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EFFECT OF YOGA AND PRANAYAMA ON PEAK EXPIRATORY FLOW RATE OF OLD AGE MEN

Vishwajit Thakare
J.S.P.M. College of Physical Education ,Pusad. Dist. Yavatmal (M.S.)

ABSTRACT

The purpose of this study was to investigate the effect of Yoga and pranayama on Peak Expiratory Flow Rate of old age men. For this study 40 subject were selected randomly out of that 20 subject were selected from Patanjali Yoga Group, Pusad Dist.Yavatmal.(M.S.). and other 20 subject were selected randomly who are walking daily in the morning. The subject were categorize in to two equal groups, one experimental group (Group A n1 = 20) those who are doing yoga and pranayama daily and one control group (Bn2=20) those who are walking daily in the morning. The design of experiment has been planned three phases. All the subject of experimental group were expose to a three months (12 week) training of yoga and pranayama daily one hour in the morning. While group B as a control which are walking daily. The variable peak expiratory flow rate which is measured by wrights peak flow meter. The training of yoga and pranayama reviled that there was significant improvement in peak expiratory flow rate.

KEYWORDS :*peak expiratory flow rate, yoga and pranayama.*

INTRODUCTION :

Yoga is a system of philosophy establish in India thousand of year ago. It to develop the spiritual harmony of the individual through the control of mind and body. The great science of yoga is India's unequally gift to mankind. If mankind is to evolve further, and if it is to save it self from its own aggressive tendencies ,the only path open through the science of yoga. But it can be seen that today the sedentary lifestyle evolved from many occupation is responsible for low levels of physical fitness.

The most important fitness component in human health is cardiovascular endurance. It is the ability to deliver essential nutrients, especially oxygen, to the working muscles of the body and to remove west product during prolonged physical exertion. It involves the efficient functioning of the heart, blood vessels and lungs

Moreover, cardio respiratory endurance is considered the most important component of health related fitness because the functioning of the heart and lungs is so essential to over all wellness.

A person simply can not live very long or very well without a healthy heart. Low level of cardio respiratory fitness are linked with heart disease, the leading cause of death.

In this context it is needless to say that yoga and pranayama technique are known to improve once over all functional ability of lungs and heart too. Pranayama is known to be a part of yoga. Yoga and Pranayama are the to sides of one coin. Patanjanjali in his yoga sutra describe yama, Niyama, Asana, Pranayama, Pratyahar, Dharana, Dhyan and Samadhi as eight angas of yoga. Amongst them, in the present materialistic world, the third and fourth part, pranayama and Asana are considered as very important part and prescribe by modern medicine too. Many physician now recommended yoga to patient at risk for heart and lung diseases as well as those with back pain, Arthritis, depression and other chronic diseases. The beneficial effect of different yoga and pranayama are well reported and have sound scientific basis. There are different types of pranayama and yoga and it has been found that these techniques influence cardio respiratory and autonomic function and also helps in reducing the scores of anxiety and tress.

PURPOSE OF THE STUDY

The purpose of the study was to investigate the effect of Effect of Yoga and Pranayama on Peak Expiratory Flow Rate of old age men.

METHOD AND MATERIAL

For this study 40 male subject were selected randomly out of that 20 from Patanjali Yoga Group, Pusad Dist-Yavatmal (M.S.). and 20 from morning walk group Pusad. The subject age group was ranging from 58 to 65 year. Those who are retired from their service, also those who are not in service but above 58 age doing the yoga and pranayama daily one hour.

The subject were categories in to two equal groups, one experimental group (Group A n1,=20) those who are doing yoga and pranayama daily one hour in the morning and one control group (Bn2=20) those person who are walking daily in the morning. It was also ensured that all of them were mentally fit for research and yoga and pranayama training. Group A received yoga and Pranayama training while Group B was treated as control. The design of the experiment has been planned in three phases. All the subject of experimental group were exposed to a three months (12 week) yoga and pranayama training one hour daily in the morning.

The phase-wise design of the experiment has been planned as follows.

Phase – I Pretest

Phase- II Training (Yoga and Pranayama)

Phase-III Post test

Pre-Test (Phase-I)

All the subjects of experiment and control groups were exposed to a Peal Expiratory Flow Rate test measured by wrights peak flow to record the pre test data.

Treatment Stimuli (phase-II)

After the completion of pretest. All the subjects of experimental group were exposed to a three month (12 week) training of Yoga and Pranayama for one hour daily in the morning 5.30 am to 6.30 am at Shriram Asegaonkar High School, Pusad.

Group A – Yoga and Pranayama

Group B – Control

For a total period 12 week the yoga teacher took yoga and pranayama daily one hour.

Daily Schedule of Yoga and Pranayama

Asanas & Pranayama	Repetition	Time
Surya Namaskar	4	**4 Min**
Shavasan		**4 Min**
Halasan	2	**3 Min**
Makarasan		**3 Min**
Bhujangasan	2	**3 Min**
Shalabhasana	2	**3 Min**
Dhanurasana	2	**3 Min**
Ardhamatsyendrasana	2	**3 Min**
Paschimonthanasana	2	**3 Min**
Gomukasana	2	**3 Min**
Padahastasana	2	**3 Min**
Shavasana		**5 Min**
Anuloma Viloma		**3 Min**
		1 Min rest
Kapalbhati Kriya		**3 Min**
		1 Min rest
Ujjayi Pranayama		**3 Min**
		1 Min rest
Bhastrika Pranayama		**3 Min**
		1 Min rest
Bhramari Prnayama		**3 Min**
Om Chanting		

One Minute rest between each Pranayama

The duration of Asanas 45 Minutes and Pranayama 15 Minute

Post Test (Phase III)

Lastly, when the Yoga and Pranayama schedule period of 12 week (three month) was

completed, the post test on peak expiratory flow rate was assessed for all the subject of both experimental and control group.

Result and Discussion :

Effect of Yoga and Pranayama on Peak Expiratory Flow Rate

	Pre test Mean	Post test Mean	SD		t Value
			Pre	Post	
Experimental group Yoga and Pranayama	451	460	67.8	64.64	6.11 Calculated t tabulated t=1.72 at .05 6.11>1.72 at .05 level
Control group Walking group	453.5	455	61.41	60.30	0.05 calculated t 0.05<1.72 tabulated t 1.72

Peak Expiratory Flow Rate of Yoga and Pranayama Experimental Group and Control group of walking are presented in table-1

Were pre test and post test mean of experimental group are 451 and 460, SD are 67.8 and 64.64 and t Value are 6.11

Were pre test and post test mean of control group are 453.5 and 455, SD are 61.41 and 63.30, t value are 0.05

From the above statistics significant the result revealed that

•Control group (Walking group) did not show significant improvement in peak expiratory flow rate of pre test and post test of mean, SD were calculated t is 0.05 it is (t=0.05<1.72) less than tabulated t

•Experimental group (Yoga and Pranayama) show significant improvement in peak expiratory flow rate of pre test and post test of mean, SD. Were calculated t value is 6.11 (t=6.11>1.72) is greater than tabulated t 1.72. hence yoga and pranayama show significant superiority over control group in improving peak expiratory flow rate.

CONCLUSION

This study on the basis of the results, warrants that 12 week of yoga and pranayama training schedule was found effective in improving peak expiratory flow rate of old age men.

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Vishwajit Thakare
J.S.P.M. College of Physical Education ,Pusad. Dist. Yavatmal (M.S.)

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