the control group but there is no significant changes in between the three package groups.

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