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Effect of Yogic Training on Respiratory Rate of College Students

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Abstract-

The nature of every yogic practice is psycho-physiological and if this conceptual background is not clearly understood, the whole outlook on yogic practices will be disturbed. The relation of yogic practice in terms of anatomy and psychology would remove many misconceptions about them.(yadav, 2013). This study is designed to evaluate the effect of a 6 weeks (except Sunday) daily practice of Yogic training on respiratory parameter by university students. Students aged 18-25 years have been taken from CBLU, Bhiwani. Healthy students who were not suffering from any ailments selected for this study. The Respiratory parameter were measured before and after the practice of Yogic training. The analysis of data reveals the following outcomes: In Yogic training group pre respiratory rate mean shows that 3.91 and post respiratory rate exemplifies that 4.08 and as far as the pre mean of control group respiratory rate is concerned that is 3.89 and post mean is 3.92. So the researcher finds the significant respiratory rate variables and gets a positive result.

Keywords- Yogic training, respiratory rate.

Introduction-

Yoga focuses on harmony between mind and body. Yoga derives its philosophy from Indian metaphysical beliefs. The word yoga comes from Sanskrit language and means union or merger. The ultimate aim of this philosophy is to strike a balance between mind and body and attain self-enlightenment. To achieve this, yoga uses movement, breath, posture, relaxation and meditation in order to establish a healthy, lively and balanced approach to life. (Saraswati, 1996). As per shiv samihita, Shiva says, I have studied all religions and given the best out of them as yoga and in relation to Pranayam or the breath control, he says, “if you control the mind you control the breath.”

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Pranayama means a pause in the movement of breath. In the Sutras the word Prana occurs by itself only once and the wording of Sutras is so clear that by no stretch of thoughts can the word Prana there be taken to refer to anything aspect breath. In addition to this the word Prana occurs twice in the sutras every time being compounded with the word Ayama. Here again the wording of the original author, *Patanjali* is very clear. He positively refers to respiratory moments. The most imperative commentators *Patanjali's Sutras* have invariable explained Prana to mean breath.(Hartranft, 2003).

The nature of every yogic practice is psycho-physiological and if this conceptual background is not clearly understood, the whole outlook on yogic practices will be disturbed. The relation of yogic practice in terms of anatomy and psychology would remove many misconceptions about them.(yadav, 2013)

Methodology-

Research Design

The purpose of the study is to find out the effect of yogic training on selected respiratory variables on school college level students in Haryana. To achieve this purpose 60 college students, those who studied in different colleges affiliated with Chaudhary Bansi Lal University, Bhiwani were selected as subjects at random from the all colleges. All the subjects were residents of Haryana. The age of the subjects were ranged from 18 to 25 years. They were divided into two equal groups of thirty each as one experimental groups and one control groups, in which group-I (n=30) underwent yogic training men group for six weeks (exclude Sunday), group-II (n=30) acted as control group for men who did not participate any special training apart from the regular day to day activities.

Objectives of the Study

1. To measure the effect of yogic training on respiratory rate of college students, those who studied in different colleges affiliated with Chaudhary Bansi Lal University, Bhiwani.

MATERIALS AND METHODS

60 healthy college students of 18 to 25 years of age were selected for the study. Random sampling method was used for the selection.

Experimental research method was applied by the researcher in the study.

The duration of experimental period was six weeks.

The pre tests were conducted before the practice.

The post tests were conducted after the practice.

Descriptive Statistics of Resting Respiratory Rate (Male Group)

Table-1

Descriptive statistics of the data measured in the post testing respiratory rate

Different Groups	Mean	Std. Deviation	N
Male Yogic Group	18.78	3.12	30
Control Group	19.21	3.37	30
Total	18.97	3.19	60

Table no.1 indicates the values of descriptive statistics of the experimental Group (Male Yogic group) & Control Group (male control group) for respiratory parameter of respiratory rate, which shows that the mean and S.D. values of Male Yogic group and the Control Group (male control group) are found to be 18.78 ± 3.12 , and 19.21 ± 3.37 respectively. Total the same is 18.97 ± 3.19 .

Table-2

Descriptive statistics of the data measured in the post-testing after adjustment with the initial difference respiratory rate

Different Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Male Yogic Group	18.76 ^a	0.26	18.19	19.46
Male Control Group	19.72 ^a	0.29	18.19	19.84

Covariates appearing in the model have evaluated at the following values: pre respiratory rate = 19.33

The mean and standard error of different post-testing Groups after adjustment have been shown in table 2. Which is for Male yogic Group 18.76 ± 0.26 , and Male Control Group 19.72 ± 0.29 .

Table-3

Ancova table for the post-test data of respiratory rate

Source	Sum of Squares	Df	Mean Square	F	Sig.(p-value)
Pre-Respiratory rate	719.15	1	719.15	224.71	.000
Treatment Group	863.35	1	43.22	13.11	.000
Error	113.62	58	3.04		
Corrected Total	1226.193	9			

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Table no. 3 indicates the values test of difference between the subject effects, which shows that there are a significant difference in pre test values of respiratory parameter of respiratory rate for the two selected Groups, as the value has found to be 224.71, which proves to be the base of Analysis of Co-Variance. Also, a significant difference is found between the post test values of the experimental and Control Group as the value has found to be 43.22, which is significant at 0.05 level.

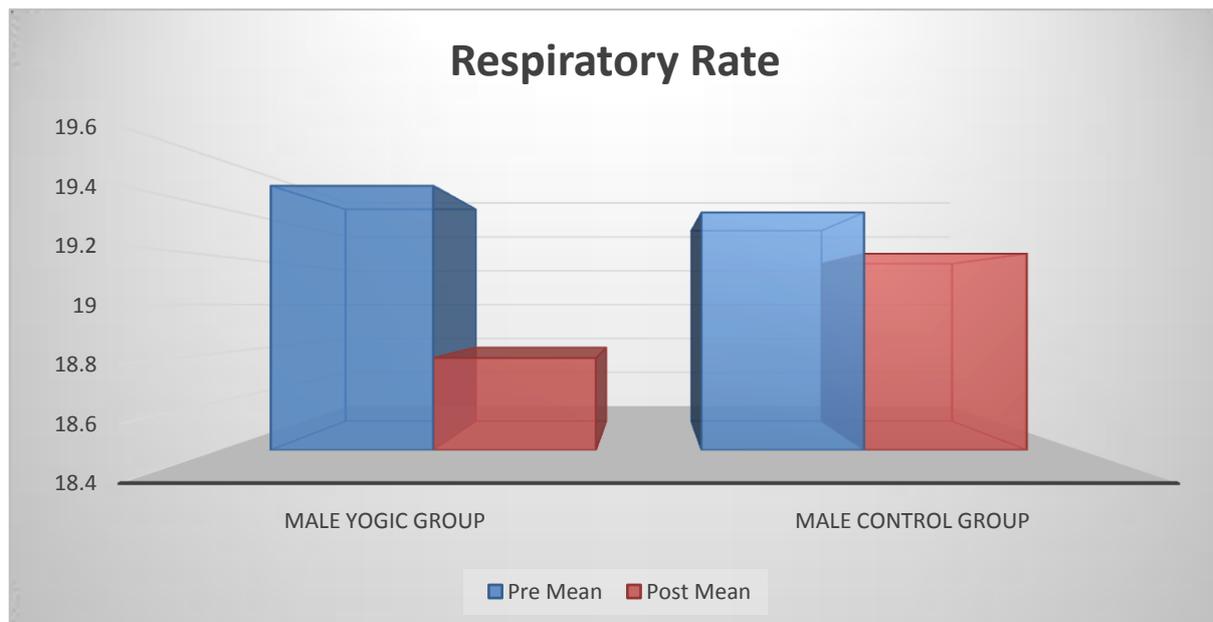


Figure- 1

Bar Diagram Showing the mean Value of Respiratory Rate among male YogicGroup and Male Control Group

DISCUSSION

In the present study a significant effect has disappeared on respiratory rate after conducting 6 weeks regular practice of yogic training. The output of other studies shows a positive effect in respiratory rate and in contrast of this the present study has shown positive effects on human respiratory system. This present study has given above stated outcome. In order to improve respiratory rate in students yogic practices can be applied. Thus in a nutshell in this study it is proved beyond doubt that the regular practice of yogic training for six weeks is advantageous to increase the respiratory rate in order to overcome other respiration diseases. The results of this study and their explanations justify the incorporation of yoga as a part of our lifestyle is necessary to be healthy and also will help to human beings preventing from age related physical fitness problems.

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CONCLUSION

This research paper has achieved the expected and fruitful result which has been assumed by the researcher a positive effect of yogic training on respiratory rate. So, if such yoga started in Universities and Colleges would be helpful to improve the health graph of students.

It may be summarized that the Yogic practices having positive effect on respiratory rate, hence validated for experimentation Yogic training specifically as well as in general.

The conducted study further increased the scope of experimentation yogic paradigm for physical fitness tests domains. Hence, enriched the academic and scientific practices and book of knowledge.

Recommendation:

The positive result has found in the present study so that yogic training can be implemented to all universities and Colleges to improve the respiration level and to increase fitness level of the students. A one hour practice daily may help to achieve the expected focus level of mind which is required for better works and studies. Through daily practice one can maintain good physical and mental health for a long period.

REFERENCES

1. Amaldas Brahmachari, "Yoga and Contemplation", Shantivanam Ashram, Tahnirpalli, Tiruchirappalli, Tamilnadu India, 1994, p. 17.
2. MV. Rajapurkar, "Pranayama - Modulator of Cerebral Functions (A hypothesis)", Yoga Mimamsa, Jan 1999, 33(4): 42-60.
3. A.C. Bhaktivedanta Swami Prabhupada, "Bhagavad-Gita As It Is", Bhaktivedanta Book Trust International, Ch.II.48, www.Krishna.com.
4. Sivapriya, D., Malani, S., & Thirumeni, S. (2010). Effect of Nadi Shodhana Pranayama on Respiratory Parameters in School Students. *Recent Research in Science and Technology*, 2(11).
5. Kinabalu, K. (2005). Immediate effect of 'nadi-shodhana pranayama' on some selected parameters of cardiovascular, pulmonary, and higher functions of brain. *Thai journal of physiological sciences*, 18(2), 10-16.
6. Khanam, A. A., Sachdeva, U., Guleria, R., & Deepak, K. K. (1996). Study of pulmonary and autonomic functions of asthma patients after yoga training. *Indian journal of physiology and pharmacology*, 40(4), 318-324.
7. Joshi, L. N., & Gokhale, L. V. (1992). Effect of short term pranayam, practice of breathing rate, & ventilator functions of lung. *Indian J Physiol Pharmscol*; 1992; 36 (2): 105, 108.
8. Dhungel, K. U., Malhotra, V., Sarkar, D., & Prajapati, R. (2008). Effect of alternate nostril breathing exercise on cardiorespiratory functions. *Nepal Med Coll J*, 10(1), 25-27.

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9. Vyas, R., & Dikshit, N. (2002). Effect of meditation on respiratory system, cardiovascular system and lipidprofile. *Indian journal of physiology and pharmacology*, 46(4), 487-491.
10. Sachan, A., Rina, D., & Janu, N. the effect of anuloma viloma pranayama and yogic asana on resting pulse rateand stress of school going children in jaipur.
11. Bharshankar, J. R., Bharshankar, R. N., Deshpande, V. N., Kaore, S. B., & Gosavi, G. B. (2003). Effect of yoga oncardiovascular system in subjects above 40 years. *Indian journal of physiology and pharmacology*, 47(2), 202-206.
- 12 Sharma, P., Verma, M. K., Sachan, A., & Verma, A. (2022). Role of Emotion and Feelings in Coronary Heart Diseases among Males & Females: A Comparative Study. *Journal of Positive School Psychology*, 6(2), 5296-5301.
- 13 Verma, A., Sachan, A., Verma, M. K., Sharma, P., & Raju, D. (2022). An analysis of six weeks training of suryanamaskar (sun salutation) on flexibility of healthy children. *International Journal of Early Childhood*, (01), 2295-2299.
- 14 Sachan, A. (2021). Surya Namaskar: Its Techniques and Health Benefits. *Indian Journal of Natural Sciences*, 12, 67.