

**EFFECT OF 8 WEEKS PRANAYAM TRAINING ON CARDIOVASCULAR
FITNESS OF YOUNG MALE BOXER**

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ABSTRACT

The purpose of the study to see the effect of 8 weeks of Pranayam Training on Cardiovascular Fitness. The (N-50) subjects (Male) young boxer are purposive randomly selected belonging to age group of 18-22 years further divided into two groups. Group-A (control Group) and group-B (Experimental Group) and selected Pranayam Technique “Anuloma-Viloma and kapalbhati Pranayam. The group perform Pranayam Training Program 6 days (1 hour) in a week for 8 weeks. Statistical Technique; Pre-Test and Post Test have been conducted Tuttle Pulse Ratio Test and “t-test” was the Statistical Technique. The results of Pre-Test and Post Test of control group with regarding to the Tuttle pulse ratio score. The descriptive statistics shows the Mean and SD values of Pre-Test on the Tuttle pulse ration score as 5.13 and 0.22 respectively. However, Post-Test had mean and SD values as 5.13 and 0.22 respectively. The standard error difference of mean was 0.04 respectively. The t value 0.44 as shown in the table above was found statistically insignificant ($P>0.05$). But while comparing the mean values of both the test, it has been observed that Pre-Test and Post-Test had demonstrated no difference of both test. The results of Pre-Test and Post Test of experimental group with regarding to the Tuttle pulse ration score. The descriptive statistics shows the Mean and SD values of Pre-Test on the Tuttle pulse ration score as 5.18 and 0.18 respectively. However, Post-Test had mean and SD values as 5.19 and 0.18 respectively. The standard error difference of mean was 0.00 respectively. The t value 3.01 as shown in the table above was found statistically significant ($P<0.05$). But while comparing the mean values of both the test, it has been observed that Post-Test had demonstrated better Tuttle pulse ration score than the Pre-Test.

KEYWORDS:- Cardiovascular Fitness, Pranayam, Young Boxer.

INTRODUCTION

Today Yoga has become popular throughout the world. It is a science which has been practiced as a healthy way of life. Yoga concentrate on controlled breathing (pranayama), body posture (asana), relaxation of mind (meditation) keeps a person healthy for maintaining health, fitness and relief to stress, frustration and anxiety. The word yoga is derived from the Sanskrit (dhatu) yuj meaning to bind. The ancient yogis they practiced pranayama to unite the breath with the mind, and thus with prana of life-force. Prana is energy, and ayama is the string and distribution of that energy. Pranayama is a scientific method of yogic type of breathing (inhale and exhale) and chest expansion exercise and improve respiratory function in healthy individuals as well as in pulmonary diseases. Cardio Vascular Endurance can be defined as the ability of heart and lungs to take in and to transport adequate amounts of oxygen to the working muscles for activities that involve large muscle masses, to be performed over long periods of time. As sports is an activity in our lives where pursuits of different movement achieved through the total investigation of Neuro–muscular coordination. In this modern era, we can see that each and every individual directly or indirectly related to sports. In Modern Physical Education commonly known belief is there sports there is the pursuit of discipline freely formed (such as biological, social and physical sciences). Over a decade, the society in general has realized the need for keeping fit and healthy through organized physical activity programme. Scientific evidence has made us clear that man engages himself in organized vigorous physical activity programme. Many researchers strongly support the regular exercises helps one to keep one strong and healthy and to prevent cardio vascular diseases. Physically fit person, heart beats at a lower rate and pumps more blood per beat at rest. As a result of regular exercises and individual's capacity to use oxygen is increased. Health, Fitness and physical performance are purely correlated phenomena. Health is generally defined as the freedom from diseases. Fitness is ability to do physical movement with desire quality and speed for excellence in performance. Boxing is a combat sports. It is one of the most popular game, especially in Africa, Europe and the Americas. It was also popular in ancient Greek and Rome. The rules were crude and boxers often indulged into lethal boxing rounds with leather strapped on to their bare hands. It is believed that in Ancient Rome, the Boxing fighters were usually offenders or slaves. They played the game to win and gain independence. However, the facts are pointed to free men fighting for competition and the spirit of the sport. Eventually, Augustus is known to have banned fighting. The legend was popularly known as the 'Father of boxing'. However, the more

recognizable development occurred during a time known as modern era in boxing. In the year 1866, the Marquis of Queensberry consented to a new set of boxing rules. The rules were titled with his name. The new rules introduced limited number of 3-minute rounds. The relationship of boxing and cardiovascular fitness is much important. It is an intermittent sport characterized by short duration, high intensity bursts of activity. It requires significant cardiovascular fitness, and operates within a well-developed aerobic system. Boxing is estimated to be 70-80% anaerobic and 20-30% aerobic (Ghosh et al., 1995).

Objectives:-

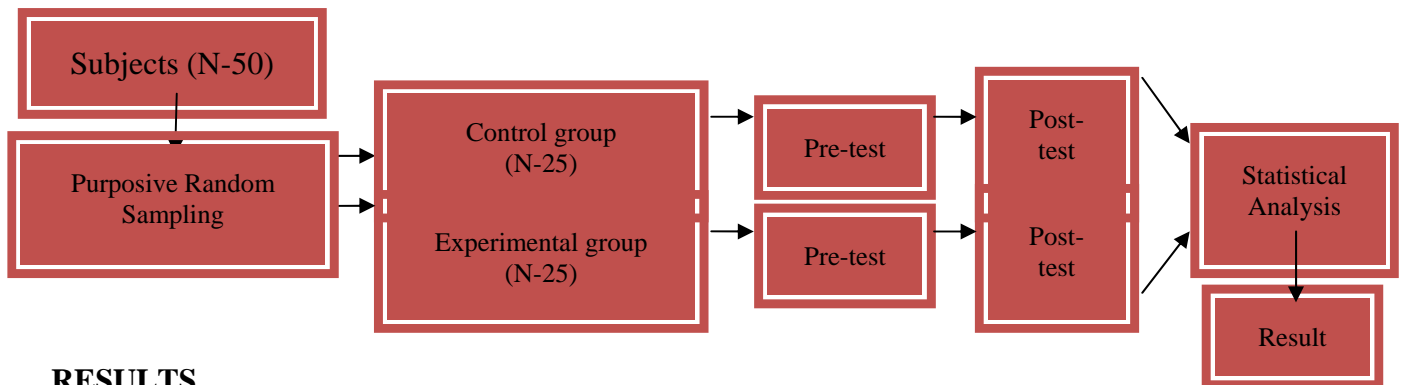
To see the effect of pranayam training on cardiovascular fitness of young male boxers.

Material and Method:-

The (N-50) subjects (Male) young boxers are purposive randomly selected belonging to age group of 18-22 years and further divided into two groups. Group-A (Control Group), Group-B (Experimental Group) and selected Pranayam Technique “Anuloma-Viloma and Kapalbhata Pranayam. The group perform Pranayam Training Program for 6 days (1 hours) in a week for 8 weeks. The test was conducted Tuttle pulse ratio Pre-Test and Post Test. The statistical package for the social science (SPSS) Version 16.0 was used for all analyses. The difference in the mean of each group for selected variable were tested for the significance of difference by t-test. In all the analyses, the 5% critical level ($P>0.05$) was considered to indicate statistical significance. The present study reveals that young (Male) boxers of Jalandhar district which reflects the adequate nutrition, socioeconomic status and normal life style of these individuals.

DESIGN OF THE STUDY

This is an exploratory study that has employed method of data collection and analysis quantitatively. The purpose of the study was to find out the difference of Pre-Test and Post Test in Cardiovascular Fitness among young (Male) Boxer. The purposive random selection technique was used to attain the objectives of the study.



RESULTS

Table: - 1

	Pre-Test		Post-Test		SEDM	t-Value	Sig.
	Mean	SD	Mean	SD			
Control Group	5.13	0.22	5.13	0.22	0.04	0.44	0.66

significant at 0.05 level

degree of freedom= 48

Control Group:-

Present the results of Pre-Test and Post Test of control group with regarding to the Tuttle pulse ration score. The descriptive statistics shows the Mean and SD values of Pre-Test on the Tuttle pulse ration score as 5.13 and 0.22 respectively. However, Post-Test had mean and SD values as 5.13 and 0.22 respectively. The standard error difference of mean was 0.04 respectively. The t value 0.44 as shown in the table above was found statistically insignificant ($P < 0.05$). But while comparing the mean values of both the test, it has been observed that Pre-Test and Post-Test had demonstrated no difference of both tests. The comparison of mean scores of both the groups has been presented graphically in figure below.

Figure-1

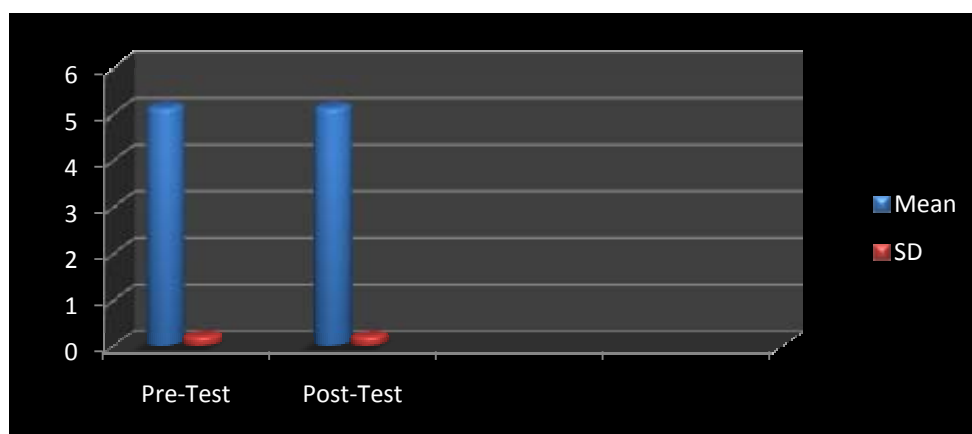


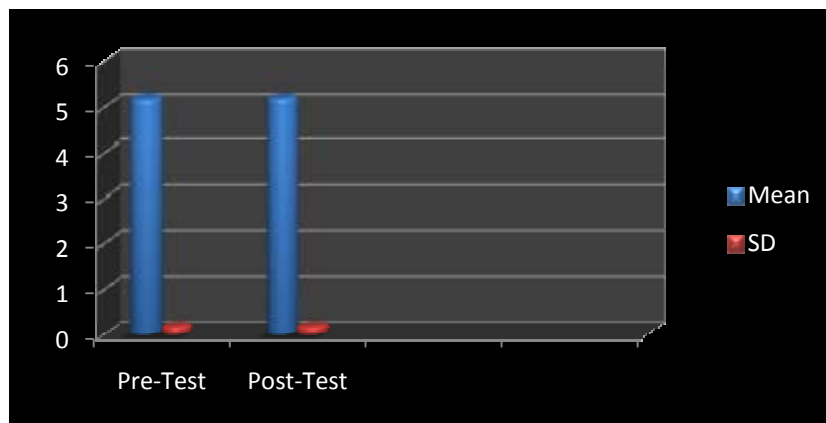
Table: - 2

	Pre-Test		Post-Test		SEDM	t-Value	Sig.
	Mean	SD	Mean	SD			
Experimental Group	5.18	0.18	5.19	0.18	0.00	3.01	0.00

Experimental Group:-

Table-1 Presents the results of Pre-Test and Post Test of experimental group with regarding to the Tuttle pulse ration score. The descriptive statistics shows the Mean and SD values of Pre-Test on the Tuttle pulse ration score as 5.18 and 0.18 respectively. However, Post-Test had mean and SD values as 5.19 and 0.18 respectively. The standard error difference of mean were 0.00 respectively. The t value 3.01 as shown in the table above was found statistically significant ($P < 0.05$). But while comparing the mean values of both the test, it has been observed that Post-Test had demonstrated better Tuttle pulse ration score than the Pre-Test. The comparison of mean scores of both the groups has been presented graphically in figure below.

Figure-2



Conclusion:-

The following conclusions have been drawn in the view of data analysis of present study. The collected data showed significant difference in the subject belonging to experimental group and control group. Experimental group was found better than the control group on the Tuttle pulse ration score. In the study to see the significant effect of Paranayam training on cardiovascular fitness.

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