

"COMPARATIVE STUDY EFFECT OF YOGASANA AND AEROBIC TRAINING ON PHYSICAL FITNESS OF COLLEGE FEMALE STUDENTS"

Author: DR. MANJUNATH V. MANNUR

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DECLARATION

I hereby declare that the book work entitled "A Comparative Study Effect of Yogasana and Aerobic Training on Physical Fitness of College Female Students". has been undertaken by me. I state that the book has not been written on the basis of other candidates who have published the same work.

Place : Dharawad

DR. MANJUNATH V. MANNUR

Date : 02/04/2022

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Dedicated To My Beloved Perents Shri. Veerabhadrappa.

AND

SMT. Lalita.

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CHAPTER: I

INTRODUCTION

The 21st century has seen a historical development in science and technology that includes space, defense, atomic energy, computers, Internet service, etc. Through the invention of the Internet we can collect the information requested in a fraction of a second from anywhere in the world. Due to this advanced scientific technological invention, the movements of the human body have been limited.

The tension and competitive feeling have increased. Man suffered from stress, hypo kinetic and psychosomatic foods. Now man should not avoid significant physical activities of any kind. Everyone wants a good physical shape and they are the conclusive goals of all those who want the joy of life. Everyone should follow good health practices in their daily lives. Secondary health ailments are quite common for everyone. In case of primary health problems, precautionary measures are many. Few people control their ailment such as blood pressure, diabetes, heartburn, asthma, etc., by taking drugs by hand. But such a practice does not completely expel the health disorder; On the other hand, it leads to many other health problems. Continuous, contextualized and punctual practice of yoga and any physical activity is an impressive tool for maintaining good health and also helps expel all sick diseases from the human body.

Lord Patanjali started this darshan yoga with this slogan. This literally means that yoga related scriptures are presented. We show yoga in our life with the ritual of this slogan. There is so much universal awareness today about yoga that it is probably written and read. The word yoga derives from the Sanskrit 'Yuj' which means pact or agreement on fair. Yoga is the connection of the image with global awareness. Swami Vivekananda said that everything is likely to obtain Divinity. Maharshi Patanjali defined the definition of yoga in the second session of the first chapter in his book entitled Yogasutra.

That is why yoga is the name of preventing the absolute instincts of constant birth in our mind through yoga. The main goal of yoga is to stabilize thoughts useful for personality development by eliminating unnecessary thoughts by controlling mental instincts. In Indian philosophy there are six traditional philosophies of Vedic philosophy, one of which is the name of philosophy.

The Darshan Yoga system is closely related to the number of Darshan. A series of psychology and metaphysics has been adopted in the practice of yoga as defined by Rishi Patanjali, but believes more than several darshans. This is honest because the power of the Goddess has been linked to the twenty-five elements of reality.

There is so much similarity between yoga and the number of darshans that Max Mullar had to say that these two philosophies were so famous that they could understand the difference between them and with God and the other without God.

Deep relationship between yoga and darshan number defined by H. Zimmer. Both visions are considered twin in India, which are two aspects of the same matter. Here, in numbers, the basic principles of the human nature of darshan are described in detail and in the definition of liberation, freeing from slavery, and the methods for contributing to both the detailed description and the definition of the elements. Physical education and sport become an integral part of education; they experience the effect of scientific improvement. Now, the one-day sports histrionics becomes excellent thanks to the inclusion of a few well-founded academic training methods and devices of importance for sports exercise, such as the improvement of techniques and strategies of sports equipment and devices, as well as other comprehensive parts and the situation of sports training.

While yoga specifically describes the practical and practical ways to get rid of the dynamics of the process or suggests a path for "kevalya". Patanjali is considered the founder of the yoga philosophy. Patasnjali's "Yogasutra" are known as "Rajyoga", which is a system for controlling the mind. Patanjali in his second sutra defined the term yoga, which is considered the formula of the precept for all his work? This concise but effective definition is based on the meaning of the three Sanskrit words. I. K. Taimnee translates that yoga is the control of mental research.

The use of this word in defining the beginnings of yoga is an example of technical terminology and the concept that plays an important role in Yogasutra. This document indicates that Patanjali was aware of Buddhist ideas and had adopted them into his system. Swami Vivekanada explained that the slogan, yoga controls the mind when various activities take place. Patanjali Ashtanga Yoga's text became the basis of a method. These eight limbs are taken from the Masutras of the second book and are the main characteristic of every Rajya Yoga that is currently taught.

The eight organs are as follows:-

- The first is Yama (The "prohibition") Non-violence, truth, invincibility, celibacy and apathy.
- Rule (the five "vows"- defilement, contentment, penance, self-discipline and godliness).
- Asana It means "sitting" and in Patanjali sutras it means holding a seat for meditation. Pranayama "controlling the prana" prana, the breath of breath means to restrain or control it.
- It also means controlling the force of life.
- Retraction "withdrawal" withdrawal of senses from subjects.
- Perception "concentration" Focusing on one thing.
- Meditation("contemplation") unilateral
- Samadhi "liberation" linking meditation to consciousness.

The greatest achievement in this branch of thought does not seem to be an illusion of diversity experienced in the world. This world is real. Furthermore, the highest result is a phenomenon in which one of the many personalities is sought, not a single universal being that can be shared with all individuals.

There are several types of yoga purposes. People seek Yoga to improve their health, to achieve salvation. Relieves the chakra and in that case identity is realized with the Supreme Brahman. In Mahabharata, the purpose of yoga has been described in several ways, such as entering the world of Brahman, performing Brahman, or Brahman or Atman, which is omnipresent. The goal is to enjoy an uninterrupted relationship with Lord Vishnu. Yoga is the science of body and mind. Therefore, it has received worldwide acceptance and scientific acceptance.

The United Nations World Health Organization (WHO) has also emphasized yoga training as an important link between physical and mental health. The proper cure for physical illness or human mental torture is yoga. Yoga helps in the internal processes of the body by making the organs and organs work. Yoga changes a person's attitude towards life and his approach to life.

The word yoga derives from the term, which means alliance, connection or harmony. Yoga unites the soul and the Supreme of God. Our Rishis Munis have described the eight parts of Yoga for the purification of the body, mind and soul. These eight limbs are Yama, Niyam, Asana, Pranayama, Pratyahar, Dharana, Dhyan and Samadhi. The concept of meditation in it is called the science of yoga.

One of the keys to finding yoga is that it helps young or old to keep their bodies healthy and healthy. As you get older, you can better understand yoga positions. You become obsessed with the appearance of open spaces. Yoga has never been a stranger to us. We have been doing this since we were young children. So it can be a cat stretch that strengthens the spinal cord or has windmills that help with digestion. You will notice that a child is doing something about what yoga is during the day. Yoga can have different meanings for many people. We are going to help you find "One Way of Yoga Life".

Yogacharya Bhavin Mehta says that the definition of Maharshi Patanjali Yoga is achieved through Yoga through the reflection of mental fullness. Ashtanga Yoga is not a separate eight-step path, but an eight-dimensional path, in which the eight dimensions are studied. His method is Ashtanga Yoga.

These eight steps are so important that they can continue to oppose the instincts of the mind and take them to the highest level up to Samadhi. Today asana, pranayama and meditation: these three organs are studied more, but the importance of the other five organs is equally important Ashtanga Yoga:-

The eight limbs of the Ashtanga Yoga are:-

- Yama,
- Niyam,
- Asana,
- Pranayama,
- Pratyahara,
- Perception,
- Meditation and
- Samadhi.

The first organ of the Ashtanga Yoga is Yama:-

There are five divisions of Yama,

- Truth,
- Non-Violence,
- Unseen,
- Apigraha and
- Brahmacharya.

Bhavin Bhai says that: Indian culture has always emphasized telling the truth and practicing it. Keep in mind that violence of any kind is not practiced with the mind, karma, promise, and does not steal or make an incorrect collection. A person can practice celibacy by controlling their senses.

- Truth: Practicing truth with mind, word and deed. Integrity brings inner peace through integrity.
- Non-Violence:- Do not think or do bad things to one's mind, promise and karma.
- Nonviolence really means loving everyone. Don't hurt anyone.
- Undesirable: Do not own anything else without the owner's permission. Don't steal in a nutshell.
- Aparigah: Do not store. Use resources to be shared.
- Celibacy: A person can practice celibacy by controlling his or her senses.

The other part of the Ashtanga Yoga is the Rule

There are also five types of rules:-

- Shouch,
- Satisfaction,
- Tapas,
- Swadhyaya and
- Ishwarapidhidhan.

Bhavin Bhai says, these are the rules that one must make in order to make life easier and happier,

- Defecation :- Keeping body and mind clean
- Satisfaction: The saying that contentment is always happy in our society is prevalent in our society, just as it means these rules.
- Tapas: Tightening the body slightly, for example, can be called the part of the tapas we fast.
- Swadhyaya : Self-study means self-study. This rule is very important for a person. "The person has to make some time for himself every day," says Bhavin Bhai.
- God-given: Brother-in-law says that this is the simplest interpretation of the irregularity of accepting God's sovereignty.

The third part of the Ashtanga Yoga is Asana:-

We all know asanas and their benefits well. "Asanas are so widespread today that through their studies you can find a long life of Norogi and don't see life," says Bhavnabhai.

The fourth organ of the Ashtanga Yoga is Pranayama:-

This organ is also very frequent. General Chat Chat Lounge Pranayama means the exercise of animals. Pranayama like Kapal Bharti and Anulom Willomb are most popular. The simplest rule of pranayama is to breathe. Breathe in the lungs breathe out slowly. Pranayama is essential for keeping the body vibrant, focused mind and happy mind.

The fifth part of the Ashtanga Yoga is the retraction:-

Bhavnabhai says that the practice of refraction can be somewhat daunting.

Here the individual must control his senses and reconnect with his original source. In short, the eyes look good; the ears listen to music, etc.

The sixth organ of the Ashtanga Yoga is assumption:-

Perception is the assumption of a goal by stabilizing the mind on a single object.

The seventh organ of the Ashtanga Yoga is meditation:-

Meditation means meditation, today the term has become very popular, people are also taking lessons for it. But in short, meditating means stabilizing the mind and keeping it for a long time.

The eighth organ of the Ashtanga Yoga is Samadhi:

Samadhi is the last supreme step of the Ashtanga Yoga. In the end, Bhavnabhai says, "One must begin a complete yoga practice by practicing or practicing the organ that is convenient for the person. In the modern world, the sports field has become so popular that a large number of young men and women participate in sports around the world. The level of physical activity has significantly improved thanks to mechanical principles and modern training. An athlete or player takes advantage of training methods and always switches from one training process to another to take advantage of it.

Yogasana training and aerobic training are considered more efficient than other training methods for developing fitness. It is long lasting and can be performed in different stations without devices. Yoga practice includes Asana and Pranayama and aerobic exercises include running, walking, swimming, cycling and aerobic dance that improve physical fitness.

Physical fitness is the ability to live a comfortable and commensurable life.

The physical and mental period of the healthy person of the healthy and cheerful life.

Physical fitness must be essential for today's generation of young people. It provides self-confidence and maintains mental awareness. Somatic health is necessary for humans to feel good about their nature, since their mind and body are in complete Consonance. Clark and Clark (1989) investigate the fact that physical health is not a stable object and that it separates from person to person and occasionally in the same person according to the components. Engraving two lines 10 meters isolated using stepping tape or cones. The two squares were set notwithstanding what may be normal the line they were going to start at. On the sign "arranged", the part puts their front foot behind the starting line. On the sign, "go!" the part hurries to the versus line, gets a square of wood, run back and puts it on or past the starting line. By then turning without a rest, they run back to recover the resulting square and pass on it back over the end line. Two starters were performed.

The most specific goals of physical health are to improve somatic health. Concordant with Nixon and Cozens (1964); It was the resource for establishing scientific evidence of somatic health improvement that generated data from the first meeting of physical inculcators in 1885 when the occupation of physical education was generated.

The Council of the President of the United States on physical health and sport describes the terms "physical fitness as the ability to carry out daily activities with enthusiasm and activity, without inept fatigue, with abundant energy to enjoy leisure activities and face unknown emergencies" (Clarke, 1971). Normal health indicates a person's ability to live more impressively with his or her ability, which is based on physical, mental and consciousness, social and spiritual elements of health that are highly associated. Preliminary physical health is recognized by the president's advice on physical health and sports were athletic strength, muscle endurance and cardio-respiratory endurance.

However, later on, the association of presidents also included some other elements of motor performance, such as agility, speed, elasticity and balance in physical health. But taking into account the common observation of most researchers, the author has not adapted the component such as momentum, agility, power and balance (which are more important for results in specific sports) as necessary basic elements of fitness.

However, the author defines physical health from a group of five elements, namely strength, tolerance and cardio-respiratory distress, flexibility and body composition. It is a significant reference here that some academics (e.g. Clarke and Clarke, 1987; AAHPERD, 1980, 1984) require a fitness comparison test that contains standard body fat percentages, such as physical health tests1 Farsighted men of all ages and castes, white, brown, yellow and black, cults or banaustics, rude, returning to the caves, harnessed the power of the mind over the body. When you impress with your exercise, you will find that the mind is the most important part of training.

Fitness: - the exercise recognized nine elements which consist in the representation of physical fitness.

The following list lists each of the nine essences and illustrations on how they are used:

- Endurance: A muscles ability of the organs against fatigue (persisting eruptive rebounding through an entire Basketball game.)
- Co ordination: The capability to unify the atop schedule components, so that effective.
- **Strength:-** The precinct to which muscles can applied force by agreement against resistance.(holding or preventing factor or Person)
- **Power:** The capability to apply at most muscular contraction immediately in an explosion irrupts of movements. (Jumping, sprint/ starting.)
- **Agility:** The potency to apply a sequence of explosion power momentum in accelerated inheritance in conflict directions.
- **Balance:** The capability to control the body position, either stationery or while moving.
- **Flexibility:** The capability to achieve an extended range of motion without being impeded by excess tissue, i.e. fat or muscle. (Executing a leg split.)
- Local muscle endurance: A single muscles capability to perform sustains work.
- **Cardiovascular Endurance:** The heart function to deliver blood to working muscle and their capacity to use it.

Strength movements are achieved of all among the nine factors of health cardio respiratory attributes is very significant to improve as it enhances all the another different parts of the situation equations. Body composition is the performance of the caloric balance and, since the emphasis has traditionally been on the side of the caloric intake of assimilation, we are now increasingly aware of the enormous power of production in regulating body weight.

The short-term interim process and large-scale community studies show that different physical activities help reduce body fat. Body clearance is not only transcendental for health and is influenced by exercise; it is also an important public health problem and therefore deserves greater awareness in the physical fitness test.

The main step in a scheduled area of exercise is general assessment, when it is suitable for anyone planning to participate in a timely physical gymnastics program for a medical examination. The best way to find out about anybody problem is by analyzing urine in the blood. Through the blood test we can discover most of the diseases and problems of the body.

During exercise, the protoplasm category of sparsely spread molecules increases by about ten percent due to the drop in the water content of the protoplasm.

This impact must be taken into account in the assessed impacts of exercise in the lipoprotein category, as well as in molecules that are linked to proteins such as FFA.

As a result of the exercise, the category of protoplasm triglycerides and inadequately compact lipoproteins remains stable or falls a little alone in the accelerated contents during exercise for two hours with a load of up to 400 kg m / minute.

Physical training or conditioning is the process used to develop parts of physical health. Conditioning causes physiological changes mainly in each system of the body. The consequences of the modification of the fiscal year are influenced by the recurrences, by the period and, in particular, by the acuity of the programmed fiscal year and by the inheritance.

The impacts of training are particular for the form of exercise performed by the muscle groups involved and for the form of training program used the scientific study of exercise and its benefits has an impact on the body increasing significantly with the growing awareness of the relationship between exercise and health. Field and laboratory research on human training issues is added with physiological and biochemical studies on experimental animals, along with accumulated and chronic exercises that can now be persuaded on a cellular and molecular level.

According to the Indian tradition, Yoga, in particular Hathayoga, is composed of different yoga exercises, namely asana (body postures), pranayama (controlled modulation of breathing), bandha (physiological blockages or inclusion of elective muscles), kriya (purification procedure) and mudras. (Attitude that spontaneously elevates contemplation) Swami kuvalayananda, the father of scientific exploration in Yoga and the confirmatory of Kaivalyadham (India) has linked the yoga exercise program to preserve recovery and tranquility.

Yoga is a plan of conical punishment, generated in India by the self imbibes.

However, today, the academic researcher notes its usefulness for a complete evolution of the personality in the company of incalculable spiritual and therapeutic attractions, yoga education is becoming more famous in the sectors of all sports fields and, moreover, in the study program in all of India. Yoga (Sanskrit Pali, yoga) is a physical, mental and spiritual punishment that emanates in neoteric India, whose goal is to obtain a state of complete spiritual sense and tranquility. The Praus are companions in contemplative studies on Hinduism, Buddhism and Jainism.

The Sanskrit term yoga has the literal meaning of "yoke" or "the task of yoke or congruence" from a root. In Vedic Sanskrit, the word "yoga" besides its specific meaning is the yoke or the relationship of bulls or horses; it already has a figurative vision, where it receives the common intention of "use", use, application and performance ". The idea of "activity, endurance, enthusiasm and perseverance are found in the Sanskrit epic.

The most important benefit of yoga is physical and mental therapy. The Indians have placed great importance on "yoga" and "physical exercises" not only to prevent or treat physical ailments/diseases, but also to keep fit. The great old Rishis, Vedas and Purans also placed great importance on physical fitness (Uppal and Gautam, 2006). Traditionally, Lord Shiva is considered to be the original founder of yoga. It is believed that this secret divine science of life, revealed to the sages enlightened during meditation, was first narrated by Lord Shiva to his wife Parvati for "Improving humanity". Hiranyagarbha was proclaimed as the first yoga teacher.

Yoga is an ancient science of physical, mental and spiritual development. Yoga has become increasingly popular in western cultures as a means of exercise and physical training. Yoga is essential for developing harmony between body, mind and spirit. Yoga asanas are ways of moving and / or keeping the body in a different position. Yoga asana has several exercises or postures that work wonders on fitness and health.

The exercises (postures) vary widely in their application and style, and gently extend and explore all parts of the body. Yoga asanas increase physical strength, endurance and flexibility, improve blood circulation, improve posture and muscle tone and provide greater concentration and self-control powers.

Through the practice of yoga, we become aware of the connection between our emotional, mental and physical levels. On the other hand, pranayama is one of the five principles of yoga or breathing and exercise that promote proper breathing. The ultimate goal of yoga is to allow you to blend the raw (annamaya), physical (pranamaya) (material) mental (manomaya), intellectual (vijnanamaya) and spiritual

(Anandamaya), within your being. From the yogic point of view, proper breathing is bringing more oxygen to the blood and brain and to the control of Prana or life's vital energy. The union of these two yogic principles is considered the highest form of purification and self-discipline, which includes both the mind and the body the long-term study of yoga conducted by professionals in the United States, has transmitted the changes in physical and musculoskeletal fitness, as well as the decrease in the characteristics of asthma in asthmatics.

Punctual yoga has exerted high brain assessments of GABA and has been shown to change mood and decomposition more than other metabolic exercises, such as jogging and walking. When we talk about fitness, we usually think about the body, but about your fitness? The emotional mentor, social advancement with spiritual facet is also vital.

What is our requirement for an entire health?

Total health

To acquire the above purpose, one must practice some type of somatic activity such as exercise or yoga or any sport or game; it's a fact. Can you change from person to person depends on one? The preference

to spend a few times early in the morning doing yoga is the best recipe for a healthy mind in a healthy body.

Therefore, the scope of this research is broad. Yoga defines the association of staff with the global self.

This is an imposed science and a systematic human lifestyle. Its aim is to improve all individuality. Compatible with Maharsi Patanjali, yoga has eight components, namely, yama, niyama, asana, pranayama, dharana, dhyana and samadhi. However, Hatha Yoga represents yoga with asana, pranayama, kriya and mudra.

Several training programs have been developed to strengthen the body part. Most of these programs consist of vigorous and endurance exercises that further emphasize the working out of physical strength and suffering. Any personal change in your abilities and fitness level. The yogic practices that are popularized are systematic visions for improving an individual's physical fitness.

However, the experiment lacks evidence of the usefulness of physics and exercises to promote physical fitness. Exercises can be said to contribute to fitness; therefore, it is necessary to consider the concept of yoga exercise, in relation to physical fitness. Yoga is approved as one of India's most important and valuable legacies. Today, an entire universe is seeking in yoga the answer to several problems faced by modern man, who has been designed and practiced by our ancient sages for immanent personality improvement.

Now one day yoga is becoming famous and compatible with the use of figure and fitness. A few minutes of daily yoga provide good results in integral development.

To bring yoga to life and really use it, you have to take it seriously in all senses of the word and experience it as an essential part of everyday life. Raising awareness of fitness in the community is very important for people who need to realize the value of fitness.

The current physical state is composed of several factors such as endurance, body composition, flexibility, muscle state and ability to achieve mental relaxation. True physical fitness takes care of the ability of a fit body to create a calm and happy mind. If your body is a sacred place, it likes a temple and a soul, divinity; the true physical state beautifies the temple and pleases the divinity. Fitness is the mother of sport.

The more fit the athlete the better the performance. Yoga is not devotion or a gentle part of religion; It is a way of life whose goal is "a healthy mind in a healthy body". Yoga helps us to immanent improvement such as physical, mental and spiritual being; Yoga also helps balance the improvements from the previous three. Different types of exercise and training, such as aerobic exercises, ensure an improvement in somatic well-being. They have little to do with improving the spiritual or astral body. Yogic exercises replenish the body with universal energy.

This convenience

- Procurement of complete balancing and concordant.
- Encourages self-reforming.
- Removes negative blocks from the mind and poison from the body.
- Enhances Personal power.
- Increases self-awareness.
- Assists in caution focus and concentration, in particularly significant for children.
- Commute stress and bewilderment in the physical body by energizing the parasympathetic nervous system.

The desirous feels renovated and energize. Thus, Yoga dedicate upon every desirous the energies to control body and mind.

• Exercise

It is very essential for each of us to carry out certain types of physical activity. Playing sports is not only a great hobby, but also a great way to keep fit.

But teenagers tend to skip this important aspect of their life, to hang out with friends. This is where young people depart from their healthy and dominant lifestyle.

• Sleep

Having a peaceful sleep contributes greatly to preserving all your physical conditions. In fact, sleeping well is one of the main beauty mysteries of celebrities. If you have a hygienic dream, it shows up on your face in the form of radiance. Adequate sleep deficiency is likely to motivate the short temper and increase the pause in mood swings.

STATEMENT OF THE PROBLEM

The aim of the study was to "A Comparative Study of Effects of Yogasana and Aerobic Training on Physical Fitness of College Female Students".

THE OBJECTIVES OF THE STUDY

The following objectives will set for the present study,

- To find out how the physical fitness variables changes through yogasana training and aerobic training.
- To find out which experimental group increases faster on physical fitness during pre and post test.
- To find out which experimental group maintains physical fitness for longer duration during the training cessation period.
- To find out which training group decreases quickly on physical fitness during the training cessation period.

HYPOTHESES

The following null hypotheses are set for the present study.

- There is no significant difference between mean of score of Control group and Yogasana group of college female students.
- There is no significant difference between mean of score of Control group and Aerobics group on college female.
- There is no significant difference between mean of score of Aerobics group and Yogasana group.
- There is no significant difference between mean of score of experiment group and control group after Yogasana and Aerobics training programme on physical fitness on college female students.

DELIMITATIONS

The following delimitations are set for the present study

- The study will be delimited to the study 75 (seventy five) healthy untrained female students are selected on random basis and aged between 18 to 21 years.
- The study will be delimited to the students are selected from Karnataka University Arts, Commerce college Dharawad

LIMITATIONS

- The hereditary and environmental factors, which would influence the criterion variables, are recognized as limitation.
- Methodological variations such as air temperature, atmospheric pressures, relative humidity etc. during testing periods not will be controlled and their possibility influence on the result.
- Day to day activities, rest period, food habits and life style could not be controlled.

DEFINITION OF THE TERMS

- **YOGA:** Yoga is the unit of physical and mental discipline, with control of breath and all other functions, practiced in order to attain one pointed concentration of mind, spiritual union with the supreme.
- **ASANA (POSTURE):-** Asana means holding the body in a specific posture to bring stability to the body and poise to the mind.
- AEROBIC EXERCISES: Aerobic literally means "with oxygen in and refers to the use of oxygen in muscles energy generating process. Aerobic exercises typically those performed at moderate levels of intensity for extended periods of time that maintain an increased heart rate.
- **AEROBIC DANCE:** Move rhythmically in a series of steps along with a partner or in a group or movement and steps in time to music.

CHAPTER: II

REVIEW OF RELATED LITERATURE

A study of the related writing is an occupant venture to know a whole image of what has been done and said concerning the issue underneath study, this sorts of assessment achieves an expansive understanding and a neater see of the whole sports divisions. The audit furnishes us with a chance of increasing directly into the strategies, measures, subjects and approaches utilized by other research laborers. Investigation of counseling written works demonstrates finding perusing assessing of investigation just as reports of startling perception and intendment that are counseled to the particular arranged research venture.

2.1 STUDIES ON YOGIC TRAINING

- Padhi Laxmipriya, Patra Sanjib (2009), pranayama is the fourth Anga or member of Astangayoga. It is one of the important components of Astangayoga. The article on pranayama will provide valuable information to readers as well Professionals must have adequate knowledge of psycho physiological research using pranayama as an intervention. The results of the research studies have been arranged in sequence and with different subtitles.
- Bera T. K. (2008), Research reports, available so far, reveals that the physiological significances of yoga are generally explained in terms of its effects. In fact, the accurate mechanism about how yoga works at physiological level is less known. Although many experts explain various mechanism of yoga physiologically, however many of such explanations are based on assumptions and speculations. In this study, considering the claims of traditional texts, the present researcher has drawn certain cardinal principles based on the physiological findings of scientific researches in yoga.
- Galantino, Mary Lou, Galbavy, Robyn Quinn, Lauren (2008), they completed a systematic review of the literature on the effect of yoga on quality of life and physical outcome measures in the pediatric population. We explored various databases and included case-control and pilot studies, cohort and randomized controlled trials that examined yoga as an exercise intervention for children. Using the Sackets levels of evidence, this article reviews the literature on yoga as a complementary mind-body movement therapy.

We address the research through three practice patterns according to the Guide to Physical Therapist Practice and provide considerations for the inclusion of yoga into clinical practice. The evidence shows physiological benefits of yoga for the pediatric population that may benefit children through the rehabilitation process, but larger clinical trials, including specific measures of quality of life are necessary to provide definitive evidence.

- **Bhogal R.S. (2008),** Therapeutic applications of Yoga have been evident all over the world. However, the sufficient research data, to establish the scientific bases of the healing/curing mechanism, are not available so far this article is an attempt to propose a plausible scientific reasoning behind such a mechanism in the light of "Physiology of Traditional Yoga and Meditation" as well as, in the context of "a better body functioning through Yogic interventions." Impact of selected Yoga Practices on various conditions and body organs, along with contra-indications of Yoga practices for certain conditions; have also been proposed in the article.
- **Kuvalayananda Swami (2007),** Intra-esophageal pressures were seen to be more negative during Uddiyana and more positive during Uddiyana Bandha in comparison to deep inspiration and expiration respectively. The favorable influence of these pressure changes on circulation has been discussed.
- Kuvalayananda Swami, Karambelkar P. V. (2007), with controlled diet regimen; no increase in urinary acidity was noted after Bhastrika Pranayama for 45minutes followed by rest for 15 minutes. One round of Bhastrika consisted of 40 strokes of Kapalabhati in 20 seconds followed by Puraka-Kumbhaka-Rechaka of 10-20- 40seconds followed by next round in the same manner.
- **Kuvalayananda Swami** (2007), better functioning of nervous system, endocrine glands, circulatory, respiratory and digestive systems through the practice of pranayama and thus vitalizing the human organism is discussed in details and its psychological impact in respect of inner perceptions leading to higher consciousness has been outlined.
- Kuvalayananda Swami (2006), a gradual evolution of pranayama has been formulated and divided into five important stages. In the first evolutionary stage pranayama invariably meant Antar-Kumbhaka. In the second stage pranayama became independent of religious practices, but during pranayama mental recitation of Gayatri with Vyahrti, Pranava and Siras was compulsory along with meditation of Savita (Sun.).Use of pranayama with simplified technique and mental

recitation of Pranava for spiritual and mystic goals marked the third evolutionary stage. During the fourth evolutionary stage it became a pure psycho physiological practice. During the Fifth evolutionary stage Hathayogins described eight varieties of kumbhaka emphasizing more on the physical rather than the mental aspect. Last but not the least an attempt to co-ordinate pranayama with modem physiology is being made by Kaivalyadhama.

- Bera T. K. (2006), a conceptual approach towards standardization and evaluation of asanas, based on biomechanical principles and subjective expressions, has been proposed. Using criteria of Yogasana, as found in ancient texts, the evaluation of performance score of a Yogasana (PSY) is suggested by means of the equation: PSY= (SB + MT) + MS (where, SB = Stability of Body, MT'=Maintenance of Time, SM = Stability of Mind). An innovative instrument for the purpose has also been proposed. The terms Asana and Yogasana have been used synonymously.
- Sugumar (2021), the study was designed to detect the impacts of yoga practices on body composition among college students. Thirty healthy and untrained male subjects from various departments of the Gandhigram Rural Institute, Deemed University, Gandhigram, Dindigual were preferred and their ages ranged from 18 to 25 years old. The subjects were distributed identically into two groups, namely the control and the experimental group. The experimental group underwent selected asanas and Pranayama for five days a week for six weeks. The control group did not undergo any training programs instead of their routine work. Body composition was measured using the BIA method in all three sites. Before and after the end of the practice period, all subjects were assessed.

The results of previous and subsequent tests were compared with the use of covariance analysis. The discovery of body composition shows a significant improvement due to six-week yogic practice compared to the stable group.

• Manimakalai and Chitra, (2021), she studied the effect of Yogasanas practice on flexibility among university women. Thirty healthy and untrained women from Annamalai University in various departments were preferred and their ages ranged from 18 to 25 years. The subjects were divided into two groups, namely the control and the experimental group. The experimental group passes favorite asanas for five days a week for eight weeks. The stable group did not pass any training programs instead of their routine work. Flexibility was measured using sit and reach the box. Before and after the end of the practice period, all subjects were assessed. The results of previous and subsequent tests were compared with the use of covariance analysis. The discovery

of flexibility shows a significant improvement due to eight-week yoga practice compared to the Stabile group.

- **Praveenakumar et. al. (2011),** He studied the impacts of pranayama and yogic meditation on selected somatic and physiological variables. Thirty children in the 12 to 15 age group were selected by the yoga department of the University of Karnataka, Dharwad. The subjects were divided into two groups, namely stable and experimental group. The experimental group was assigned yoga, pranayama and meditation for a period of twelve weeks, both in the morning and in the evening, on alternative days of the week. The stable group did not participate in the yogic pranayama and meditation training programmer. The information collected was analyzed statistically using the covariance assessment (ANCOVA). The group of experiments showed a marked improvement in the preferred somatic and physiological variables without systolic and diastolic pressure compared to the stable group.
- **Raju et. al. (1997),** He studied the short-term impact of 4 weeks of intimate yoga practice on physiological responses in six healthy volunteer midwives. Responses were measured using a maximum stress test on the treadmill. Yoga practice included morning and afternoon sessions of 90 minutes each. Histrionics were compared before and after yoga exercise. At most, the work produced for the group increased by 21%, with a significant reduction in the category of oxygen used per unit of work, but without a significant simultaneous change in heart rate. After an intense yoga workout, at 154 min (-1) (in proportion to the pre-yoga max in most exercise tests) participants could practice more relaxed, with a significantly lower heart rate (p <0.05), ventilation per minute of travel (p <0, 05), Use of travel oxygen per work unit (p <0.05) and a significant lower respiratory quotient (p <0.05). The connotation o the impact of intimate yoga on cardio-respiratory competence is discussed, with the suggestion that yoga has a quantifiable physiological impact in a transparent way different from other exercises.
- Takeshima (2021), studied the impact of concomitant aerobic and contradictory training on physical training on physical fitness in the elderly matron. Thirty five volunteers were distributed into two groups programmed group of exercises with accommodative circuit (PG) 8 men and 10 women, 68.3 (4.9) years and non-sports control group 7 men and 10 women, 68.0 (3, 4) years). The PG participated in a 12-week supervised program, 3 days a week, which included 10 minutes of warm-up and 30 minutes of operation of the scheduled accommodation circuit. (Moderate intensity hydraulic resistance exercise and aerobic activity at 70% of

maximum heart rate) followed by 10 minutes of cooling exercise. Programmed accommodation circuit exercise increased oxygen uptake Muscle power appreciated by a high hydraulic resistance exercise machine with low to high contradiction dial settings for knee extension, knee flexion, back extension and flexion, traction chest pressure and pressure, shoulder pressure and pressure on the legs and body fat (sum of three skin folds) decreased and high density lipoprotein cholesterol (HDLC) increased per PG. No changes were made to any variables for the control group. These results indicate that scheduled accommodation circuit training includes aerobic exercise and hydraulic resistance exercise which significantly improves cardio respiratory health, muscle power and body composition.

- Toy, (2021), studied the effects of aerobic dance training on Vo2 Max and body composition in early middle-aged women. Twenty subjects were selected for the experimental group (No: 10) and the control group (No: 10) for this study. The practical group spends twelve weeks of aerobic dance training. The control group that has not received any training. The selected variables were vo2 max, body weight, body mass index and body fat percentage measured in the study. After twelve weeks of aerobic dance training, a significant reduction in body weight, BMI and body fat percentage and a significant reduction in vo-2 max were observed. This study highlights that systematic aerobic dance training helps increase physical fitness and respiratory cardio among middle-aged women.
- Rathore B. S. et al. (2009), done an assessment on "Essential Analysis of Cardiovascular and Motor Fitness Abilities of Inter-University Players". The assessment contains the going with. The purpose behind this assessment was to review cardiovascular and motor wellbeing profile (limits) of between school players of University of Rajasthan. An immaterial differentiation between particular game and gathering game players (t estimation of .06 was not actually the table estimation of 1.96 required for 't' test to be essential at 0.05 level with 118 degree of chance) was seen in cardiovascular determination, sensitive quality, solid quality and duration of arms and shoulders, skill and hard and fast J.C.R. scores. Watchwords: Cardiovascular profile, motor wellbeing, particular game players and gathering game players.
- M Rajeswari and Dr. P Anbalagan (2017) explored the effect of pranayama with Aerobic exercise with Aerobic health. There are affirmations that the demonstration of pranayama and high-sway rehearses improves physical and mental execution. The present assessment was grasped to mull over the effect of pranayama with energetic exercise on solid duration, crucial

farthest point and cardio respiratory tirelessness. Thirty customary male volunteers had encountered a 12 weeks instructional class of pranayama (n1=10), energetic exercise (n2=10) and pranayama with high-sway work out (n3=10). The suitable parameters were used when the planning. The results show that the pranayama bundle set apart as higher degree in imperative farthest point (p<0.05). The oxygen expending gathering shows increasingly imperative cardio respiratory diligence and solid duration than the other groups (p<0.05) .But the merged pranayama and energetic exercise pack shows a more critical improvement in all viewpoints than the other three social events (p<0.05).

- Samsudeen, (2011), inquired about the effect of pranayama with Aerobic exercise with Aerobic health. There are affirmations that the demonstration of pranayama and high-sway rehearses improves physical and mental execution. The present assessment was grasped to think about the effect of pranayama with energetic exercise on solid duration, central cutoff and cardio respiratory steadiness. Thirty conventional male volunteers had encountered a 12 weeks instructional class of pranayama (n1=10), overwhelming activity (n2=10) and pranayama with high-sway work out (n3=10). The fitting parameters were used when the planning. The results show that the pranayama pack set apart as higher degree in irreplaceable point of confinement (p<0.05). The oxygen devouring get-together shows increasingly imperative cardio respiratory determination and solid duration than the other groups (p<0.05). But the united pranayama and energetic exercise pack shows a more essential improvement in all points of view than the other three get-togethers (p<0.05).
- Saroja, (2011), Directed the investigation on to discover the impact of yoga practice, physical exercise and blend of yoga practice, physical exercise on chosen engine capacity parts, physiological factors among school men understudies. For these reason sixty school men understudies were chosen as subjects aimlessly from different universities in Sivagangai District, Tamilnadu, India and their age was 19-23 years. They were isolated into four gatherings to be specific yoga gathering, physical exercise gathering, and yogic practice and physical exercise consolidated gathering and control gathering. The initial three gatherings did yoga asanas, pranayama, Dhayana and physical exercise separately for about a month and a half. The pre and post test were taken for every one of the subjects when the preparation separately. Subordinate factors are Motor capacity segments (Flexibility, Cardio Respiratory continuance) and Physiological factors (Resting beat rate, Breath holding time) Independent factors (yoga,

physical exercise, mix of yoga and physical activities gathering and control gathering) were chosen. This investigation presumed that the degree of adaptability was improved more noteworthy by chose yogic practices that that of physical activities and joined preparing of yogic practices than that of physical activities and continuance was essentially improved more noteworthy by chose consolidated exercises that of physical activities. Likewise physical activities improve the cardio respiratory continuance more noteworthy than yogic practices. Yogic practices improved the resting beat rate more prominent than physical exercise.

- Kewal Krishan and Sudhir Kumar Sharma (2009), done an investigation on "Effects of Yogic Practices and Callisthenic Exercises on Resting Pulse Rate Variable of Secondary School Boys". The examination contains the going with. The objective of this assessment was to consider the effects of yogic practices and callisthenic rehearses on resting beat rate components of helper school youngsters in Hamirpur region of Uttar Pradesh Total 120 young fellows subjects (40 yogic works on get-together, 40 exercise works on social occasion and 40 benchmark gathering) were put under yogic practices and exercise rehearses bundle a pretest was taken for all the 120 subjects. A month and a half getting ready of yogic practices and exercise rehearses was given to the different social affairs. A post test was taken after a month and a portion of the readiness. Examination of contrast was applied to take a gander at the four social occasions, for their heartbeat response model, and Schaffer's post hoc test was applied to find the commonness of the get-together. The outcome of the assessment indicated that Resting beat pace of yogic practices pack was better than the following two social occasions. Catchphrase: callisthenic and resting beat rate.
- Raj kumar and Durgesh (2007), done the effect of callisthenic practice and yogic asanas on the improvement of trunk and shoulder versatility among PU students. Sixty youngsters moving in class twelfth in V.G. WOMEN'S PU College Gulbarga, were picked discretionarily and divided into three social events. Two social events and B are exploratory get-togethers and C is the benchmark gathering. Each social event having twenty subjects under 16-18 years of age were filled in as subjects. Social affair a performed yogic asanas, Group B was presented to exercise and assembling C filled in as the control. The length of the arrangement program was two months. The basic mean difference between the pre test and post test for trunk and shoulder flexibility were dismembered using that' extent and Analysis of co covariance.

The examination demonstrated that both the test bundles accomplished an in a general sense better display when appeared differently in relation to the benchmark bunch in the two components. The assessment of data moreover revealed that yogic asana exploratory social event showed to be amazing when appeared differently in relation to the callisthenic works on get-together.

- Shahid Bashir (2015), his studied on Impact of yogic and physical exercises on personality variables. A study of college level students. The research work has been complete on merits and norms were followed strictly to avoid any mistake or fault that will affect the experimental design, validity and authenticity of the research work. The present research paper is the step to calculate the impact of exercise habit on psychological variables of college students. The sample size consists of 160 college students and the subjects were selected on the basis of random sampling procedure were applied and the age limit of the subjects is between 18 to 25 years. Sample design About 120 students are selected and were divided in to three groups and each group contains 60 students. One group as control and other two experimental groups Criteria measures 1-Emotional Intelligence 2-Aggressive Behavior 3- Anxiety Level.
- Shiv Kant, Mastram (2015), Impact of yoga preparing on physiological factors of school level understudy. The Purpose of this examination was to research the impact of yoga preparing on physiological Variables of school level understudies. Another reason for the investigation was to improve the physiological degree of understudies. subjects were chosen haphazardly from Govt. Sr. Sec. School, Ugalan, Dist. Hisar (Haryana). The concentrated physiological factors are Pulse rate, systolic circulatory strain, diastolic circulatory strain and Respiratory rate.

The mean and 't' test were applied for understanding of information. The degree of centrality was set at .05. The outcome uncovered that there was critical (p<.05) impact of yoga preparing on physiological factors of school understudies.

CHAPTER: III

METHODOLOGY

The selection of subjects, procedure for diagnosis of postural disorder, program schedule and the statistical methods which will be adopted for collection and assess of the information are presented in this chapter.

SELECTION OF THE STUDY

A. SAMPLE:

The aim of the study was to find out the impacts of yogic training and aerobic training on physical fitness of college female students. Seventy five healthy, untrained students were selected from Shree Avenue Building, Haliyal Rd, Dharwad Karnataka, India, for this study. The subjects age grouped from 18 to 21 years.

Group Strength and Treatment

Group	Total Strength	Treatment
Experimental Group A	25	Aerobic training
Experimental Group B	25	Yogasana
Controlled Group C	25	Neutral

B. TOOLS

The following tools will be used to measure the performance parameters of the students will selected for the study.

- 1. 50 meters Sprint (Running)
- 2. Standing Broad Jump
- 3. Shuttle Run
- 4. Shot Put Throw
- 5. Sit and Reach Test

FITNESS TEST EVENTS

No.	Test	Measurement	Assessment
1	50 meters	Acceleration and	50 meters Race test was taken and 1/10 second's
	Sprint	speed	time was noted.
	Standing	Explosive strength of	Standing Broad Jump test was taken and the nearest
2	Broad Jump	the legs	mark from the starting line was noted in meter and
			centimeter.
	Shuttle Run	Speed and Agility	Shuttle Run test in a 2X10 meter area was taken and
3			1/10 seconds time was noted.
	Shot Put	Throw core body	Shot Put Throw test was noted in meter and
4		strength and total body	centimeter.
		power	
5	Sit and	Test Flexibility	Sit and Reach Test was noted in centimeter
	Reach		

TEST ADMINISTRATION

I. 50 METER SPRINT

PURPOSE: The purpose of this test is to determine momentum and speed.

EQUIPMENT REQUIRED: Measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 70 meters.

PROCEDURE: The test includes running a single at most sprints over 50 meters, with the time recorded. A thorough warm up were allot, involving some practice starts and momentum. Start from a stationary standing position (hands cannot touch the ground), with one foot in front of the other. The front foot was behind the starting line. Once the subject was ready and stable, the starter gave the command "set" then "go." The testers were provided hints for at most speed (such as keeping low, driving hard with the hands and legs) and the participants were conduced not to slow down afore crossing the end line.

RESULTS: Two tests were allowed, and the best time was collected for the two nearest decimal places. Time starts from the first movement (if a stopwatch is used) or when the timing system was activated and finished when the chest crossed the finish line.

RELIABILITY: Credibility is greatly rectified if timing gates are used. Also weather situations and running surface can affect the results, and these situations should be noted with the results. If feasible, set up the track with a crosswind to at least the affect of wind.

II. STANDING BROAD JUMP TEST

AIM: To measure the eruptive strength of the legs

EQUIPMENT REQUIRED: Tape measure to measure distance jumped, non-slip floor for takeoff, and selected soft landing area. Consulted sports field Long Jump Landing Mats are also procurable. The take off line should be clearly marked.

PROCEDURE: The subject was asked to stand behind a line marked on the ground with feet slightly apart. Two foot takes off and landing was used, with swinging of the arms and bending of the knees to furnished forward drive.

The subject efforts to jump as far as possible, landing on both feet without falling backwards. Three efforts were allowed.

SCORING: The measurement was taken from take-off line to the nearest point of contact on the landing (back of the heels). Noticed the longest distance jumped the best of three attempts.

III. SHUTTLE RUN

PURPOSE: To measure speed and agility

EQUIPMENT REQUIRED: Wooden blocks, marker cones, measurement tape, stopwatch, non-slip surface.

PROCEDURE: Imprint two lines 10 meters separated utilizing stamping tape or cones.

The two squares were set despite what might be expected the line they were going to begin at. On the sign "prepared", the member puts their front foot behind the beginning line. On the sign, "go!" the

member runs to the versus line, gets a square of wood, run back and puts it on or past the beginning line. At that point turning without a rest, they run back to recapture the subsequent square and convey it back over the end line. Two preliminaries were performed.

SCORING: The quickest time was recorded. Results were noted to the nearest tenth of a second.

IV. SHOT PUT

AIM: To measures core body brawn and total body strength.

EQUIPMENT REQUIRED: Shot put, measure tape, clear open area for testing.

PROCEDURE: The athlete started with his back to the throwing region, with their heels at the start line, and the shot cradled in both hands between the knees.

The subject bended forward and downward afore throwing the shot backwards over their head in a twohanded throwing action (optimally at about 45 degrees).

SCORING: Measurement was made from the starting line to the point of effect of the shot put with the ground. The measurement was recorded in meters and centimeters. The best result of two trials was recorded.

V. SIT AND REACH FLEXIBILITY TEST

PURPOSE: To measure the flexibility.

EQUIPMENT REQUIRED: Sit and reach box (Alternatively a ruler was used, and a step or box)

PROCEDURE: This test includes sitting on the floor with legs stretched out straight ahead. Shoes were removed. The soles of the feet are placed flat opposite the box. Both knees were locked and pressed flat to the floor-the tester may assist by holding them down. With the palms facing downwards, and the hands on top of each other or side by side, the subject reached forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject arrives out and holds that situation for at one-two seconds while the distance was noted. Make sure there are no jerky activities.

SCORING: The score was recorded to the nearest centimeter or half inch as the distance reached by the hand. Some test versions use the level of the feet as the zero mark, while others have the zero mark 9 inches before the feet. There was also the rectify sit and reach test which adjusts the zero mark depending on the hands and leg length of the subject.

ADMINISTRATION OF TRAINING PROGRAM

For preparing the yogasana training schedule experts from the physical education field, experts from the field of yoga and medical field were concerned. The schedule was prepared with the concern of the guide for the present study. Following Yogasanas were selected for the training program. The selected Yogasanas description with pictures is given below.



Illustration: - UTTANPADASANA (LEG RAISED POSE)

PROCEDURE

1. Exhale and inhaling start heighten both the legs upward and stop when they make angle of 90 degree with the floor.

2. Keep the sight at the toes of the feet.



Illustration: - PASCHIMOTTANASANA (FORWARD BEND)

PROCEDURE

- 1. Only inhale.
- 2. Exhale, and hold the big toes of both the feet with both the hands.
- 3. In exhaled state bend downward and rest the forehead on the knees. Maintain smooth breathing



Illustration: HALASANA (PLOUGH POSE)

PROCEDURE

1. Exhale and while inhaling slowly heighten the legs to a 90 degree angle from the floor.

2. Exhaling raise the waist and hips, taking the legs over the head, keeping them suspended above the ground.

3. After exhaling fully, lower the leg further down and rest the toes on the floor. Keep to toes stretched and breathe normally.



Illustration: - SHASHANKASAN

PROCEDURE

1. Sit down in Vajrasana and keep your back and neck erect.

2. While inhaling, raise your arms over head as high as possible, and stretch towards upwards.

3. While exhaling, bend forward while raising your buttocks. Your hands should be stretched and arms should touch ears.

4. Please ensure that while bending forward do not allow your buttocks to come off their position between the heels.

5. Rest your elbows on the floor and relax your arms. You can touch your forehead on the ground. Breathe normally and maintain this posture for a while.

6. While inhaling, stretch your arms and return back to Vajrasana.


Illustration: - ARDHAMATSYENDRASANA (HALF SPINAL TWIST)

PROCEDURE

1. Half Spinal Twist pose is one of the best and most important yogasana in Hatha Yoga. It has a huge amount of benefits which cover all the body systems.

2. Full Spinal Twist position was the favorite meditation pose of the Sage Matsyendranath so this pose is named after him. However, as it is a little difficult to practice a simplified form half spinal twist came about.

3. Bend the left leg and place the left foot on the ground over the right knee.

4. Bend the right leg and fold it so that it is resting on the ground with the right heel near the left buttock.

5. Bring the right hand over the left leg and grab the big toe of the left foot.

6. Inhale and exhaling twist the trunk of the body as much as possible, turning the neck so the gaze is over the left shoulder and encircle the waist with the left hand with the palm facing outwards. Continue to maintain the asana, breathing normally.



Illustration: - YOGAMUDRA

PROCEDURE

1. Inhale and take both the hands back and keep the palms facing outside interlocking the thumbs. Keep both the hands straight.

2. Exhaling bend in the waist and rest the forehead on the floor. Continue smooth breathing.



Illustration: - MATSYASANA (FISH POSE)

PROCEDURE

- 1. Spread the legs one foot apart.
- 2. Fold the left leg in the knee and place it on the right thigh.
- 3. Fold the right leg in the knee and place it on left thigh.

4. Now with the help of the elbows raise the head, curve the back backwards and place the top of the head on the floor, making the arch of the back.

5. Hold the toes of the feet with hands and continue normal breathing.



Illustration: - TRIKONASANA (TRIANGLE POSE)

PROCEDURE

- 1. Lift the left leg and place it at a maximum distance towards the left.
- 2. Turn the toe of the left foot towards the left and inhale.
- 3. Exhale and bend the left leg in the knee and place the left hand palm near the left foot toe.
- 4. Take the right hand forward straight above the right ear and continue smooth breathing.



Illustration: - JANUSHIRASANA

PROCEDURE

- 1. Sit on the Asana (yoga mat, sheet etc) with legs stretched forward.
- 2. Bend your right leg and touch the sole its foot sole to your left thigh (as shown in the picture)
- 3. Keeping the lower part of the body straight, inhale and stretch both your hands towards the sky
- 4. While exhaling, bend and hold your left foot with both the hands.
- 5. Try to touch your forehead to your left knee. Normalize your breath.
- 6. Repeat the above step for the other foot as well (left foot).



Illustration: - SHAVASANA (CORPSE POSE)

PROCEDURE

1. Spread the legs one to two feet apart, the toes are turned outwards, the heels facing each other, a comfortable distance apart.

2. Bring the arms a little away from the body, palms turned upward.

3. Relax the neck and allow it to turn to the side if it is more comfortable.

4. Close the eyes and focus the attention on the body, breathing normally.

5. Begin focusing each body part and relaxing it, then moving on. Keep the mind focused on relaxation, the breath should be normal. Relax the whole body.

All the Yogasanas conducted in very flexible manner due to the lack of flexibility in body part. Subjects took help of the administrator or scholar in some of the Yogasana.

YOGASANA SCHEDULE

The yogasana practice sessions were conducted and supervised by the researcher himself. For teaching purpose, each asanas were explained and demonstrated to the subjects and asked to perform the same. Necessary corrections were made, the rest of the instructions were given in between. Yogic exercises schedule were as follow: -

Sr.No.	Name of Yogasana	Duration	Repetition
1	Uttanpadasana	05 sec	2
2	Pashchimotanasana	05 sec	2
3	Halasana	15 sec.	2
4	Shashankasana	20 sec.	2
5	Ardhamatsyendrasana	10 sec.	2
6	Yogmudra	10 sec.	2
7	Matsyasana	10 sec.	2
8	Trikonasana	15 sec.	2
9	Janushirasana	10 sec.	2
10	Shavasana	180 sec.	1

FOR FIRST WEEK

Note: Each subject was allowed relaxing in Shavasana when it was needed

FOR SECOND AND THIRD WEEK

Sr. No.	Name of Yogasana	Duration	Repetition
1	Uttanpadasana	07 sec.	2
2	Pashchimotanasana	07 sec.	2
3	Halasana	20 sec.	2
4	Shashankasana	30 sec.	2
5	Ardhamatsyendrasana	15 sec.	2
6	Yogmudra	15 sec.	2
7	Matsyasana	15 sec.	2
8	Trikonasana	25 sec.	2
9	Janushirasana	20 sec.	2
10	Shavasana	180 sec.	1

Note: Each subject was allowed relaxing in Shavasana when it was needed.

Sr. No	Name of Yogasana	Duration	Repetition
1	Uttanpadasana	10 sec. /student capacity	2
2	Pashchimotanasana	10 sec. /student capacity	2
3	Halasana	25 sec. /student capacity	2
4	Shashankasana	30 sec.	2
5	Ardhamatsyendrasana	15 sec. /student capacity	2
6	Yogmudra	15 sec.	2
7	Matsyasana	15 sec.	2
8	Trikonasana	25 sec.	2
9	Janushirasana	20 sec.	2
10	Shavasana	Shavasana 180 sec.	

FOR FOURTH AND FIFTH WEEK

Note: Each subject was allowed relaxing in shavasana when it was needed.

FOR SIXTH WEEK

Sr. No	Name of Yogasana	Duration	Repetition
1	Uttanpadasana	20sec. /student capacity	3
2	Pashchimotanasana	20sec. /student capacity	3
3	Halasana	25sec. /student capacity	3
4	Shashankasana	30sec.	
3	Ardhamatsyendrasana	20sec. /student capacity	2
5	Yogmudra	25sec.	3
6	Matsyasana	20sec.	3
7	Trikonasana	25sec.	3
8	Janushirasana	25sec.	3
9	Shavasana	180 sec.	3
10			1

Note: Each subject was allowed relaxing in Shavasana when it was needed.

Exercises	Number of Sets	Duration of exercises	Density between sets	Density Between
Aerobic				rounds
Exercises	1	15minutes	6minutes	10minutes
Running	1	10minutes	5minutes	7minutes
Skipping	1	05minutes	3minutes	5minutes

AEROBIC EXERCISES SCHEDULE

EXPERIMENTAL DESIGN

The selected subjects shall be divided into three groups with Twenty Five subjects in each group selected randomly, with two experimental groups and one control group. Experimental Group A underwent the yogasana training in selected Yogasana. Experimental Group B underwent the selected aerobic exercise with music programme. The training periods of experimental groups are six weeks, five days per week with duration of 45 minutes. Control group did not undergo any training programme rather than their routine work.

COLLECTION OF THE DATA

The data were collected on physical fitness variables for all the three groups before the experimental period (pre test) and after six weeks of the training period (post test) respectively. During this period the subjects were not allowed to participate in any training programme.

STATISTICAL PROCEDURE TO BE USED IN THE STUDY

The data will be tabulated first then means and standard deviations of both the groups will be computed. For the analysis of the study 'f 'test will be applied to compare the mean scores of pre-test and post test among both the groups.

CHAPTER: IV

ANALYSIS OF DATA AND RESULTS OF THE STUDY

The statistical technique that had been used for the systematic and meaning full analysis of collected data from college girl from Dharawad city in respect of five test items of physical fitness aspects of the students likes 50 Meters Sprint, Standing Broad Jump, Shuttle Run, Shot Put and Sit and Reach Test of the subjects were checked by their test. The groups were preferred at unkempt and were dividend three groups. A total number of seventy five girls' students from Karnataka University Arts, Commerce College, Dharawad were choose as subjects for the study. Pre test for the selected variables were administered before experiment. After measuring their physical fitness in different items, actual training programme was given them by the research scholar.

The training programme comprised of three groups with twenty (25) subjects in each group, Group-A Aerobics exercise, Group-B Yogasana and Group-C Control Group. Three alternate days a week Training programme was given to the subjects for period of six (6) weeks. To invigilate the affect of training programme on girls post test was conducted for physical fitness components measurements. Analysis of Data After the twelve weeks of treatment to experimental groups, data was in quotation by applying ANCOVA. Further, the LSD - Post Hoc tests were applied to find the significance of mean difference among specific group means. Graphical representations of means values were also presented. In order to investigate and test the noticeable of difference if any, assess of covariance was computed. The hypothesis was tested at 0.05 level confidences.

Means and Standard Deviations of 50 Meters Sprint

Test	Group		Sum of Squares	df	Mean	F Ratio	
	A	В	С			Square	
Pre Test	9.95	9.82	9.65	T0.40	5	0.20	1.67
				E7.99	72	0.12	
Post Test	9.62	9.75	9.59	T1.20	2	0.60	*4.00
				E11.01	72	0.15	
Adjusted	8.69	8.56	8.39	T0.97	2	0.49	*4.90
Mean				E7.21	71	0.10	

Table: 1

* Significant at 0.05 level of confidence.

As mentioned in the Coefficient Analysis Summary -01, speed test measurement was found in 1.67 in 'F' ratio of pre-test medium (group "A" 9.95, group "B" 9.82 and group "C" 9.65). Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful.

The final test of the three groups was found in the 'F' ratio 4.00 of the median (group "A" 9.62, Group "B" 9.75, and Group "C" 9.59).

Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio of fixed middle (group "A" 8.69, group "B" 8.56 and group "C" 8.39) was found 4.90. Which was found to be worthwhile at 0.05 (2,72 = 3.11) level. Medium of the three groups is shown in graphs-01.

The distinguish among the three groups found in the middle of the revised medium was found to be futile. To see the significance of the differences between improved mediums and to see how fitness has been more effective for group 'A', 'B' and 'C' experimental groups, the credentials were tested with the critical difference between the LSD test improved medium, which is mentioned in the Table -02.

Difference between two experimental groups of speed measurement and the middle of a control group's pair and improved final medians

	Adjusted Mean	Mean Differences	Critical	
				Difference
				(C.D.)
Group–A	Group– B	Group- C		
8.69	8.56		0.31	0.28
8.69		8.39	* 0.30	0.28
	8.56	8.39	0.09	0.28

Table:	2
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The distinguish between the two experimental groups of speed measurements and the revised median of a control group's group can be clearly seen in the abovementioned Table - 02. The group 'A' and 'C' (0.30) were found to be higher than the revolutionary difference (0.28). Therefore, it can be said that the Aerobic training group was seen to be superior in terms of speed measurements.

Graphs- 01 50 Meters Sprint



The distinguish between the two experimental groups of speed measurements and the revised median of a control group's group can be clearly seen in the abovementioned Graph-1. The group 'A' and 'C' (0.30) were found to be higher than the revolutionary difference (0.28).

Therefore, it can be said that the Aerobic training group was seen to be superior in terms of speed measurements. Means and Standard Deviations of Standing Broad Jump

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Table: 03								
Test	Group			Sum of Squares	df	Mean	F Ratio	
	-			-		Square		
	А	В	С			Square		
D	1.1.4	1.10	0.00	T D 5 1	2	0.04	0.04	
Pre Test	1.14	1.19	0.98	10.51	2	0.26	0.04	
				E526.54	72	7.31		
Post Test	1.15	1.20	0.98	T12.20	2	6.1	*3.58	
				E50.50	72	1.70		
Adjusted	1.13	1.14	1.01	T0.95	2	0.48	*4.36	
Mean				E86	71	0.17		

Significant at 0.05 level of confidence. (2, 72) = 3.11 T = Treatment E = Error F (2, 71) = 3.11 According to the Coefficient Analysis Summary -03, the foot tests were found in 0.04 of the pre-test medium (group "A" 1.14, group "B" 1.19 and group "C" 0.98) in the explosion measurement test. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio of 3.58 (Medium "A" 1.15, Group "B" 1.20 and Group "C" 0.98). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio of the revised medium (group "A" 1.13, group "B" 1.14 and group "C" 1.01) was found at 4.36. Which was found to be worthwhile at 0.05 (2, 72 = 3.11) level. Medium of the three groups is shown in graphs-01.

The difference between the three groups found in the middle of the revised medium was found to be futile. To see the significance of the differences between improved mediums and to see how fitness has been more effective for group 'A', 'B' and 'C' experimental groups, and the credentials were tested with the critical difference between the LSD test improved medium, which is mentioned in the Table - 04. Difference between two experimental groups of standing broad jump's measurement and the middle of a control group's pair and improved final medians

A	djusted Mean		Mean Differences	Critical Difference (C.D.)
Group–A	Group– B	Group- C		
1.13	1.14		0.01	0.03
1.13		1.01	0.12	0.03
	1.14	1.01	0.13	0.03

Table - 04.

The distinguish between the two experimental groups of foot explosive measurement and the improved midline of a controlled group's group can be clearly seen in the above summaries-04. The group 'A' and 'C' (0.03) as well as the group "B" and "C" were found to be higher than the revolutionary difference (0.03).

Thus, it could be seen that Aerobic training and Yogasana groups were seen to be superior in controlling the foot's explosive measurements.



Standing Broad Jump



Means and Standard Deviations of Shuttle Run Analysis of Covariance)

Table -05

Test	Group		Sum of Squares	df	Mean Square	F Ratio	
	А	В	С				
Pre Test	7.610	7.6	7.607	T0.56	2.72	0.29	0.03
				E.0.60.		669.	
Post Test	7.600	7.606	7.61.	T10.2.	2.72	.676	*6.59
				E.1.7		0966	
Adjusted	7.67.	7.67.	07.9	T0696	2.71	760.	*6.90
Mean				E724		0.07	

Significant at .05 level of confidence F (2, 72) = 3.11 T = Treatment E= Error F (2, 71) = 3.1100.20.40.60.811.21.4A Group B C Pre Test Post Test Adjust Mean

According to the Coefficient Analysis Summary - 05, the 'F' ratio of 0.03 was found in the pre-test medium (group "A" 10.72, Group "B" 10.66 and Group "C" 10.41) in the Calibrate Measurement Test. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio 6.59 of the median (group "A" 10.24, group "B" 10.23 and group "C" 10.75). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. The 'F' ratio of 6.90 was found when the revised medium (group "A" 10.15, group "B" 10.10 and group "C" 9.70) was found. Which was found to be worthwhile at 0.05 (2, 72 = 3.11) level. The median of the pair of the three groups is shown in graphs-03.

The distinguish among the three groups found in the middle of the revised medium was found to be futile. To see the significance of the differences between improved mediums and to see how fitness has been more effective for group 'A', 'B' and 'C' experimental groups, and the credentials were tested with the critical difference between the LSD test improved medium, which is indicated in the Table-06. Difference between two experimental groups of Shuttle Run's measurement and the middle of a control group's pair and improved final medians.

	Adjusted Mea	n	Mean Differences	Critical Difference (C.D.)
Group–A	Group– B	Group- C		
10.15	10.10		0.05	0.43
10.15		9.70	*0.45	0.43
	10.10	9.70	*0.40	0.43

Table: 06

The difference between the two experimental groups of dexterity measurement and the revised median of a control group's group can be clearly seen in the above- mentioned summary. The group was found between 'A' and 'C' (0.43), which was higher than the revolutionary difference (0.43).

Hence it can be said that the Aerobic training group could be seen to be superior to the control group.



Shuttle Run



Means and Standard Deviations of Shot put Throw

Tab	le	_	7
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Test	Group			Sum of Squares	df	Mean Square	F Ratio
	Α	В	C				
Pre Test	4.74	4.79	4.69	T1.58	2	0.79	0.07
				E840.24	72	11.67	
Post Test	4.91	4.97	4.71	T20.47	2	10.24	*6.69
				E110.25	72	1.53	
Adjusted	3.92	3.90	2.65	T18.20	2	9.10	*7.17
Mean				E90.24	71	1.27	

Significant at .05 level of confidence F (2, 72) =3.11 T= Treatment E= Error F (2, 71) =3.11

According to the Coefficient Analysis Summary -07, the measurable test of the shoulder muscle ("A" 4.74, group "B" 4.79 and group "C" 4.69) of 'F' ratio 0.07 was found. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio 6.69 of the median (group "A" 4.91, group "B" 4.97 and group "C" 4.71). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the revised medium (group "A" 3.92, group "B" 3.90 and group "C" 2.65) was found to be 7.17 'F'. Which was found to be worthwhile at 0.05 (2, 72 = 3.11) level. Medium of the three groups is shown in graphs-04. The difference between the three groups found in the middle of the revised medium was found to be

futile. To see the significance of the differences between improved mediums and to see how fitness has been more effective for group 'A', 'B' and 'C' experimental groups, and the credentials were tested with the critical difference between the LSD test improved medium, which is outlined in the Table-08. Difference between two experimental groups of Shot puts measurement and the middle of a control group's pair and improved final medians.

	Adjusted Mear	1	Mean Differences	Critical Difference (C.D.)
Group–A	Group– B	Group- C		
3.92	3.90		0.02	1.00
3.92		2.65	*1.27	1.00
	3.90	2.65	0.25	1.00

Table - 8

The distinguish between the two experimental groups of measurement of the muscles of the shoulder muscles in the above indicate matrix and the correct medium of the control group of a control group can be clearly seen. The group which was found between 'A' and 'C' (1.00), was found to be higher than the revolutionary difference (1.00). This can be said that the Aerobic training group was seen to be superior to the control of the muscles of the shoulder muscles.

Graph: 04

Shot Put Throw



Means and Standard Deviations of Sit and Reach

Test	Group		Sum of Squares	df	Mean Square	F Ratio	
	А	В	С				
Pre Test	5.68	5.60	5.60	T2.60	2	1.30	0.10
				E946.24	72	13.14	
Post Test	6.61	6.45	5.94	T15.25	2	7.63	*5.82
				E94.20	72	1.31	
Adjusted	4.16	4.25	3.20	T14.24	2	7.12	*6.14
Mean				E82.16	72	1.16	

Table: ()9
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Significant at .05 level of confidence (2, 72) = 3.11 T = Treatment E = Error F (2, 71) = 3.11 As mentioned in Cooperative Analysis Sample -09, the 'F' ratio of 0.10 was found in the pre-test medium (Group "A" 5.68, Group "B" 5.60 and Group "C" 5.60) in the Tempt ability Measurement Test. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful.

The final test medium of three groups (group "A" 6.61, group "B" 6.45 and Group 'C' 5.94) 'F' ratio was 5.82. Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio 6.14 was found in the revised medium (group "A" 4.16, group "B" 4.25 and group "C" 3.20). Which was found to be worthwhile at 0.05 (2, 72 = 3.11) level. Medium of the three groups is shown in graphs-04.

The distinguish among the three groups found in the middle of the revised medium was found to be futile. To see the significance of the differences between improved mediums and to see how fitness has been more effective for group 'A', 'B' and 'C' experimental groups, and the credentials were tested with the critical difference between the LSD test improved medium, which is outlined in the Table-08. Difference between two experimental groups of Sit and Reach's measurement and the middle of a control group's pair and improved final medians.

Table: 1	10
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	Adjusted Mean			Critical Difference (C.D.)
Group–A	Group– B	Group- C		
4.16	4.25		0.09	1.00
4.16		3.20	0.96	1.00
	4.25	3.20	*1.05	1.00

The difference between the two experimental groups of mildness measurements and the revised midpoint of a control group's group can clearly be seen in the above-mentioned summary. The group was found between 'B' and 'C' (1.00), which was higher than the revolutionary difference (1.00).

This can be said that Yogasana group was seen to be more prominent than controlling the measurable measurements.

Graph: 5

Sit and Reach Test



DISCUSSION OF FINDINGS

After investigating the results, the calculated 'F" ratio was found greater than the tabulated value for the 50 meters Sprint. Hence, there was noticeable distinguish in the training. Further it pair wise comparison it was observed that both the training i.e. Aerobics exercise and yoga training both were effective in comparison of control group.

There was no noticeable distinguish in Aerobics exercise and yogasana on 50 meters Sprint, whereas, Aerobics exercises and yogasana should be preferred in improving the speed For the sit ups calculated 'F' ratio value was also found greater than the tabulated value.

Therefore it was concluded that there were significant difference of training. Further it pair wise comparison it was observed that both the training Aerobics exercise and yogasana both were effective in comparison of control group. But there was also significant difference in both training Aerobics exercise and yogasana.

It was therefore concluded that Aerobics exercise should be preferred over Yogasana, whereas, Aerobics exercise was more effective than yogasana in improving the explosive power of college girls. In other physical fitness components as shuttle run, standing broad jump, 50 metre run and sit and reach test calculated 'F' ratio value was also found greater than the tabulated value.

Therefore it was concluded that there were significant difference of training on these physical fitness component. Further the pair wise comparison also suggested that Aerobics exercises and yogasana were effective in comparison control group and also no significant difference in both training as Aerobics exercise and yogasana.

There suggested the Aerobics exercises and yogasana were resulted equally effective, whereas, Aerobics exercises and yogasana should be preferred in improving the agility, explosive power, speed and flexibility of college girls While the calculated 'F' ratio were found significant than the tabulated value, hence there were significant difference of training over the subjects.

There were both treatments produced the equal effectiveness on the college girls. The results of the study were similar to the studies conducted by Venkatareddy et al I and Pargaonkar and Bera where the yoga training and Aerobics exercises were found effective in reducing the obesity.

On the basis of the results of the study the hypotheses for the study were stated as follows:

- Aerobics exercise and yoga will bring about the significant changes in hand and shoulder power and speed of college girls was accepted.
- Aerobics exercise and yoga will bring about the significant changes in back muscles power and flexibility of college girls was accepted.
- Aerobics exercise and yoga will bring about the significant changes in Agility of college girls was accepted.
- Aerobics exercise and yoga will bring about the significant changes in Explosive leg strength of college girls was accepted.
- Aerobics exercise and yoga will bring about the significant changes in speed of college girls was accepted.
- Aerobics exercise and yoga will bring about the significant changes in endurance of college girls was accepted.

CHAPTER: V

SUMMARY, INTERPRETATION AND RECOMMENDATIONS

SUMMARY

In order to perform the required amount of work in daily routine one must have adequate level of physical fitness. It is not only helpful in getting success in life but also in making life healthy. The person must be fit from the point of view of taking part in sports and yoga and performing day to day business as far as performance in sports in concerned, somatic health is the backbone of all the activities of life.

The purpose of the study was to assess the impact of selected training programme on physical fitness of girl students. The subjects were selected from colleges of Dharawad city aged between 18-22 years. A total of 75 girls students were choosed as the subjects. These students were unkempt distributed into three equable groups as Group A- Aerobics exercises, Group B- Yogasana and Group C- Control Group. Pre test for the physical fitness components were administered prior to experiment. The Aerobics exercises and Yogasana were experimented for six days per week for the period of 6 week and the post test were taken for the selected variables.

In order to find out the significance of difference appraise of covariance was used and the level of significance chosen was at 0.05 levels. In order to find which training programme is more effective, pair wise comparison analysis on adjusted means of post test data was used.

INTERPRETATION

After analyzing the data the following conclusions were drawn under the light of results of the study:

In the speed measurement test, 1.67 of the 'F' ratio of pre-test medium (group "A" 9.95, group "B" 9.82 and group "C" 9.65) was found. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio 4.00 of the median (group "A" 9.62, Group "B" 9.75, and Group "C" 9.59). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio of fixed middle (group "A" 8.69, group "B" 8.56 and group "C" 8.39) was found 4.90. Which was found to be worthwhile at 0.05 (2, 72 = 3.11) level.

- 2. Examples of pre-test medium (group "A" 1.14, group "B" 1.19 and group "C" 0.98) were found to be 0.04 in 0.04 in Foot Explosive Measurement Test. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio of 3.58 (Medium "A" 1.15, Group "B" 1.20 and Group "C" 0.98). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio of the revised medium (group "A" 1.13, group "B" 1.14 and group "C" 1.01) was found at 4.36.
- 3. In the Illusion Measurement Test, the pre-test medium (Group "A" 10.72, Group "B" 10.66 and Group "C" 10.41) of 'F' ratio was found 0.03. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio 6.59 of the median (group "A" 10.24, group "B" 10.23 and group "C" 10.75). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. The 'F' ratio of 6.90 was found when the revised medium (group "A" 10.15, group "B" 10.10 and group "C" 9.70) was found.
- 4. In the force measurement test of the shoulder muscle, the pre-test medium (group "A" 4.74, group "B" 4.79 and group "C" 4.69) of 'F' ratio 0.07 was observed. Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The final test of the three groups was found in the 'F' ratio 6.69 of the median (group "A" 4.91, group "B" 4.97 and group "C" 4.71). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the revised medium (group "A" 3.92, group "B" 3.90 and group "C" 2.65) was found to be 7.17 'F'.
- 5. Neutrality measurement test found a 0.10 in the 'F' ratio of the pre-test medium (group "A" 5.68, group "B" 5.60 and group "C" 5.60). Which was not seen at the 0.05 (2, 72 = 3.11) standard. It is thus clear that the distribution of the three groups of topics was successful. The 'F' ratio 5.82 was found in the final test medium of three groups (Group "A" 6.61, Group "B" 6.45 and Group "C" 5.94). Which was seen to be worthwhile at 0.05 (2, 72 = 3.11) level. While the 'F' ratio 6.14 was found in the revised medium (group "A" 4.16, group "B" 4.25 and group "C" 3.20).

FINDINGS

- 1. Aerobic training group was seen to be superior in terms of speed (50 meters Sprint) measurements.
- 2. Aerobic training and Yogasana groups were seen as superior in controlling the leg's explosive (Standing broad Jump) measurements.
- 3. Aerobic training groups could be seen as superior in controlling (Shuttle Run) caloric intake groups.
- 4. Aerobic training group was found to be superior in controlling force measurements (Shot put) of shoulder muscles.
- 5. The Yogasana group was seen to be more prominent than controlling the measurable (Sit and Reach) measures.

RECOMMENDATIONS

More research has to be conducted regarding the physical fitness. Research is an evergreen process. Different ways same topic even related topic that has been already conducted by others. It may be possible that one may have better ideas and better ways of conducting any research study. By analyzing all the facts the research scholar wishes to make the following recommendations to the future aspirants:

- The study may be conducted on boy subjects of the same age group.
- The same type of study may be conducted on subjects of age other than those employed in this study.
- The same type of study may be conducted by raising the specimen size.
- The study can conduct by comparing effect of other training programme.
- A similar type of study may be conducted on different areas college girls residing in different cities and states.
- A similar type of study may be conducted on women with different age group.
- A similar type study may be conducted on different age group of men.
- A similar type of study may be conducted the variables other than these chosen for this study.

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Yogasana	Monday		Tuesday		Wednesday		Thursday		Friday	
	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition
Uttanpadasana	05sec.	2	05sec.	2	05sec.	2	05sec.	2	05sec.	2
Pashchimotanasana	05sec.	2	05sec.	2	05sec.	2	05sec.	2	05sec.	2
Halasana	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Shashankasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Ardhamatsyendrasana	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
Yogmudra	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
Matsyasana	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
Trikonasana	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Janushirasana	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
Shavasana	180sec.	1	180sec.	1	180sec.	1	180sec.	1	180sec.	1

APPENDIX – I YOGASANA TRAINING SCHEDULE FOR FIRST WEEK

Note: Each subject was allowed relaxing in Shavasana when it was needed.

APPENDIX – II YOGASANA TRAINING SCHEDULE FOR SECOND AND THIRD WEEK

Yogasana	Monday		Tuesday		Wednesday		Thursday		Friday	
	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition
Uttanpadasana	07sec.	2	07sec.	2	07sec.	2	07sec.	2	07sec.	2
Pashchimotanasana	07sec.	2	07sec.	2	07sec.	2	07sec.	2	07sec.	2
Halasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Shashankasana	30sec.	2	30sec.	2	30sec.	2	30sec.	2	30sec.	2
Ardhamatsyendrasana	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Yogmudra	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Matsyasana	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Trikonasana	55sec.	2	55sec.	2	55sec.	2	55sec.	2	55sec.	2
Janushirasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Shavasana	180sec.	1	180sec.	1	180sec.	1	180sec.	1	180sec.	1

Note: Each subject was allowed relaxing in shavasana when it was needed.

APPENDIX – III

YOGASANA TRAINING SCHEDULE

FOR FOURTH AND FIFTH WEEK

			1							
Yogasana	Monday		Tuesday		Wednesday		Thursday		Friday	
	Denetien	Denstitien	Dunting	Denetitien	Describer	Denstitien	Dunting	Denetitien	Duration	Denetitien
	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition
Uttanpadasana	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
1										
	10	-	10	-	10		10	-	10	
Pashchimotanasana	10sec.	2	10sec.	2	10sec.	2	10sec.	2	10sec.	2
Halasana	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
						_				
Shashankasana	30sec.	2	30sec.	2	30sec.	2	30sec.	2	30sec.	2
Ardhamatsvendrasana	15sec	2	15sec	2	15sec	2	15sec	2	15sec	2
7 Humaniats y charasana	15500.	2	15500.	2	15500.	2	15500.	2	15500.	2
Yogmudra	15sec.	2	15sec.	2	15sec.	2	15sec.	2	15sec.	2
Matevacana	15:00	2	15:00	2	15:00	2	15:00	2	15:00	2
Watsyasana	15800.	2	13800.	2	15800.	2	13800.	2	15800.	2
Trikonasana	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
Tanaahimaanaa	20	2	20	2	20	2	20	2	20	2
Janushirasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Shavasana	180sec.	1	180sec.	1	180sec.	1	180sec.	1	180sec.	1
1	1	1	1	1	1	1	1	1	1	1

Note: Each subject was allowed relaxing in shavasana when it was needed

APPENDIX – IV YOGASANA TRAINING SCHEDULE FOR SIXTH WEEK

Yogasana	Monday		Tuesday		Wednesday		Thursday		Friday	
	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition	Duration	Repetition
Uttanpadasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Pashchimotanasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Halasana	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
Shashankasana	30sec.	2	30sec.	2	30sec.	2	30sec.	2	30sec.	2
Ardhamatsyendrasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Yogmudra	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
Matsyasana	20sec.	2	20sec.	2	20sec.	2	20sec.	2	20sec.	2
Trikonasana	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
Janushirasana	25sec.	2	25sec.	2	25sec.	2	25sec.	2	25sec.	2
Shavasana	180sec.	1	180sec.	1	180sec.	1	180sec.	1	180sec.	1

Note: Each subject was allowed relaxing in shavasana when it was needed.

APPENDIX: I PRE-TEST OF EXPERIMENTAL GROUP: A (AEROBICS EXERCISE)

S.No	50 mts. Sprint (sec.)	Standing Broad Jump (meters)	Shuttle Run (sec.)	Shot Put (8 pounds) (meter)	Sit and Reach Test (cm.)
1	10.24	1.17	11.04	4.92	5.6
2	10.04	1.08	10.14	4.27	6.0
3	9.91	1.26	10.89	4.70	5.1
4	9.89	1.34	10.46	5.02	6.3
5	10.62	1.29	10.74	5.11	6.0
6	9.84	1.64	11.23	4.21	6.1
7	9.91	1.29	10.12	5.17	5.4
8	10.2	1.48	10.81	4.61	5.2
9	10.76	1.56	11.27	4.45	6.2
10	9.96	1.47	11.42	5.42	5.3
11	9.93	1.23	10.78	4.74	5.1
12	9.63	1.49	10.14	4.12	5.3
13	9.96	1.54	10.52	5.14	7.2
14	10.05	1.47	10.27	4.23	5.7
15	10.14	1.39	11.56	4.81	5.5
16	9.97	1.66	10.77	4.58	5.2
17	9.72	1.68	10.59	4.92	5.9
18	10.09	1.46	10.72	514	6.2
19	10.12	1.52	11.06	4.87	6.4
20	9.21	1.63	11.21	4.11	4.9
21	9.94	1.59	10.86	4.54	6.1
22	9.89	1.54	10.28	4.92	5.3
23	9.76	1.61	10.54	5.04	5.7
24	9.22	1.62	10.56	4.37	5.1
25	9.97	1.52	10.12	3.92	5.2

S.No	50 mts.	Standing Broad	Shuttle Run	Shot Put (8	Sit and Reach
	Sprint	Jump (meters)		pounds)	Test
	(sec.)			(meter)	(cm.)
1.	8.63	1.83	10.11	4.97	6.4
2	8.87	1.72	10.19	4.71	7.8
3	8.43	1.91	10.52	5.17	7.3
4	8.54	1.87	10.27	5.51	7.7
5	8.42	1.72	10.12	4.78	6.8
6	9.14	1.37	10.47	4.99	8.1
7	8.67	1.71	10.22	4.56	5.9
8	8.52	1.79	10.44	4.71	7.1
9	8.47	1.81	10.03	5.32	6.9
10	8.77	1.89	10.37	5.43	7.9
11	9.06	1.71	9.89	4.88	5.8
12	9.12	1.63	10.01	4.34	7.0
13	8.73	1.81	10.14	5.32	8.7
14	9.11	1.83	10.08	4.51	6.4
15	8.96	1.67	10.47	4.78	5.9
16	8.63	1.83	10.32	4.63	7.4
17	8.33	1.79	10.09	4.89	6.9
18	8.72	1.69	10.44	5.33	7.2
19	8.83	1.81	10.49	5.19	7.4
20	9.07	1.71	10.32	4.23	6.8
21	8.61	1.63	10.27	4.77	6.4
22	8.53	1.82	10.04	5.07	7.8
23	8.44	1.84	10.22	5.23	7.7
24	8.93	1.76	10.17	4.54	7.2
25	8.42	1.69	10.02	3.90	6.9

APPENDIX: IV POST-TEST OF EXPERIMENTAL GROUP: B (YAGASANA)

S.No	50 mts. Sprint	Standing Broad	Shuttle Shot Put (8pounds)		Sit and Reach
	(sec.)	Jump (meters)	Run(sec.)	(meter)	Test (cm.)
1	9.12	1.17	11.89	4.92	5.4
2	9.33	1.28	10.93	4.27	6.2
3	8.89	1.46	11.45	4.70	7.1
4	8.94	1.76	11.96	5.02	5.3
5	8.82	1.89	10.14	5.11	6.0
6	8.94	1.74	11.52	4.21	5.1
7	9.19	1.89	10.34	5.17	4.7
8	9.33	1.48	10.37	4.61	5.7
9	8.85	1.76	11.02	4.45	6.2
10	8.89	1.87	11.33	5.42	6.3
11	9.04	1.63	10.21	4.74	5.3
12	9.12	1.59	10.91	4.12	5.0
13	8.92	1.74	10.11	5.14	6.2
14	9.10	1.77	10.24	4.23	4.7
15	9.02	1.59	11.74	4.81	5.1
16	8.96	1.86	10.92	4.58	5.4
17	8.79	1.78	10.71	4.92	4.9
18	9.19	1.66	10.60	5.14	5.2
19	9.02	1.72	11.74	4.87	5.4
20	9.11	1.63	11.97	4.11	4.8
21	8.84	1.59	9.89	4.54	6.0
22	8.99	1.74	10.11	4.92	5.3
23	8.86	1.81	10.27	5.04	4.7
24	9.12	1.72	11.74	4.37	6.1
25	8.87	1.62	10.06	3.92	5.9

APPENDIX: V PRE-TEST OF CONTROL GROUP: C

APPENDIX: VI

POST-TEST OF CONTROL GROUP: C

S.No	50 mts.	Standing Broad	Shuttle	Shot Put (8 pound)	Sit and Reach Test	
	Sprint	Jump (meters)	Run	(meters)	(cm.)	
	(sec.)		(sec.)			
1	9.04	1.19	11.81	4.81	5.3	
2	9.36	1.26	10.44	4.38	6.2	
3	8.78	1.38	11.04	4.82	7.2	
4	9.09	1.69	11.92	5.14	5.4	
5	9.02	1.82	10.17	5.07	6.1	
6	9.11	1.73	11.44	4.31	4.9	
7	9.14	1.87	10.37	5.14	4.6	
8	9.21	1.54	10.45	4.72	5.9	
9	8.86	1.71	10.90	4.44	6.3	
10	9.12	1.81	11.22	4.37	6.5	
11	8.97	1.62	10.31	4.82	5.4	
12	8.91	1.67	10.90	4.31	5.2	
13	9.04	1.69	10.07	5.22	6.1	
14	8.95	1.78	10.30	4.09	4.8	
15	8.97	1.63	11.72	5.25	5.3	
16	8.88	1.83	10.89	4.64	5.2	
17	8.92	1.76	10.69	4.85	5.4	
18	9.10	1.59	10.72	4.82	4.9	
19	8.94	1.72	11.75	4.63	5.5	
20	8.91	1.66	11.84	5.17	4.9	
21	8.87	1.67	9.86	4.62	6.1	
22	8.86	1.77	10.07	4.87	5.4	
23	8.92	1.82	10.24	5.13	4.6	
24	9.18	1.75	11.63	4.30	6.0	
25	8.94	1.64	10.14	3.85	5.7	

ROW SCORE

Sr. No.	Group : A(Aerobics Exercise)		Group : B (Yogasana)		Group : C(Control Group)	
	Pre-Test	Post Test	Pre-Test	Post Test	Pre-Test	Post Test
1	10.24	10.11	9.96	9.56	9.12	9.14
2	10.04	9.92	9.93	9.87	9.33	9.31
3	9.91	9.08	9.63	9.59	9.89	9.87
4	9.89	9.51	9.96	9.96	9.94	9.93
5	10.62	10.47	10.05	10.05	9.82	9.94
6	9.84	9.83	10.14	10.02	9.94	9.91
7	9.91	9.47	9.97	9.91	9.29	9.24
8	10.02	9.73	9.72	9.67	9.33	9.31
9	10.76	9.60	10.09	10.07	9.85	9.86
10	9.96	9.77	10.12	10.11	9.89	9.90
11	9.93	9.06	9.21	9.16	9.44	9.47
12	9.63	9.12	9.94	9.89	9.22	9.21
13	9.96	9.73	9.89	9.77	9.92	9.93
14	10.05	9.51	9.76	9.63	9.80	9.77
15	10.14	10.90	9.22	9.21	9.42	9.37
16	9.97	9.63	9.97	9.56	9.96	9.95
17	9.72	9.33	9.91	9.88	9.79	9.82
18	10.09	9.72	9.79	9.66	9.49	9.47
19	10.12	9.83	9.89	9.85	10.02	10.04
20	9.21	9.07	9.95	9.91	9.54	9.57
21	9.94	9.61	9.84	9.80	9.81	9.83
22	9.89	9.53	9.42	9.33	9.43	9.46
23	9.76	9.44	9.76	9.86	9.57	8.52
24	9.22	9.13	9.63	9.56	9.66	9.64
25	9.97	9.42	9.97	9.93	9.87	9.34

PRE TEST AND POST TEST OF 50 METERS SPRINT

ROW SCORE

S.No	Group : A (Aerobics Exercise)		Group : B (Yogasana)		Group : C (Control Group)	
	Pre-Test	Post Test	Pre-Test	Post Test	Pre-Test	Post Test
1	1.17	1.33	1.14	1.27	1.17	1.19
2	1.08	1.34	1.19	1.22	1.28	1.26
3	1.16	1.57	1.18	1.31	1.02	1.03
4	1.04	1.24	1.13	1.17	1.16	1.19
5	1.29	1.93	1.11	1.22	1.01	1.02
6	1.04	1.18	1.13	1.17	1.12	1.03
7	1.29	1.36	1.06	1.11	1.18	1.20
8	1.18	1.39	1.12	1.19	1.00	1.04
9	1.26	1.38	1.18	1.21	1.05	1.01
10	1.17	1.29	1.02	1.11	1.02	1.11
11	1.23	1.41	1.11	1.15	1.02	1.02
12	1.19	1.23	1.03	1.07	1.14	1.17
13	1.14	1.31	1.14	1.17	1.00	1.02
14	1.27	1.43	1.15	1.19	1.03	1.08
15	1.09	1.27	1.21	1.27	1.12	1.13
16	1.16	1.23	1.05	1.13	1.09	1.11
17	1.08	1.19	1.12	1.16	1.03	1.06
18	1.16	1.29	1.02	1.06	1.06	1.09
19	1.22	1.31	1.00	1.05	1.02	1.02
20	1.13	1.27	1.03	1.07	1.11	1.16
21	1.29	1.33	1.11	1.16	1.09	1.07
22	1.14	1.22	1.02	1.06	1.12	1.11
23	1.01	1.17	1.12	1.12	1.12	1.14
24	1.12	1.26	1.03	1.06	1.01	1.05
25	1.02	1.19	1.14	1.19	1.05	1.04

PRE TEST AND POST TEST OF STANDING BROAD JUMP
ROW SCORE

S.No	Group : A(Aerobics Exercise)		Group : B (Yogasana)		Group : C (Control Group)	
	Pre-Test	Post Test	Pre-Test	Post Test	Pre-Test	Post Test
1	11.04	10.12	10.52	10.11	11.89	11.81
2	10.14	10.02	10.44	10.19	10.93	10.84
3	10.89	10.48	10.81	10.52	11.45	11.44
4	10.46	10.22	10.62	10.27	11.96	11.92
5	10.74	10.27	10.26	10.12	10.14	10.17
6	11.23	10.49	10.91	10.47	11.52	11.44
7	10.12	10.04	10.31	10.22	10.34	10.37
8	10.81	10.32	11.02	10.44	10.37	10.35
9	11.27	10.72	10.27	10.03	11.02	10.90
10	11.42	10.37	11.42	10.37	11.33	11.22
11	10.78	9.89	10.78	9.89	10.21	10.31
12	10.14	10.01	10.14	10.01	10.91	10.90
13	10.52	10.14	10.52	10.14	10.11	10.07
14	10.27	10.08	10.27	10.08	10.24	10.30
15	11.56	10.47	11.56	10.47	11.74	11.72
16	10.77	10.32	10.77	10.32	10.92	10.89
17	10.59	10.09	10.59	10.09	10.71	10.69
18	10.72	10.44	10.72	10.44	10.60	10.72
19	11.06	10.49	11.06	10.49	11.74	11.75
20	11.21	10.32	11.21	10.32	11.97	11.84
21	10.86	10.27	10.86	10.27	9.89	9.86
22	10.28	10.04	10.28	10.04	10.11	10.07
23	10.54	10.22	10.54	10.22	10.27	10.24
24	10.56	10.17	10.56	10.17	11.74	11.63
25	10.12	10.02	10.12	10.02	10.06	10.14

PRE TEST AND POST TEST OF SHUTTLE RUN (SEC.)

ROW SCORE PRE TEST AND POST TEST OF SHOT PUT (8 POUND) (METERS)

S.No	Group : A(Aerobics Exercise)		Group : B (Yogasana)		Group : C(Control Group)	
	Pre-Test	Post Test	Pre-Test	Post Test	Pre-Test	Post Test
1	4.92	4.98	4.91	4.97	4.92	4.90
2	4.27	4.53	4.52	4.71	4.27	4.38
3	4.70	4.78	5.09	5.17	4.70	4.72
4	5.02	5.13	5.35	5.51	5.02	5.14
5	5.11	5.32	4.63	4.78	5.11	5.07
6	4.21	4.53	4.85	4.99	4.21	4.31
7	5.17	5.49	4.32	4.56	5.17	5.14
8	4.61	4.73	4.63	4.71	4.61	4.72
9	4.45	4.67	5.17	5.32	4.45	4.44
10	5.42	5.43	5.42	5.43	5.42	4.37
11	4.74	4.88	4.74	4.88	4.74	4.82
12	4.12	4.34	4.12	4.34	4.12	4.31
13	5.14	5.32	5.14	5.32	5.14	5.22
14	4.23	4.51	4.23	4.51	4.23	4.09
15	4.81	4.78	4.81	4.78	4.81	5.25
16	4.58	4.63	4.58	4.63	4.58	4.64
17	4.92	4.89	4.92	4.89	4.92	4.85
18	5.14	5.33	5.14	5.33	5.14	4.82
19	4.87	5.19	4.87	5.19	4.87	4.63
20	4.11	4.23	4.11	4.23	4.11	5.17
21	4.54	4.77	4.54	4.77	4.54	4.62
22	4.92	5.07	4.92	5.07	4.92	4.87
23	5.04	5.23	5.04	5.23	5.04	5.13
24	4.37	4.54	4.37	4.54	4.37	4.30
25	3.92	3.90	3.92	3.90	3.92	3.85

ROW SCORE

S.No	Group : A(Aerobics Exercise)		Group : B (Yogasana)		Group : C(Control Group)	
	Pre-Test	Post Test	Pre-Test	Post Test	Pre-Test	Post Test
1	5.6	7.9	5.7	6.4	5.4	5.3
2	6.0	6.9	6.2	7.8	6.2	6.2
3	5.1	7.1	5.1	7.3	7.1	7.2
4	6.3	7.3	6.5	7.7	5.3	5.4
5	6.0	7.3	5.2	6.8	6.0	6.1
6	6.1	7.9	6.8	8.1	5.1	4.9
7	5.4	6.7	4.5	5.9	4.7	4.6
8	5.2	6.7	5.0	7.1	5.7	5.9
9	6.2	7.2	4.3	6.9	6.2	6.3
10	5.3	7.9	5.3	7.9	6.3	6.5
11	5.1	5.8	5.1	5.8	5.3	5.4
12	5.3	7.0	5.3	7.0	5.0	5.2
13	7.2	8.7	7.2	8.7	6.2	6.1
14	5.7	6.4	5.7	6.4	4.7	4.8
15	5.5	5.9	5.5	5.9	5.1	5.3
16	5.2	7.4	5.2	7.4	5.4	5.2
17	5.9	6.9	5.9	6.9	4.9	5.4
18	6.2	7.2	6.2	7.2	5.2	4.9
19	6.4	7.4	6.4	7.4	5.4	5.5
20	4.9	6.8	4.9	6.8	4.8	4.9
21	6.1	6.4	6.1	6.4	6.0	6.1
22	5.3	7.8	5.3	7.8	5.3	5.4
23	5.7	7.7	5.7	7.7	4.7	4.6
24	5.1	7.2	5.1	7.2	6.1	6.0
25	5.2	6.9	5.2	6.9	5.9	5.7

PRE TEST AND POST TEST OF SIT AND REACH TEST (CM.)