

**GAP BODHI TARU** A GLOBAL JOURNAL OF HUMANITIES (ISSN - 2581-5857) Impact Factor: SJIF - 5.551, IIFS - 5.125 Globally peer-reviewed and open access journal.



# INFLUENCE OF PRANAYAMA ON RESPIRATORY VARIABLES OF ADOLESCENTS IN MUMBAI

# Dr. Anita Motiramji Malge

Director of Physical Education Sydenham College of Commerce and Economics, B road Churchgate Mumbai. Email: anitanant\_5@rediffmail.com

#### **Abstract**

The purpose of the research is to find the influence of Pranayama on Respiratory variables of adolescents in Mumbai. The sample consisted of 40 adolescents, (two groups of each 20) the age group of 14 to 17 years. The study was delimited to the boys. The subject was selected by using the available sampling method on 8to10 std. student of CBSE Schools, Mumbai. It was hypothesized that the significant different in respiratory variables. For the present study, the researcher uses Pranayama. Training program Pranayama the three stages namely Inhalation (Puraka) Pause after Inhalation (Kumbhaka) and Exhalation (Rechaka) are performed. Pranayama for meditation and Relaxation, Sitakari Pranayama Sitali Pranayama Ujiayni, and Bhastrika Pranayama In this study data were analyzed and interpreted with the help of statistical form.

Keywords: Pranayama

#### **INTRODUCTION**

"Stand up, be bold be strong. Take the whole responsibility on your shoulders and know that you are the creator of your own destiny. All the strength and succor you want is within you. Therefore, make your own future." –

#### Swami Vivekananda

Pranayama, as traditionally conceived, involves much more than only breathing for relaxation. Pranayama is a term with a wild range of meanings. Patanjali defines Pranayama, as the guideline of the incoming and outgoing flow of breath with retention. It is only to be done once asana excellence has been obtained. Pranayama also refers to space power, or the power of the entire cosmos manifesting itself in us as aware living beings through the phenomena of breathing. Pranayama is made up of two words. Prana and Ayama. Ayama represents the activity of Pranayama and signifies stretch, extension, expansion, length, breath regulation, prolonging, restraint, and control. Pranayama has been mentioned as eight kinds as Suryabhedan, Ujiayni, Sitakari, Sitali, Bhastrika, Bhamari, murccha, palavini all these eight kinds of pranayama are said to have their own effects as they also have different forms of their practice.

The Purpose of the research is to find influence of Pranayama on Respiratory variables of adolescents. Sample consisted of 40 adolescents, (two groups of each 20) the age group of 14 to 17 years. The study was delimited to the boys. The subject was selected by using available sampling method on 8 to10 std. student of CBSE Schools of Mumbai. For the present study researcher uses Pranayama. Training programme. Pranayama the three stages namely Puraka (Inhalation) Kumbhaka (Pause after Inhalation) and Rechaka (Exhalation) are performed. Pranayama for meditation and Rlaxation, Sitakari Pranayama Sitali Pranayama Ujiayni and Bhastrika Pranayama.

#### **HYPOTHESIS**

It was hypothesized that the significant different in respiratory variables.

#### Tools:

Sphygmomanometers, Stethoscope, wet spirometer, Stop watch.

#### **STATISTICAL ANALYSIS**

#### Table -1: Pre test of Control and Pranayama group of Teenager

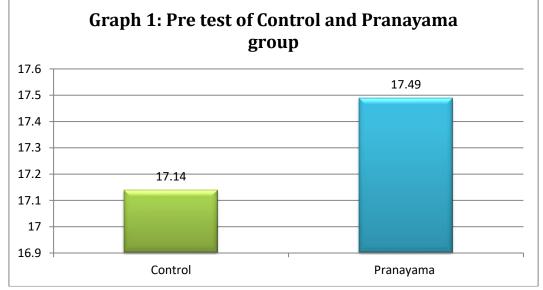
Group	Ν	Mean	SD	MD	df	SE	Cal'ť	Tab 't'
Control	20	17.14	1.09	0.35	38	0.40	0.87	2.021
Pranayama	20	17.49	1.44					



## **GAP BODHI TARU** A GLOBAL JOURNAL OF HUMANITIES (ISSN - 2581-5857) Impact Factor: SJIF - 5.551, IIFS - 5.125 Globally peer-reviewed and open access journal.



The above the test table No-1 it reveals that calculated't' value 0.87 for degree of freedom 38 is not significant at 0.05 level of significant because it is less than the table value 2.021. It show that there is no significant different of control group and Pranayama group. It means that the hypothesis starting that control group and Pranayama group students may different significantly with respect to their resting respiration rate is rejected.

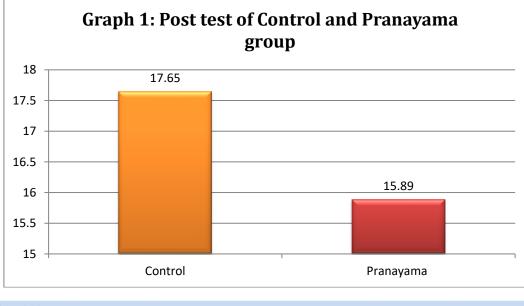


\*significant at 0.05 level of significant

Table-2: Post test of Control and Pranayama group of Teenager

Tuble 211 obt tebt of Control and Frankyania group of Feenager										
Group	Ν	Mean	SD	MD	df	SE	Cal 't'	Tab 't'		
Control	20	17.65	1.31	1.80	38	0.45	3.99*	2.021		
Pranayama	20	15.89	1.54							

The above the test table No-2 it reveals that calculated' value 3.99 for degree of freedom 38 is significant at 0.05 level of significant because calculator value is greater than the tabulated value 2.021. It show that the hypothesis starting that control group and Pranayama group students will different significantly .with respect to their respiration rate. It observe that there is significant different between control group and Pranayama group students.



#### CONCLUSION

The result shows that there is significance different between pre test and post test control group and Pranayama group students.

# GAP BODHI TARU – Volume - VII February 2024 Special Issue on "Viksit Bharat - Towards Five Trillion Economy"



## **GAP BODHI TARU A GLOBAL JOURNAL OF HUMANITIES** (ISSN - 2581-5857) Impact Factor: SJIF - 5.551, IIFS - 5.125 Globally peer-reviewed and open access journal.



#### REFERENCES

- [1] Vitthaldas Vaishanav. Yogic Pranayama and improvement of athletes' performance. Aurangabad: Abhijeet Prakashan. (2007).
- [2] Swami Kuvalayananda (2005) Pranayama. Kaivalyadhama S.M.Y.M. Samiti Lonavla
- [3] Ankad RB, Herur A, Patil S, Shashikala GV, Chinagudi S. Effect of short-term pranayama and meditation on cardiorespiratory functions in healthy individuals. Heart Views. 2011;12:58–62.
- [4] Mason H, Vandoni M, Debarbieri G, Codrons E, Ugargol V, Bernardi L. Cardiovascular and respiratory effect of yogic slow breathing in the yoga beginner: What is the best approach? Evid Based Complement Alternat Med 2013. 2013:743504.
- [5] Jerath R, Edry JW, Barnes VA, Jerath V. Physiology of long pranayamic breathing: Neural respiratory elements may provide a mechanism that explains how slow deep breathing shifts the autonomic nervous system. Med Hypotheses. 2006;67:566–71.
- [6] Tikle, Y. A. "General Health Benefits of Pranayama W.S.R. To Effects on Respiratory System: An Ayurveda Review". Journal of Drug Delivery and Therapeutics, Vol. 10, no. 1-s, Feb. 2020, pp. 215-7