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## Effect of yogic practices on physiological variables of college students

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**Abstract**

The purpose of this study was to find out the effect of yogic practices on physiological variables of college students. A sample of 15 boy students' age group of 17 to 20 years were selected and given the yogic exercise. In the yogic practices of Asana and pranayama practices were given for eight weeks. The Vital capacity, hemoglobin level, systolic and diastolic blood pressure was measure as physiological variables. The data of pre-test and post-test were obtained and find out the significant different were determine with paired t-test. The level of significance was set at 0.05. The results of this study showed that there was significance different between pre-test and post-test of vital capacity and hemoglobin level whereas there was no significant different in systolic and diastolic blood pressure of college students.

**Keywords:** Yoga, Kapal-Bhati, Bhramari, Ashanas, Anulom-Vilom

**Introduction**

Yoga is practiced in different forms in our society. Many people participate in Yoga for recreational purpose where as adults are engaged in the Yoga activity for competition purpose. Some are involved for improving their sports performance. Many sport which requires a certain level of body fitness, alertness and concentration. A competitive Sporting event poses different kinds of pressure on the participants when a player participates in the competition.

The word 'yoga' is associated by the large with the acquisition and exhibition of supernatural powers. It is customary to look at yoga as a curious ancient art which combine a set of religious belief with a strange and mysterious practical discipline. It has become fairly-common these days, to come across news about somebody claiming to be a yogi, performing miraculous feats like walking on fire and so on. There seems to be a belief in the minds of many, that yoga is concerned mainly with such extraordinary phenomena. It is also supposed that yoga is not for the common man, and that only those who can get away from daily life in society, and retire in solitude for years, with a view to undergo rigorous discipline of the body and mind, are the fit persons to indulge in yoga. It is supposed to be very risky and dangerous path, in which a common man should keep clear. It is an amazing fact that such superstitious ideas are widespread even in the land of yoga. Actually, all these ideas about yoga turn out to be more of less erroneous, on a proper scrutiny. The different, however, is that the field of yoga is, at present largely in the hands of lesser men, who are not properly educated, and who turn to yoga, mainly because they are not likely to succeed elsewhere. Dishonesty, insincerity and hypocrisy are thus rampant, causing frustration in the minds of sincere students of yoga. This sad state of affairs will be changed only when educated, intelligent men having strength of character will be attracted towards the field of yoga in sufficient numbers. Secondly, not much is as yet scientifically known about the various processes of yoga. Some scientists are of late showing interest in this area, and it seems that much valuable information can be gathered through applying the modern techniques of research to the field of yoga.

Perhaps the word 'Yoga' is older than the system of philosophy which goes by that name. The oldest use of word 'Yoga' as found in the Vedic literature (e.g. Rigveda x, 114, 9; Atharaveda VI, 911) indicates a union of various things, especially the houses or the bullocks. This is derived from the Sanskrit root 'Yujir' meaning to 'unite' or 'connect'.

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In later times, however another technical meaning came to be associated with the term and this is derived from the Sanskrit root ‘Yuj’ indicating control of the mind. Both the meanings seem to be fairly common in the Sanskrit language even today. This does not of course mean that while the word ‘Yoga’ was being used (in the time of the Vedic Aryans) to denote simply a union, the facts about controlling and steadying the mind were themselves unknown. In the Vedas we find clear indications that the rishis and the seers were quite familiar with the highest state which is the goal of yoga.

**Methods and Procedure**

In the present study a random sampling plan were used for the selection of sample. Total 15 boy students of age group of 17-20 years were selected and given the yogic practices for 8 weeks and 6 days per week. Daily one hour, during morning Surya Namaskar, total 8 Ashanas, Anulom-Vilom, Kapal-Bhati, and Bhrahmari were performed at Maharaja Aggarsain college of Education, Daroli. The Vital capacity, hemoglobin level, systolic and diastolic blood pressure was measure as physiological variables. The physiological tests were taken in Path lab in Hisar. After collection the data the statistical treatment were given and prepare table and graph. The means difference was calculated to find out the significant difference of the pre- test and post- test results. ‘t’ test were used at .05 level of significance.

**Table 1:** Comparisons of Pre-test and post-test Score of Vital capacity

Mean	Mean	SD	SED	t-value
Pre test	3650	63.38	11.20	11.49
Post test	4270	97.02		

Table-1 showed the results of the study i.e. mean, S.D., SED and t-value of Pre yogic practices test and post yogic practice test of college students. The result of the study reveals that t-value of vital capacity (11.49 ) is more than of table value of ‘t’ at 0.05 level of significance, therefore we can say that the significant improvement in vital capacity hemoglobin level after yoga practice of college students. Our hypothesis there will be no different in pre and post test result of yogic practices is rejected.

**Table 2:** Comparisons of Pre-test and post-test Score of Hemoglobin

Mean	Mean	SD	SED	t-value
Pre test	12.6	.49	.18	9.13
Post test	13.9	.62		

Table-2 showed the results of the study i.e. mean, S.D., SED and t-value of hemoglobin of pre yogic practices test and post yogic practice test of college students. The result of the study reveals that t-value of hemoglobin (9.13) is more than of table value of ‘t’ at 0.05 level of significance, therefore we can say that the significant improvement in hemoglobin level after yoga practice of college students. Our hypothesis there will be no different in pre and post test result of yogic practices is rejected.

**Table 3:** Comparisons of Pre-test and post-test Score of systolic and diastolic blood pressure

Mean	Mean	SD	SED	t-value
Pre test	80.4/121.3	1.09/1.12	.67/.19	1.23/.69
Post test	80.2/120.6	1.24/.68		

Table-3 showed the results of the study i.e. mean, S.D., SED and t-value of systolic and diastolic blood pressure of pre yogic practices test and post yogic practice test of college students. The result of the study reveals that t-value of systolic and diastolic is 1.23 and .69 is less than of table value of ‘t’ at 0.05 level of significance, therefore we can say that the no significant improvement in systolic and diastolic after yoga practice of college students. Our hypothesis there will be no different in pre and post test result of yogic practices is accepted.

**Conclusion**

The result of study showed that yogic practices effective for improving the vital capacity and hemoglobin and it is very high significant as per this research. The result also concluded that there were no significant effects on systolic and diastolic blood pressure of yogic practices. The main cause of no improvement in blood pressure is, the blood pressure of students’ already normal level so that no change were find out in blood pressure.

**References**

1. American Heritage Dictionary. Yogi, One who practices yoga." Webster's: Yogi, A follower of the yoga philosophy; an ascetic.
2. Barbara Stoker Miller. Yoga: Discipline of Freedom: the Yoga Sutra Attributed to Patanjali; a Translation of the Text, with Commentary, Introduction, and Glossary of Keywords. University of California Press, 1996, 9.
3. Birdee, Gurjeet S *et al.* Characteristics of Yoga Users: Results of a National Survey. *Journal of General Internal Medicine.* 2008; 23(10):1653-1658.
4. Costanzo, Linda S. *Physiology.* Hagerstown, MD: Lippincott Williams & Wilkins, 2007.
5. Guyton, Arthur C, John E. Hall *Textbook of Medical Physiology* (11 ed). Philadelphia: Elsevier Saunders, 2006, 511.
6. Lipton L. Using yoga to treat disease: an evidence-based review. *Journal of the American Academy of Physician Assistants.* 2008; 21(2):34-41.
7. Pratt, Joseph H. Long- continued observations on the vital capacity in health and in heart disease. *Transactions of the Association of American Physicians* (W. J. Dornan, Incorporated) 1922; 37:182-197.
8. Selvamurthy W, Nayar HS, Joseph NT, Joseph S. Physiological effects of yogic practice. *NIMHANS Journal.* 1983; 1:71-80.
9. Tran MD, Holly RG, Lashbrook J, Amsterdam EA. Effects of hatha yoga practice on health related aspects of physical fitness. *Prev. Cardiol* 2001; 4:165-170.
10. Yogeswar. *Text-book of Yoga.* Madras, Yoga Centre, 1982, 94-433.
11. Yogani. *Advanced Yoga Practices – Easy Lessons for Ecstatic Living.* 978-0-9819255-2-3, 2010.