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## Effect of Bhastrika pranayama on selected physiological variable of degree college boys

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### Abstract

The aim of the present study were to study the “Effect of Bhastrika Pranayama on Physiological variable (Blood Pressure)” of M.M. Degree College Boys of Baghpat Distict (Uttar Pradesh)

**Material and method:** The study was conducted of 60 male boys of M.M. Degree College Khekra, the data was analyzed with the help of Mean and Standard deviations and t-test to see the effect of training programme, the level of significant chosen to the test the hypothesis was at.05

**Result:** It was observed that their was no significant difference in relation to blood pressure.

**Keywords:** Yoga, Bhastrika pranayama, Systolic and Diastolic blood pressure

### Introduction

Yoga means the experience of oneness or unity with inner being. This unity comes after dissolving the quality of mind and matter into the supreme reality. It is a science by which the individual approaches truth, the aim of all yoga practice is to achieve truth where the individual soul identifies itself with the supreme soul of god.

Man has made tremendous progress in almost every walk of the life. Modern scientists and researchers have absolutely changed the life-style. However, pollution of air, water, body and mind is also the result of science. Longing for material wealth has hardened the hearts of human beings. Human values are declining. Stress and strain are the causes of physical as well as mental distraction. Yoga has the surest remedies for man’s physical as well as psychological ailments. It makes the organs of the body active in their functioning of the human body.

Yoga is not a religion. It is a method by one obtain control of one’s latent powers. It is the means to reach complete self-realization. Yoga is achieve the by turning their thoughts inward, away from the objective world. By Yoga life will be content to let of without regrets and without a sense of leaving too much undone. Yoga is are-education of one’s mental processes, along with the physical.

### Meaning of yoga

The literal meaning of the word yoga is yoke. It means for uniting the individual spirit with the universal spirit, or god. The word yoga is derived from the roots of Sanskrit yuj which means to join, to attach, to bind, and yoke, and to concentrate on one’s attention. It also means union, yoga is the true union of our will with the will of god.

According to kathopanishad, “when the senses are stilled, when the mind is at rest, when the intellect wavers not then, say the wise, is reached the highest stage. This steady control of senses and mind has been defined as yoga.

### Meaning of pranayama

Pranayama means control and regulation of breath. “prana” is a Sanskrit word which means ‘Vital force’. It also signifies ‘life’ or breath. Ayana means the control of the prana so pranayama means the control of the vital force (prana) by concentration and regulated breathing.

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**Bhastrika pranayama**

The Sanskrit word Bhastrika means “Bellow”. Thus Bhastrika pranayam is also known as the bellow breath as air is drawn forcefully in and out of the wings like the bellows of a village blacksmith. The bellows increases the flow of air into the fire producing more heat, similarly, Bhastrika pranayam increases the flow of air into the body to produce inner heat at both the physical and subtle level, stroking the inner fire of mind/body. In this pranayama the breath should go from the throat up to heart and vice-versa. The speed of the breath should be slow and equal. The sound of inhaling and exhaling in this pranayama should not be heard out.

**Material and method**

**Subjects:** The sample of the present study comprised of 60 male students, age ranged from 17-25 years of M.M. Degree college khekra. The sample here divided into two groups Control and Experimental. The grouping of subjects into control and experimental were done with equaling their pre test performance the selected physiological variable (Blood Pressure).

**Techniques**

Sit comfortably in any meditative posture. Sit erect keep the left hand on the left knee in gyanmudra. Fold the index and middle fingers of the right hand to touch the palm. Close the right nostril with the right thumb. Exhale through the left nostril and immediately inhale forcefully. Quickly open the

right nostril by closing the left nostril and repeat the procedure. Keep repeating this pattern quickly gradually increasing the speed of inhalation and exhalation. Simultaneously contract and export the abdominal muscles and slowly return to the initial.

**Experimental design**

The subject selected for the study were divided into experimental group and control group according to equaled group design. The experimental group was imparted thirty minutes of daily training of Bhastrika Pranayama for 6 six under the proper supervision and guidance of the investigator while no training was imparted to control group. At the end of six weeks training, post test was conducted for the groups.

**Blood pressure**

**Instrument:** Sphegmo meno meter/stethoscope

**Procedure:** Subject ask to relax in a bed in supine position then instrument will be placed on the right hand of the subject. The stethoscope will be used by tester then they start pumping the build after same time slowly relaxed the air from the pump where the rub-dub sound is disappears the rating will be taken. It will recorded in mm. Hg.

**Analysis and Interpretation of Data**

**Table 1.1:** Significance of Difference between Control and Experimental Group on Systolic Blood Pressure before Training Programme

Variable	Group	N	Mean	S.D	S.Ed.	t-ratio	Level of significance
Systolic blood pressure	Control	30	12.40	6.40	1.91	0.41	Not sig.
	Experimental	30	121.20	8.30			

\* Significant at.05 level of confidence.

**Table 1.2:** Significant Of Mean Difference of Experimental Group in Pre-Test and Post-Test on Systolic Blood Pressure

Variable	Test	N	Mean	S.D
Systolic Blood Pressure	Pre – Test	30	121.20	8.30
	Post- Test	30	121.60	8.35

\* Significant at.05 level of confidence.

**Table 1.3:** Significance of Difference between Pre-Test and Post-Test of Experimental Group on Systolic Blood Pressure

Variable	Test	N	Mean	S.D	S.Ed	t-ratio	Level of significance
Systolic blood pressure	Pre-test	30	121.20	8.30	2.14	0.018	Not significant
	Post-test	30	121.60	8.35			

\* Significant at.05 level of confidence.

**Table 1.4:** Significance of Difference between Control and Experimental Groups on Diastolic Blood Pressure before Training Programme

Variable	Groups	N	Mean	S.D	S.Ed.	t-ratio	Level of significance
Diastolic blood pressure	Control	30	67.47	8.25	2.12	0.09	Not Sig.
	Experimental	30	67.27	8.19			

\* Significant at.05 level of confidence.

**Table 1.5:** Significance of Mean Difference of Experimental Group’s in Pre-Test and Post-Test on Diastolic Blood Pressure

Variable	Test	N	Mean	S.D
Diastolic Blood Pressure	Pre- Test	30	67.27	8.19
	Post- Test	30	67.30	8.23

\* Significant at.05 level of confidence.

**Table 1.6:** Significance of Difference Between Pre-Test and Post-Test of Experimental Groups on Diastolic Blood Pressure

Variable	Test	N	Mean	S.D	S.Ed	t-ratio	Level of signigance
Diastolic blood pressure	Pre-test	30	67.27	8.19	2.11	0.02	Not significant
	Post-test	30	67.30	8.23			

\* Significant at.05 level of confidence.

### **Results and Discussion**

The t-test was used for finding the effect of Bhastrika Pranayama on male students of college. It was observed that there was no significant difference in blood pressure.

More over the duration of training period was six weeks might be too short periods for bringing any significant change in blood pressure.

### **Conclusion**

Yoga is for everyone, athletes included. Yoga works on strength, flexibility, balance agility endurance, core and overall strength, among other things. Any athlete could benefit hugely by adding yoga to her or his training regimen. No amount of weight- lifting with free weights will give your own body weight will, practicing yoga increase flexibility movements balancing poses I yoga improve overall balance in everything you do. Yoga also helps in improving the physiological variables such as resting pulse rate, vital lung capacity but this study show that there is no significant relation with blood pressure.

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