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“Effect Of Yogic And Aerobic Exercise On Physical 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 physical, variables namely speed, muscular endurance, explosive power, and cardio respiratory endurance. 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 physical, variables

Key Words: yogic exercises, aerobic exercises and physical activity

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.

Exercise reduces levels of Cortisol, which causes many health problems, both physical and mental. Frequent and regular aerobic exercise has been shown to help prevent or treat serious and life-threatening chronic conditions such as high blood pressure, obesity, heart disease, Type 2 diabetes, insomnia, and depression. Endurance exercise before meals lowers blood glucose more than the same exercise after meals. According to the World Health Organization, lack of physical activity contributes to approximately 17% of heart disease and diabetes, 12% of falls in the elderly, and 10% of breast cancer and colon cancer

The beneficial effect of exercise on the cardiovascular system is well documented. There is a direct relation between physical inactivity and cardiovascular mortality, and physical inactivity is an independent risk factor for the development of coronary artery disease. There is a dose response relation between the amount of exercise performed from approximately 700 to 2000 kcal of energy expenditure per week and all cause mortality and cardiovascular disease mortality in middle-aged and elderly populations. The greatest potential for reduced mortality is in the sedentary who become moderately active

Aerobic exercise and fitness can be contrasted with anaerobic exercise, of which strength training and short-distance 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 three main focuses of Hatha yoga make it beneficial to those suffering from heart disease.

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 Physical variables of high school students.
2. To find the relation between yogic practice and aerobic exercises with Physical fitness of high school students.

HYPOTHESIS

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

- It is hypothesised that there will be a significant difference due to the influence of Yogic and Aerobic exercises on Physical variables such as Flexibility, Muscular Strength, Muscular Endurance and Agility of high school students.

Methodology

The purpose of the study was to find out the “Effect of Yogic exercise and Aerobic exercise on physical variables of high school students”. To achieve this purpose 150, sample was selected. The group ranging from 14 to 16 years studying in high school was selected randomly as 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-

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 the criterion variables are presented in following table.

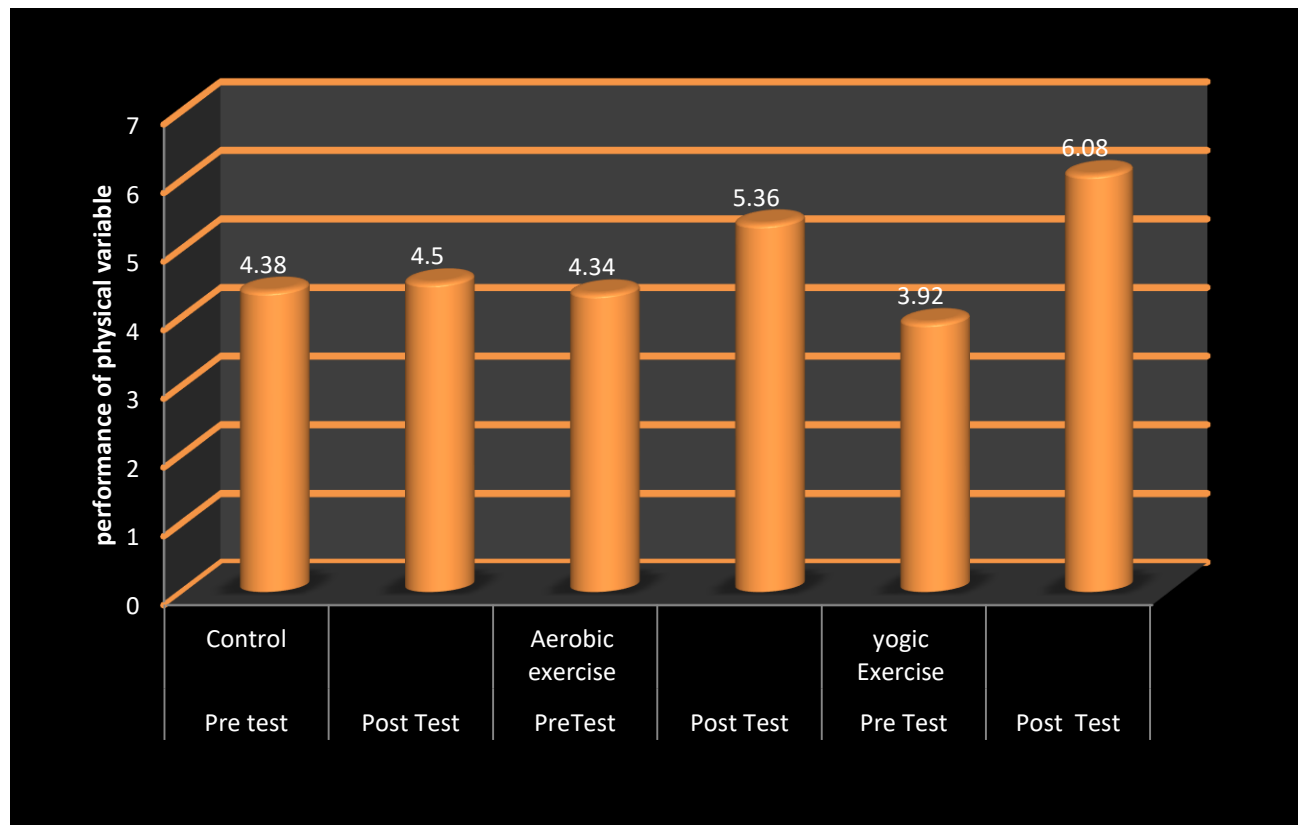
Sl. No	Physical Variables	Test /Tools Administered	Criterion Measures
1	Flexibility	Sit and reach	In seconds
2	Muscular Strength	Broad jump	In meter
3	Muscular Endurance	12 min walk and run	In rounds
4	Agility	Shuttle Run	In seconds

EXPERIMENTAL DESIGN AND STATISTICAL PROCEDURES

The pre and post-test random group design was used as experimental design in which forty five 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 analyzed statistically by using ANCOVA (analysis of covariance) to find out the effects of yogic exercises and aerobic exercises on selected physical, physiological and 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

The results of the study showed that there was a significant difference among yogic exercises group, aerobic exercises group and control group on selected physical variables such as speed, muscular endurance, explosive power and cardio respiratory endurance. It also reveals that there was significant improvement on selected physical variables namely speed, muscular endurance, explosive power and cardio respiratory endurance due to aerobic exercises after twelve weeks of training period. Further it reveals that there was no significant improvement on the performance of speed and explosive power due to yogic exercises after twelve weeks of training period. It was also noticed that there was significant improvement on selected physical variables namely muscular endurance and cardio respiratory endurance due to yogic exercises after twelve weeks of training period. Significant differences were found between yogic exercises group and aerobic exercises group on selected physical variables namely flexibility, muscular endurance, muscular strength and Agility after twelve weeks of training period. However, yogic exercises group dominated in all the selected physical variables than yogic exercises group.



SUMMARY

The present study was investigated the” effect of yogic and aerobic exercises on physical variables of high school students” physical variables are flexibility, muscular strength ,muscular endurance and agility 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, flexibility has measured with sit and reach, muscular strength through broad jump, agility by shuttle run walk and muscular endurance was assessed by Harvard test, Balance ability has been increased due to training of aerobic and yoga observing at pre and post-test session between sub group of research. Yoga group has noticed better performance with respective balance ability compare to aerobic and control group.

It was observed that the flexibility variables also significantly enhanced due to yogic training comparing to control and aerobic training among group.

Yoga training has noticed the better and increased muscular endurance comparing to aerobic training.

Conclusion:

The significant improvement has noticed in the post test of control and subgroup, yogic training group has effected and brought significant changes in their flexibility, muscular strength ,muscular endurance and agility comparing to Aerobic training group, when it was assessed at pre and post session of training.

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