International Journal of Physical Education & Sports Sciences
Vol. 11, Issue No. 2, April-2017, ISSN 2231-3745

Effects of Yogic Practices on Human Health

Jitendra Sharma[1]* Dr. Minakshi Pathak[2]

[1] Research Scholar

[2] Dean, School of Physical Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore

Abstract – Yoga and Health are closely related. Yoga is a popular aid in improving both physical and mental health. This is the basically, the most common goal of people who practice yoga for health reason. For year yoga has been considered therapeutic. Several researches have been conducted to look at the effects of this practice on the body. When yoga is done correctly, it will help the body cope with ageing and reduce the harmful effects of stress on the mind and body. Yoga practice and proper diet can help to improve the flexibility and strength of musculoskeletal system.

Key Words – Yogic, Human Health, Yoga and Practices.

----------X----------

INTRODUCTION

Yoga provides holistic approach in coping with respiratory ailments by improving one's physical, mental and spiritual health. Yoga for a fact is not a sport; however, it helps players. Yoga is now intertwined to the game, giving the benefits that every players needs. Soccer involves agility and concentration among players. Since they get most of the game by using their leg muscles, chances of their being injured or sprained is much likely. This is where yoga steps into brought enlightenment. Yoga focuses on a person's overall health, bringing them to a state where everything is in its proper position and on track. Yoga is beneficial to both physical and emotional well-being. Yoga can aid in the prevention of accidents as well as the improvement of strength and flexibility.

MEANING OF YOGA

The word 'Yoga' is derived from the root "Yuj" or Yoke that means union or merger. The merger of soul with God and the experience of oneness with Him are implied by yoga.Patanjali stated that "Yoga Cittavrtti nirodha". It means stilling the mind's movement. It is also explained as seeing yourself in yourself by yourself. Yoga is a timeless pragmatic science that has developed over thousands of years to address man's physical and spiritual well-being. Yoga training is a technique of harmony and also a preparation for the total integration of human personality. Yoga was first summarized and systematized around the second century A.D by Patanjali and his yoga sutra is still regarded as the classic work on the subject. Hence, Patanjali is known as the Father of Yoga. He has formed a number of sutras regarding yoga (195 statements) called yoga sutras.Yoga is a method by which one can remove ignorance and attain union with the supreme self (Iyengar 1983).

IMPORTANCE OF YOGA

Yoga is a system of attaining perfect physical and mental health. The body is the temple of soul and to attain harmony of mind, body and spirit, the body must be physically fit. Yoga controls one's senses resulting in an integrated personality. Positive changes in the life style of people can be brought through by yoga. Behaviors can also be molded properly leading to balanced personalities. It clearly reveals that there will be a sound mind only in a sound body. To keep our body in good condition, it is essential that the various organs and systems of our body must be in good condition. Yogic exercises play an important role in the maintenance of the above systems. The practice of yoga not only develops the body but also enhances the mental faculties.

Yoga is a system of psycho physical training that has its uncovering of mystical consciousness. The yoga asanas not only to develop the muscles and the body but also regulate the activities of all the internal organs and glands to positively affect the nervous system which controls our well being to a greater degree than we actually suppose. Best of all, yoga is apt for all, regardless of age, color, caste, creed or religion; from the healthiest to the sickest, from the richest to the poorest, from the whitest to the blackest. Here are some of the specific and immense benefits of yoga.

Yoga:

1. Reduces tension and improves relaxing abilities.
2. Increases physical endurance, power, and flexibility.
3. Increases focus and self-control abilities.
4. It instills impulse control.
5. Aids in the recovery of both old and new injuries.
6. Increases pain tolerance and improves mental clarity.
7. Improves the immune system's efficiency.
8. Improves muscle tone and posture.
9. It helps to improve blood supply.
10. Good, glowing skin is the result.
11. Cleanses and increases the overall function of the organs.
12. Provides mental clarity and a more optimistic perspective on life.
13. Instills a sense of inner peace and order.

The best part is that yoga is very relaxing. Allergies, Alzheimer's disease, anaemia, rage, anxiety, arthritis, asthma, back pain, bronchitis, cancer, carpal tunnel syndrome, chronic fatigue, colitis, constipation, depression, diabetes, epilepsy, and eye disorders are only a few of the illnesses that have been shown to be relieved, reversed, or even healed by the practise of yoga. Other conditions include wrinkles, gastrointestinal problems, headaches, heartburn, haemorrhoids, hepatitis, high blood pressure, hypertension, immune failure, impotence, menopause, menstrual cramps, migraines, multiple sclerosis, muscular dystrophy, nervous stress, obesity,osteoporosis, prostate, enlargement, sciatica, skin problems, sleep apnea, slipped disk, sterility, stiffness, stress, insomnia, intoxication, thyroid problems, kidney stones, stuttering and stammering, urinary tract disorders for women and vaginal infections.

Yoga universally benefits all people of all ages. Yoga is described as the silencing of the mind's activities that leads to complete realisation of the Supreme Being's intrinsic existence, which is fascinating to those with a philosophical mind. It is a practical holistic philosophy designed to bring about profound state of well-being and is an integral subject, which takes into consideration of Man as a whole. The aim of yoga is to devise ways and means of helping better emotional and intellectual concentration.

EIGHT LIMBS OF YOGA

The great yogi, Patanjali, has enumerated what is called as raja yoga. The Patanjali's Raja Yoga lays down an eight fold path to reach the goals of life. They are referred to as "Eight Limbs of yoga" (or) Astanga Yoga.

Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, and Samadhi are the eight limbs of Yoga. These eight limbs are all linked in some way. Each limb has a lot of facets within it. They can be realized or experienced only through the study of the texts and practice of the same in our life. Each limb leads progressively to the next higher stage of awareness and to spiritual life. Here all the eight limbs are constructed so that an individual develops his /her spirituality in life. The first five limbs deal with the individual's outward actions or external practices.

Produced as a result of spiritual wisdom. Every step is just a footstep or eight Limbs to reach the final eighth step.

Yama: Abstinence – code of character

Yama is a list of do's and don'ts (restraints) and it is the first anga of the Raja yoga. Actually it deals with the individual's moral discipline that is the code of character. It proscribes killing, falsehood, theft and greediness during one's life time.

Niyama: Observance of code of conduct

The second "anga" of Raja yoga also details some moral codes of conduct for the individual. This section is devoted to a recommendation of good things to be followed in life. Patanjali refers to them as Niyamas.

Asana: Posture

The third "anga" is Asana. Asana means posture. We give all possible movements to the body by aligning our body into different postures, hold on to those postures for some time and then relax the whole body. This wide range of posturing improves suppleness and flexibility in the body. Further it tones up the nervous system, function of all vital internal organs, stimulation of the glands and regulation of the blood flow. The muscles in our body are thus formed and strengthened.

Pranayama: Breath control

Pranayama is the fourth "anga"in Raja yoga. Pranayama means breath control. In other words it is the control of air by means of inhalation, holding

and exhalation. Pranayama is mainly used to prepare the mind for meditation.

Pratyahara: Sense withdrawal

The living involves the five senses that are at the disposal of our body. Self control means controlling our sense organs namely the eyes, the nose, the mouth, the ear, and the body. In pratyahara, Patanjali advocates sense withdrawal to save a yogi from sense involvement. Moha or attraction is repulsed by pratyahara. This is possible by disciplined practice of the sense organs. When one is taken away by sensation of sight, touching, hearing, smelling and taste concentration meditation is not possible. To control sensation, pratyahara is recommended.

Dharana: Concentration

Dharana means concentration. Patanjali says that concentration is the fixing of the mind on something. It is a preparatory stage for next stage called Dhyana. In this stage the concentration of mind is practised by focusing our attention on a particular spot or object.

Dhyana: Meditation

In yoga sutra, Dhyana means the unity of the mind achieved through contemplation. Concentration results in meditation. Dhyana is a deep meditative stage in which the entire mind is fixed on an object or thought. It is done so intensely and entirely so that the mind unites with the object contemplated. It is a stage of total concentration insulated from all kinds of distractions or interruptions. Such a stage is called dhyana the seventh “anga” of Patanjali yoga.

Samadhi: Self Realization

Samadhi is a highly integrated consciousness, in which the person meditating the object and the act of meditation are unified into a one whole. This is such a stage in which self-realization is attained.

LITERATURE REVIEW

Hafner-Holter, et. al. (2009) conducted a study on Effects of fitness training and yoga on well-being, social competence and body image. It describes and compares influences from a physical activity program and a yoga program on well-being, mood, stress coping, body-image and social competence in healthy people. Before completing the programme and after participating for 20 units, 18 people in a gym and 21 people in a yoga programme completed the following questionnaires: Body-Image-Questionnaire (25), Symptom-Checklist-90 R (8), Complaint-List (31), Adjective Mood-Scale, and a Visual Analogue Scale for evaluating stress levels (10). Statistical studies indicate that both training groups improved their social competence; the gym group reported less sexual distress, while the yoga group reported less summarization and body-related anxiety, as well as improved physical and emotional well-being.

Chen et. al. (2009) Researchers conducted a study on the influence of yoga exercise intervention on health-related physical fitness in school-age asthmatic children to investigate the effects of yoga exercise on the health-related physical activity of school-age asthmatic children. The study used a quasi-experimental research design in which 31 children aged 7 to 12 years were randomly selected from one Taipei County public elementary school (exercise group 16; control group 15). For a total of seven weeks, the fitness group practised the yoga exercise routine three times a week. Every 60-minute yoga session included 10 minutes of warm-up and breathing exercises, 40 minutes of yoga postures, and 10 minutes of cool-down exercises. Before the exercise (baseline), and again after the seventh and ninth weeks, fitness levels were assessed.

Brown and Gerbarg (2009) Yoga breathing is a significant part of health and spiritual practises in Indo-Tibetan traditions, according to the author. It's thought to be essential for physical well-being, reflection, mindfulness, and enlightenment. It's a form of meditation as well as a way to get ready for deep meditation. By getting your mind back to the present moment, yoga meditation (pranayama) will help you relax. They reviewed data showing how breathing exercises can influence longevity mechanisms in certain ways that overlap with meditation and in other ways that are distinct from meditation but complement it synergistically.

Chaya et. al. (2006) At a residential yoga education and research centre in Bangalore, researchers looked at the net improvement in the basal metabolic rate (BMR) of people who were regularly participating in a combination of yoga activities (asana or yogic postures, meditation, and pranayama or breathing exercises) for a minimum of six months. Individuals who practised yoga through a variety of activities had their BMR calculated and contrasted to control subjects who did not practise yoga but lived similar lifestyles. The long-term practise of yoga using a mixture of stimulatory and inhibitory yogic activities results in a substantially reduced BMR, which is likely related to reduced arousal, according to this report.

Adanmohan et. al. (2005) conducted a comparison study of the “Effect of short-term (three-week) training in savitri (slow breathing) and bhastrika (fast breathing) pranayams on respiratory pressures and endurance, reaction time, blood pressure, heart rate, rate-pressure product, and double product on respiratory p Thirty student volunteers is divided into two groups of fifteen students each. Group I was taught Savitri pranayam, which involves slow, rhythmic, and deep breathing. Group II received

instruction in bhastrika pranayam, a bellows-style fast and deep breathing technique. Before and after a three-week training cycle, parameters were assessed. The practise of Savitri pranayam resulted in a major improvement in respiratory pressures and stamina. There was a noticeable but statistically insignificant reduction in reaction time in both classes.

Harinath et. al. (2004) "Effects of Hatha yoga and Omkar meditation on cardiopulmonary output, psychological profile, and melatonin secretion," according to the study. Thirty stable men between the ages of 25 and 35 agreed to participate in the study. They were randomly divided into two 15-person groups. Group 1 subjects served as controllers for three months, doing 40 minutes of body flexibility workouts and 20 minutes of sluggish running in the morning and 60 minutes of games in the evening. Group 2 participants practised 45 minutes of yogic asanas (postures) and 15 minutes of pranayama in the morning and 15 minutes of preparatory yogic postures, 15 minutes of pranayama, and 30 minutes of meditation in the evening for three months. Orthostatic resistance, pulse rate, blood pressure, respiratory rate, and complicated lung function are also things to think of (such as forced vital capacity, forced expiratory volume in 1 second, forced expiratory volume percentage, peak expiratory flow rate, and maximum volume ventilation).

Barshankar, et. al. (2003) The effect of yoga on cardiovascular function in people over the age of 40 was studied. The Valsalva ratio, pulse rate, systolic and diastolic blood pressure, and Valsalva ratio were measured in 50 control subjects (who did not participate in any form of physical activity) and 50 study subjects who had been practising yoga for 5 years. According to the findings, subjects who practise yoga have a substantial reduction in their pulse rate (P0.001). The difference between the research group and the control group in mean systolic and diastolic blood pressure was also statistically significant (P0.01 and P0.001, respectively).

Virtanen et. al. (2003) The researchers wanted to see whether psychological factors like heart rate variability (HRV), blood pressure variability (BPV), and baroreflex sensitivity (BRS) are linked in healthy middle-aged men and women. The researchers looked at a population-based study of 71 men and 79 women aged 35 to 64. During paced breathing, five-minute supine ECG recordings and beat-to-beat photoplethysmographic finger systolic and diastolic arterial pressure were obtained. For low-frequency (0.01-0.15 Hz) and high-frequency (0.15-0.10 Hz) energies, power spectra were computed using fast Fourier transforms.

Swami Vivekananda Yoga Research Foundation (2002) Yoga and relaxation were the subjects of a report. In this study, 35 male volunteers ranging in age from 20 to 46 years old participated in two yoga-based guided relaxation and supine rest sessions. 15 subjects had their autonomic variables assessed before, during, and after the practises, while 25 subjects had their oxygen intake and breath volume measured before and during both forms of relaxation. Following directed relaxation, there was a substantial decrease in oxygen intake and an increase in breath volume (paired t test). Both forms of relaxation resulted in similar decreases in heart rate and skin conductance.

Karuppasamy (2002) conducted a study on "Effect of physical training and asanas on selected physiological variable and motor ability component among college men". For this study, he selected 30 college men age ranging between 18 to 19 years and divided them in three groups, which underwent six weeks training programme of asana and physical training and a control group that did not do any training. He used ANCOVA and found out that there was significant effect of asana on pulse rate but there is no change in speed.

OBJECTIVES OF THE STUDY

Yogic practices and physical activities are crucial in the creation of the nervous and endocrine systems' equilibrium, which has a direct impact on many of the body's other systems and organs. Yoga is a treatment that is both curative and preventative. The purpose of yoga is to achieve inner peace, enhanced focus abilities, a relaxed state of being, and relationship harmony.

We become conscious of the interconnectedness of our emotional, mental, and physical levels when we practice yoga. Gradually, this knowledge contributes to a comprehension of life's more nuanced aspects. The ultimate aim of yoga is to allow you to fuse the gross material (annamaya) and spiritual (Pranayama) levels of your being. Mental (Manomaya), intellectual (Vijnanamaya), and spiritual (anandamaya).

There are a number of studies already undertaken in yoga and physical exercises. However, no study has been conducted on the effect of yogic practices, physical exercises and the combination of both yogic practices and physical exercises on selected physical physiological and Anthropometric variables of college players in MP State.

RESEARCH METHODOLOGY

YOGASANA

The following were the selected Yogic exercises given to isolated yoga group and combined group. The yogasana was done every day early in the

morning except on Sundays. Each asana was done thrice. The following procedures were adopted:

The Sun Salutation: Surya namskar is not an asana, but a series of gentle flowing movements synchronized with the breath. 6 cycles of the Sun Salutation was done every day

Tadasana: This involved the subject to be in a standing position, with the feet slightly apart in the normal stance placed sideward's and to the shoulder width of the individual. Keeping the palms together he slowly extended the arms above the head and elbows were straight hands to be inter locked. Heels were slowly raised and the body was balanced on the toes.

Vrkshasana: This necessitated the subject to be in a standing position, with straight balancing on the right foot, bend the left knee placing the foot against the opposite thigh with the knee pointing outwards. Keeping the palms together, he slowly extended the arms above the head and elbows were straight and kept the eyes focused on a point.

Utkatasana: This involved the subject to be in a standing position, balancing on both the feet, keeping the palms together, he slowly extended the arms above the head and elbows were straight. Next he sat down slowly till both the knees touched together and kept the body straight.

Natarajasana: This involved the subject to be in a standing position, with a body facing straight ahead. He bent the right knee, lifting the foot until it touched the body, held the ankle with the right hand and stretched the left arm up, with elbow straight the arm was brought along side of the left ear and the right foot was stretched away from the body.

Padmasana: Here the subject placed his right foot on the left thigh and left foot on the right thigh with the soles of the feet upward. The hands were placed on the lap, with palms up. The right hand was placed upon the left or was left leave them hanging down loosely on the knees with fingertips pointing to the earth.

Bhujangasana: Lying in prone position, with legs straight together and chin touching the ground, the subject was asked to rests the palms on the ground below the shoulders and elbows with the soles of the feet facing up. Inhaling slowly the chin, nose, forehead, head and chest were slowly raised as the cobra raises its hood. The spine was bent as an arch and the back and lumbar regions were well stretched.

Halasana: Lying on the back, the legs were raised slowly up to 90 degrees and held for a few seconds. Legs were gently lowered behind the head until the toes touched the ground. Feet were extended a little further behind the head with toes pointing outward.

Savasana: This is a relaxing asana. One should lie on the back with a little distance between the legs and hands a little away from the body. The body should be slack. Position of the head should either be straight or tilted to any side that suits best.

Vajrasana: Here the subject bent the legs and sat on the knees placing the heels under the hips. The heels were being open but the toes joined and the feet completely touching the ground. The spine was kept straight and the hands placed on the knees while the arms were kept straight.

Chakrasana: Subject was asked to stand with the feet apart to the shoulder width. Hands were raised upward. The trunk was slowly bent backward and the palms placed on the ground.

Nadisuddhi Pranayama

Subjects were asked to sit in a meditation mode and keep the head, neck, waist straight. With the right hand in nasica mudhra and left hand in chin mudra. They were asked to breathe in air from left side the close left nostril and breathe out air from right nostril and then breathe in air from right side then close right nostril with thumb finger and breathe out air from the left nostril

CONCUSION

Improved memory, respiration, cardiovascular risk, BMI, blood pressure, and diabetes mellitus were all found to be significant health benefits in the study of yoga practices discussed in the paper. It also improved immunity and alleviated joint pain. The recent research articles underlying the effects of yogasanas, pranayamas. Yogic practices significantly improved Physical variables, such as speed, leg explosive power, agility.

REFERENCES

Hafner-Holter S, Kopp M and Günther V. (2009) Effects of fitness training and yoga on well-being stress, social competence and body image Journal of sports, 23: 4, pp. 244-248.

Chen TL, (et.al), Kuo CH. (2009) Department of Nursing, Chung Jen College of Nursing, Health Science and Management, Chiayi City, Taiwan.

Brown and Gerbarg. PL, et.al (2009) "Sudarshan Kriya yoga Breathing in the Treatment of Stress, Anxiety and Depression. Part II-clinical Applications and Guidelines" J. Alterm. complement Med. II (G), pp. 711-7.

Chaya et. al (2006) " The Effect of Long Term Combined yoga practice on the Basal

metabolic Rate of Healthy Adults" BMC complement Altern Med . 31, pp. 6; 28.

Madan Mohan et.al (2005) "Effect of slow and fast pranayamas on Reaction Time and cardio respiratory variables" Indian J. Physiol. Pharmacol. 49: 3, pp. 313 -8

Harinath, Malhotra A.S etal (2004) "Effects of Hatha yoga and Omkar Meditation on cardio respiratory performance, psychologic profile and melatonin secretion" Journal Attern. compliment Med ,10 :2 : pp. 18

Bharshankar JR. etal. (2003) "Effect of yoga on cardiovascular system in subjects above 40 years" Indian J. Physiol. Pharmacol 47 (2): pp. 202.

Virtanen.R et.al (2003) "Anxiety and Hostility are associated with Reduced Baroreflex sensitivity and Increased Beat – to Beat blood pressure variability " Psychosome. Med 65: 5; pp. 751–6.

Swami Vivekananda Research foundation (2002) "Yoga Sudha. The monthly Journal of swami Vivekananda yoga prakashan, Bangalore.

Karuppasamy (2002) "Effect of Physical Training and Asana on selected physiological variables and motor ability component" unpublished M.Phil. Dissertation, Alagappa University, Karaikudi.

Corresponding Author

Jitendra Sharma*

Research Scholar