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Yoga was originated in India several thousand years ago. According to Max Mueller, Yoga is about six thousand years old, but other sources indicate that it is much older than that. Patanjali, who lived about 200 B.C., is called the Father of Yoga because he was the first to put into writing what had until that time been handed down only verbally from master to pupil.

Kuvalayananda wrote

"Yoga has a complete message for humanity,
It has a message for the human body,
It has a message for the human mind, and
It has also a message for the human spirit".

He further said that intelligent and capable youth should come forth to carry this message to every individual not only in India, but also in every other part of the world.

The word 'Yoga' is derived from the Sanskrit root "Yuj" which means join, or union. The purpose of all yogas is to unite man, the finite with the infinite, with cosmic consciousness, Truth, God, Light or whatever other names one chooses to call the ultimate Reality.
Patanjali defines Yoga as, 'the control of the fluctuations of the mind, the intellect, and the ego' (Iyengar, 1997).

Patanjali has formulated eight stages in Yoga. They are Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.

Yama deals with social discipline, while Niyama talks about individual discipline. Asana is the practice of various postures and pranayama deals with breath control. Pratyahara speaks about withdrawal of sense, Dharana deals with concentration. Dhyana and Samadhi talk about meditation and self realisation respectively.

Patanjali system of yogic practices were more systematic, scientific and it is also the basic of all yoga systems and practiced commonly by all.

There are many more yogic systems in India but they are not as popular as Patanjali system of yogic practices.

In short, Yoga can help to solve the problems of any receptive individual, whether these problems be of a physical, mental, or spiritual nature and thereby,
eventually, also help to solve the problems of a group, society and even a nation. (Devi, 1994).

On all those who seek physical well being, mental peace, or concentration of mind, yoga bestows whatever they demand and satisfies them all. (Iyengar 1997).

The Government of India, having realized the manifold advantages of Yoga, is beginning to encourage the practice of Yoga on a nationwide scale.

Yoga exercises are incidentally invaluable in keeping the figure slim and youthful, and many women would find them effective in helping to solve their particular problems.

Woman differs greatly from man in her build and stature. From a careful study of the features distinguishing woman from man, namely her physical body, her changing physiological functions and emotional states, it follows that, if she chooses to adopt Yogasana and Pranayama as part of her way of life, they will be even more meaningful and advantageous to her.

Yogasanas and Pranayama have stood the test of time for centuries and are helpful for all the needs of
men and women in their pursuit of perfect health and supreme happiness.

Asana means "a manner of sitting", generally translated as posture. It should be kept in mind that the goal of Yoga is the Samadhi, and since Indian culture has favoured the seated position for meditation, Asana would primarily mean a "seated posture".

Asanas are a distinguishing feature of Yoga. Patanjali describes asana as, "posture brings stability of the body and poise of the mind".

All types of asana exercise have two features - motion and action. Asanas exercise the anterior, posterior, lateral, and interior portions of the body equally, as every posture is a complete entity in which each part of the body has a particular role to play and no part is forgotten. Motion is constant movement from position to position or from place to place. Asanas, though appearing static externally, are full of dynamic action within. A full range of movements and actions such as horizontal, vertical, diagonal, and circumferential extension and expansion are created while performing the postures. This requires skill, intelligence, and application. No portion of the body
or the mind is left untouched when an asana is carefully and correctly performed. (Iyengar, 1997).

Prana is air, breath, the very life force; Yama means expansion of its length and breadth and volume. Thus the systematic lengthening of inhalation and exhalation and the pause in between is breath control. It has a greater say in the efficiency and capacity of lungs. As such its influences will be more beneficial in all sports and games.

Any activity which requires a total concentration of our mind will also control our breath which may even be stopped for a while (e.g) while threading the needle, our breathing is stopped for a few movements. This shows clearly that there is a correlation between our mind and breathing, a pranic activity. The emotions and the mental activities are related to the nervous system and through it they change our breathing. This means if we try to manipulate our breathing voluntarily. We tackle the life force which is deeply connected with the mind and therefore with the emotions. Pranayama aims primarily at the control on the mind. When the mind stands still, no thought process or emotional disturbance is possible. Thus by controlling the mind we would be able to control
different emotions and as a result, the temperament, moods, desires and natural instincts of mind are also controlled automatically.

The word 'sport' comes from 'desports' from old French verb 'de porter' which meant to play games. Another derivation of the word 'sport' is related to the English word 'desport' and the Italian 'deporto' which mean whiling away the time in pleasure.

From fifteenth to the eighteenth century, 'sport' had meant any pastime or diversion from the serious side of life, sometimes but not always, requiring physical effort and skill. In the nineteenth and twentieth century, the word 'sport' came to be used in a more restricted way to refer to stereotyped competitive activities often performed by experts. In this restricted sense sport may be defined as traditionalised set of rules to be exemplified by men who try to be excellent in and through their bodies.

Sports in the form of exercise have been used as a means of treating various disorders by Greeks as can be gathered from works of Hippocrates.

European Council adopted the term 'sport for all' in 1966 to give broader meaning and universal
appeal to sport. The concept of sport for all which is quite different from the traditional conception of sport embraces not only sport proper but also and perhaps above all, various forms of physical activity, from spontaneous unorganised games to a minimum of physical exercise regularly performed.

In a wider sense, we could think of life time sports which may be defined as "physical activities in which persons participate throughout most of their life span". This life time sports oriented approach is greatly needed in the field of physical education today because the traditional programme of team sports has failed to prepare students who could participate in physical activities during the adult years.

An international charter of physical education and sport was adopted by the UNESCO in November 1978. Article 1 of the charter states the ideals of sport for all as follows:

Article 1 - The practice of physical education and sport is a fundamental right for all. Every human being has a fundamental right of access to physical education and sport, which are essential for the full development of his personality. The freedom to develop physical,
intellectual and moral powers through physical education and sport must be guaranteed both within the educational system and in other aspects of social life.

Everyone must have full opportunities in accordance with his national tradition of sport, for practicing physical education and sport, developing his physical fitness and attaining a level of achievement in sport which corresponds to his gifts.

Special opportunities must be made available for young people, including children of pre-school age, for the aged and for the handicapped to develop their personalities to the full through physical education and sport programmes suited to their requirement.

The scope of the term "sport" may be summarised in the following points:

i) Any pastime or recreation with or without physical efforts and skill.

ii) Competitive physical activities performed by experts.

iii) Part of physical education programme involving organised games.
iv) Physical activities used as exercise for promotion of health and physical fitness.

v) Form of exercise in the treatment of various disorders.

vi) The moderate and adequate practice of physical activities suited to the requirements of individuals.

Many studies have proved that Yoga practices are tremendously beneficial to sportsmen. It prevents sports injuries and helps in rehabilitation programmes for sports injuries.

Application of yogic exercises has a considerable scope in the promotion of sports. Promotion of sports depends on its (i) basic fitness factors (ii) specific sports skills and (iii) psychological factors.

Excellent performance in any sport is governed by the several factors of physical fitness. The important ones may be mentioned as: speed, strength, stamina, suppleness, stability and neuromuscular coordination. Although not many scientific researches have been done, the works of Herbert A. de Vries (1961a, 1961b, 1962), Gharote (1964, 1976), Dhanraj (1974), Giri
(1966), Moses (1972), Gharote and Ganguly (1973), Therrien (1968), Huddleston (1964) have shown enough evidence about how Yoga could be gainfully employed in the promotion of basic fitness factors. Using elaborate Fleishman battery of basic fitness tests, Gharote (1974) has shown how even a short term yogic training could improve different basic fitness factors. Huddleston (1964) has strongly urged that a daily 10 to 12 minute exercise programme based on yoga be incorporated in the schools throughout United States.

Yoga has a special gift to alter the athletes and sports-women. Asanas can help correct the faulty movement of muscles which cause strains and sprains. They create freedom from pressures and tensions and give speed, elasticity, strength, endurance and coordination to the entire system. When sportsmen and sports-women suffer from exhaustion, they can easily recover their energy by practicing asanas. Asanas also increase their range of movement, Iyengar (1997).

There is a definite and perceptible difference between the yogic type of exercise and other types of physical exercises that are responsible for building physiological development such as pulse rate, breath holding time and respiratory rate and concentration of
mind. Yogic system of physical culture do promote the blood circulation and pulse rate. Further, it may be noted that yogic system of exercises directly influence the vital organs and promote health.

Colleges in India in general and Tamil Nadu in particular do not have any systematic compulsory programme in physical education either for men or women. Participation is optional in the intramural programme where inter class competitions are conducted among students. The best few in games and athletic events get themselves selected to represent their colleges in inter collegiate tournaments and may go further to find a place in university teams.

Women students in colleges, as day scholars in particular, either do not get time to participate in any game after college hours or are not permitted to stay for long for such participation by their parents. A few women, residing in college hostels or really interested in play through their past participation or achievements in schools, do become participants in colleges.

This study was an attempt to find out the impact of yogic practices on college women participants and non participants in sports in general and its influence on non participation alone.
STATEMENT OF THE PROBLEM

The purpose of the study was to investigate the effect of yogic practices on selected physical, physiological and psychological variables among collegiate women participants and non participants in sports and games.

HYPOTHESES

It was hypothesised that

1. There would be no significant effect of Yogic practices on cardiorespiratory endurance, muscular endurance and flexibility among collegiate women participants and non participants in sports.

2. Performance in all selected physical variables between the groups would not differ significantly.

3. There would not be any significant change in Resting heart rate, Respiratory rate and Breath holding time after yogic practices among women collegiate participants and non participants in sports.

4. Performance in all the selected physiological variables would not show any significant difference between the experimental groups.
5. There would be no significant influence of yogic practices on trait anxiety and self concept among women collegiate participants and non participants in sports.

6. There would not be significant differences in all selected psychological variables between the two experimental groups.

DELIMITATIONS

The study was delimited on the following aspects:

1) For this study twenty women students who participated in sports & games and another twenty women students who did not participate in any sports & games were selected randomly from Queen Mary's College, Chennai as subjects.

2) The age of the subjects ranged from seventeen to twenty two years.

3) Asanas and pranayama were only practiced by both the experimental groups.

4) The following physical, physiological and psychological variables only were chosen for the study.
Physical

Cardiorespiratory endurance
Muscular endurance and
Flexibility

Physiological

Resting Heart Rate
Respiratory rate and
Breath holding time

Psychological

Trait Anxiety
Self concept

5) The experimental period was delimited to twelve weeks only.

LIMITATIONS

1) The health habits and other physiological factors of the subjects were not considered in this study.

2) The climatic conditions were not taken into consideration while the training and tests were administered.
3) Certain factors like food, previous physical training, lifestyle, daily routine, diet and mood state and other psycho sociological factors which may have some effect on the results of this study were not taken into consideration.

4) The responses of the subjects to the statements in the questionnaire would depend upon various factors, such as understanding of the statements, seriousness and sincerity of the subjects etcetera. The accuracy and reliability of the subject's responses to the questionnaire could not therefore be assessed and this was considered as one of the limitations.

DEFINITION AND EXPLANATION OF THE TERMS

Yogic Practices

Yogic Practices are Indian method of exercises which are practiced over thousands of years for keeping the human body physically and mentally fit (Kalidasan et.al. 1998).

Asanas

Asana is the practice of various postures.
Pranayama

Prana is air, breath, the very life force; Yama means expansion of its length and breadth and volume. Thus the systematic lengthening of inhalation and exhalation and the pause in between is breath control (Iyengar, 1997).

Cardiorespiratory Endurance

It is the ability of the circulatory and respiratory systems to efficiently adjust to and recover from exercise (Clarke, 1976).

It refers to the cooperative efforts of the heart, the blood vessels, and the organs of respiration which are responsible for bringing environmental air into the lungs and ultimately expelling waste gases (Greeberg et al. 1986).

Muscular Endurance

Muscular endurance is the ability to perform repeated isotonic or isokinetic muscle contractions or to sustain an isometric contraction. Muscular endurance tends to improve with muscular strength; thus training techniques for these two components are similar (Bucher et al. 1985).
Flexibility

Range of movement present at body points (Barrow et.al. 1989).

The range of motion possible about a given joint or series of joints (Prentice, 1994).

Resting Heart Rate

The number of times heart contracts in each minute while the body is at rest (Hockey, 1993).

Respiratory Rate

It is the number of breaths in a minute or a number of respiration/expiration in a minute.

Breath holding time

It is defined as the duration of time through which one can hold his breath without inhaling or exhaling after a deep inhalation (Strukic, 1981).

Anxiety

The term 'Anxiety' is used to describe the combination of intensity of behaviour and direction of effect or emotion. The direction of effect characteristic or anxiety is negative in that it
describes subjective feelings that are unpleasant (Spielberger et.al., 1970).

Self Concept

It is individual's perception, attitude and feelings about himself (Guilford).

Participants in Sports

For this study, 'Participants in Sports' is related to college women students who actively participate in regular physical education programme of the college like intramural and extramural tournaments besides regular practice sessions.

Non-Participants in Sports

For this study, 'Non-Participants in Sports' is related to college women students who do not participate in any physical education programme in the college.

SIGNIFICANCE OF THE STUDY

1) The results of the study may contribute to the knowledge of yogic practices and their utility for sports participants and non participants among students.
2) The study may help to identify the effects of yogic practice on physical, physiological and psychological variables.

3) The study may also help the physical educators and coaches in preparing a schedule of training along with yogic practice to provide psychological balance (physiological) among participants.