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# "Effect Of Yogic And Aerobic Exercise On Psychological Variables Of High School Students"

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# Abstract:

The purpose of the study was to find out the effects of yogic exercises and aerobic exercises on selected psychological variables namely Stress, aggression and anxiety. The study has carried out and well designed to help to the practitioners in develop their personality factors. In this study the researcher has selected yogic and aerobic exercise training that is having more effect on psychological variables

Key Words; psychological variables, yogic exercises, aerobic exercises Anxiety, Stress, and Aggression

#### Introduction:

Health is the level of functional or metabolic efficiency of a living being. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury or pain (as in "good health" or "healthy").

The World Health Organization defined health in its broader sense in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" Physical exercise is important for maintaining physical fitness and can contribute positively to maintaining a healthy weight, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system.

This has been accompanied by increasing use of mechanized transportation, a greater prevalence of labor saving technology in the home, and less active recreational pursuits.

Aerobic exercise and fitness can be contrasted with anaerobic exercise, of which strength training and shortdistance running are the most salient examples. The two types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle.

During aerobic exercise the body demands more oxygen, so the lungs must deliver more oxygen to the working muscles through the blood. As the depth of breathing increases, exchange of oxygen and carbon dioxide between the lungs and the blood occurs more rapidly and efficiently. Regular exercise increases the lungs capacity to deliver oxygen.

Yoga is a generic term for the physical, mental, and spiritual practices or disciplines which originated in ancient India with a view to attain a state of permanent peace.

Various traditions of yoga are found in Buddhism, Hinduism and Jainism. In Hinduism, yoga is one of the six astika schools of Hindu philosophy. Long term yoga practitioners in the United States have reported musculoskeletal and mental health improvements, as well as reduced symptoms of asthma in asthmatics. Regular yoga practice increases brain GABA levels and has been shown to improve mood and anxiety more than some other metabolically matched exercises, such as walking.

The emphasis on the physical benefits of yoga, attributed to practice of the asanas, has deemphasized the other traditional purposes of yoga which are to facilitate the flow of prana and to aid in balancing the koshas of the physical and metaphysical body. Yoga is a form of exercise that unites breath, mind, body, and spirit. The word and practice yoga conjures up images of Eastern philosophy and ancient practices.

Modern day yoga practice has been discovered in the Western world by many people want to strengthen their bodies in a new way. Yoga is not the fast pace cardiovascular workout like running, dance class, or a sport like tennis. Yoga is learning how to slow your thoughts way down, place all your attention on the present moment, and create an oasis of stillness in your movements. Programme is the.

# **OBJECTIVES OF THE STUDY**

- 1. To assess the effect of Yogic and Aerobic exercises practices on Psychological variables of high school students.
- 2. To find the relation between yogic practice and aerobic exercises with Psychological wellbeing of high school students.

#### HYPOTHESIS

It will be hypothesized that, as a result of Yogic and Aerobic exercises on Psychological variables of High School Students on both Experimental and Control Groups.

- It was hypothesised that there will be a significant improvement in their psychological variables such as Anxiety, Stress, and Aggression of government high school students.
- There will be a significant difference between Yogic Group and Aerobic Exercise Groups on Psychological variables of government high school students.

### **DEFINITIONS OF TERMS**

#### Yoga

Is a way of life which can be practiced by any human being regardless of age and condition of health. Yoga is a gaining process of control over the mind, thereby improving the physiological and psychological behaviour of an individual

#### Asana

Means holding the body in a particular posture to bring stability to the body and poise to the mind. The exercises of asana bring purity in tabular channels firmness to the body and vitality to the body and the mind.

#### Aerobi<mark>cs</mark>

Means 'with oxygen'. Aerobic exercise is designed to produce a sustained increase in heart rate and whose energy cost can be met by the body from aerobic sources, that is, from increased oxygen consumption. This is a particular strenuous exercise routine which requires plenty of oxygen, it is particularly helpful for strengthening the heart and lungs through using your bodies' muscles to increase the heart rate.

#### **Aerobics Training**

This is a particular strenuous exercise routine which requires plenty of oxygen, it is particularly helpful for strengthening the heart and lungs through using your bodies muscles to increase the heart rate.

#### Methodology

The purpose of the study was to find out the effects of yogic exercises and aerobic exercises on selected psychological variables. The purpose of the study was to find out the "Effect of Yogic exercise and Aerobic exercise on psychological variables of high school students". To achieve this purpose 150 samples selected randomly, group ranging from 14 to 16 years, subjects were divided into three groups of fifty each known as:

a) Experimental group 1- Yogic exercise group

b) Experimental group 2 -Aerobic exercise group

c) Control group 3- Control Group

### **Experimental design:**

The Selected subjects were divided in to three groups of 50 subjects, out of which two groups are Experimental groups and a control group. Experimental groups underwent the yogic exercise training Group-I, aerobic exercise training group-II in selected exercises. The training period of an experimental group was 16 weeks 5 days per week for duration of 60 minutes (the training was given between 6.30 a.m. to 7.30 a.m. Morning and evening 4.30.p.m. to 5.30 p.m.). Control group III did not undergo any training rather than their routine work.

The selection tests and	l the criterion	variables are	presented in fo	llowing table.

Sl. No	<b>Psychological Variables</b>	<b>Test /Tools Administered</b>	<b>Criterion Measures</b>
1	Anxiety	Develop by	Questionnaire
		PallaviBhatnagar	
2	Stress	Develop by Z. Akthar	Questionnaire
3	Aggression	Develop by G P Mathura	Questionnaire
		and Dr.RajkumariBhatnagar	

EXPERIMENTAL DESIGN AND STATISTICAL PROCEDURES

The pre and post-test random group design was used as experimental design in which 150 men subjects were randomly selected and divided into three equal groups of fifteen each. Group I underwent yogic exercises, Group II underwent aerobic exercises and Group III acted as control. The subjects were tested on selected criterion variables at prior and immediately after the twelve weeks of training programme as pre and post-tests respectively. The collected data were analysed statistically by using ANCOVA (analysis of covariance) to find out the effects of yogic exercises and aerobic exercises on selected psychological variables for each variable separately. Whenever, the obtained 'F' ratio for the adjusted post-test mean was found to be significant, the Scheffe's test was applied as post hoc test to determine the paired mean differences, if any. The .05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

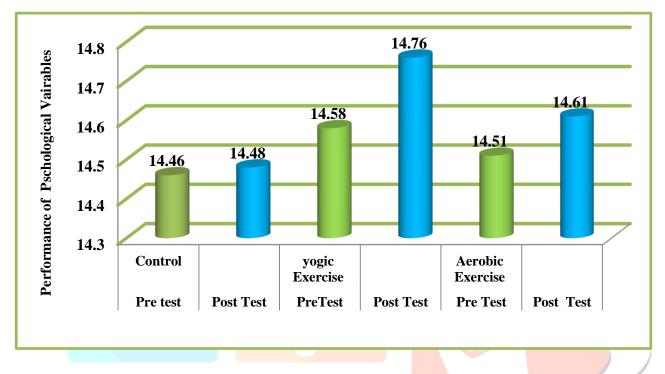
# **RESULTS OF THE STUDY**

# **Psychological Variables**

#### Stress, Aggression and Anxiety

The results of the study showed that there was a significant difference among yogic exercises group, aerobic exercises group and control group on selected psychological variables such as stress, aggression and anxiety. It also reveals that there was significant reduction on aggression and anxiety due to yogic exercises and aerobic exercises after twelve weeks of training period. It further showed that there was significant improvement on self-confidence due to yogic exercises and aerobic exercises after twelve weeks of training period. Significant twelve weeks of training period. Significant differences were found between yogic exercises group and aerobic exercises group in the reduction of

aggression and anxiety after twelve weeks of training period. And also there was a significant difference between yogic exercises group and aerobic exercises group in the improvement of Stress, Anxiety and aggression after twelve weeks of training period.



The present study was investigated the" effect of yogic and aerobic exercises on psychological variables of high school students" The psychological variables selected are anxiety, stress, aggression and achievement motivation, have been chosen to assess the effects of aerobic and yogic training on dependent variables of secondary school students. To collect the require data various tools have been administered and conducted test, psychological factors Anxiety measured by standardized scale constructed PallaviBhatanagar, stress behavior has collected by Z Akhtar, aggression by G.P. Mathura, and Dr RajkumariBhtanagar and attention ability was assessed by Attention destruction box .

. When anxiety behavior was tested yoga training group has exhibited lesser comparing to aerobic training group. Aerobic group has noticed lesser Aggressive behavior comparing to yoga training group. Yoga group has also noticed the lesser stress behavior comparing to aerobic training group. The yoga group has noticed better attention ability comparing to aerobic training group.

#### **Conclusion:**

- 1. Yoga group has exhibited lesser anxiety and stress, whereas aerobic group have exhibited lesser aggressive behaviour comparing to counterpart when it was assessed at before and after training of yoga and aerobic'
- 2. The yogic techniques and exercises have improved the attention ability comparing to their counterpart, when it was assessed at pre-post-test session.

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