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Yoga: An Art of Living

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Abstract

Yoga is one of the oldest sciences which are about 5000 years old. References of yoga even found in Upanisads (Kaohopanisad). Yoga, being the process of normalization, is studied since thousands of years. The daily practice of Yoga brings the various unbalanced systems of the body to normal state. Yoga is being increasingly used as an adjuvant therapy for various conditions based on research done in the past many decades. This paper attempts to focus on the scientific basis of some Yoga practices.

Keywords: Yoga, Scientific Basis, Therapy, Stress, Nervous System, Neuroplasticity

1. Introduction

Yoga is a simple process of reversing the ordinary outward flow of energy and consciousness so that the mind becomes a dynamic center of direct perception no longer dependent upon the fallible senses but capable of actually experiencing Truth. By practicing the step-by-step methods of Yoga taking nothing for granted on emotional grounds or through blind faith we come to know our oneness with the Infinite Intelligence, Power, and Joy and this is the essence of our own Self.

Yoga, the ancient cultural heritage of India has recently become popular as a therapeutic adjuvant to modern scientific medicine. A lot of research has been done on various aspects of Yoga in relation to health and disease and the physiological and psychological benefits of Yoga have given rise to various potentialities as an adjuvant therapy for numerous psychosomatic disorders

2. The Origin of Yoga

'Yoga' -the very word radiates peace and tranquility. This feeling probably stems from the etymology of the word. The word Yoga is derived from the Sanskrit word - 'Yuj' which essentially means to join or unite. The union referred to is that of the individual self uniting with Cosmic Consciousness or the Universal Spirit. Yoga is a means to achieving this goal.

Born in India, almost 26,000 years ago, Yoga is believed to have evolved during the period of the 'Sat Yuga', also called the Golden age. This period became known as a time of everlasting peace and abundant blessings, filled with seekers of the Eternal Truth. That is why, probably, even today we associate yoga with sages and hermits.

It was not until the discovery of the Indus- valley civilization, the largest civilization, that knowledge about the origin of Yoga surfaced. Excavations give evidence of yoga's existence during this period; yogi -like figures engraved on soapstone seals have been unearthed. In fact, it was the Aryans, migrating from the north- west, who were instrumental in discovering yoga.

3. Goals of Yoga

The ultimate goal of Yoga is *moksha* (liberation) though the exact definition of what form this takes depends on the philosophical or theological system with which it is conjugated. According to Jacobsen, a renowned scholar of Yoga "Yoga has five principal meanings:

1. Yoga as a disciplined method for attaining a goal;
2. Yoga as techniques of controlling the body and the mind;
3. Yoga as a name of one of the schools or systems of philosophy (*darśana*);
4. Yoga in connection with other words, such as "hatha-, mantra-, and laya-," referring to traditions specialising in particular techniques of yoga;
5. Yoga as the goal of Yoga practice."

4. Types of Yoga

4.1 Hatha Yoga

The term Hatha Yoga has been commonly used to describe the practice of asana (postures). The syllable 'ha' denotes the pranic (vital) force governing the physical body and 'tha' denotes the chitta (mental) force thus making Hatha Yoga a catalyst to an awakening of the two energies that govern our lives. More correctly the techniques described in Hatha Yoga harmonise and purify the body systems and focus the mind in preparation for more advanced chakra and kundalini practices.

The Hatha Yoga system includes asana along with the six shatkarmas (physical and mental detox techniques), mudras and bandhas (psycho-physiological energy release techniques) and Pranayama (pranic awakening practices). Fine tuning of the human personality at increasingly subtle levels leads to higher states of awareness and meditation.

4.2 Mantra Yoga

Mantra Yoga has its origin in Vedic Sciences and also in Tantra, in fact all the verses in Vedas are called mantras, it is said that any person who can chant or sing Vedas can achieve the ultimate salvation or union with supreme consciousness only by chanting the mantras, which is the aim Mantra Yoga.

4.3 Bhakti Yoga

Bhakti is Yoga of devotion or complete faith. This faith is generally in the God or supreme consciousness in any of the forms. It may be Lord Rama, Krishna, Christ, Mohammed, Buddha etc. It may be a Guru for his disciples.

Important thing is the person interested in following this path should have very strong emotional bond with the object of faith. The flow of emotional energy is directed to this object. Mostly people suppress their emotions and that often reflects in the form of physical and mental disorders. This Bhakti Yoga releases those suppressed emotions and brings the purification of inner self.

Continuous meditation of God or object of faith gradually decrease the ego of the practitioner, which further prevents new distractions, fickleness or even pain and induces strong bonds of love. Slowly the practitioner loses the self-identity and becomes one with the object of faith, this is a state of self-realization.

4.4 Karma Yoga

Karma Yoga is a path of devotion to the work. One loses his identity while working, only selfless work remains. This state is very difficult to achieve. Generally some rewards or incentives or outcome follows the work and one is attached to this reward or incentive. This is not the Karma Yoga. Non-attachment with the work and becoming the perfect instrument of the super consciousness in this manifested universe is the ultimate aim of Karma Yoga.

In the initial stages of Karma Yoga, individual possesses strong sense of ego and consciously or unconsciously he is attached to the fruits of his efforts or at least praise or recognition but by continuous involvement in the work and change in mental attitude, one can surely disassociate himself from the ego and his own personality. In this state the work becomes worship to the God, it becomes spiritual, also the individual becomes expert, skilled and Yogi. He achieves stability of mind in all conditions, he is not disturbed or excited or happy in any of the situations. He becomes divine & his actions represent God's will.

4.5 Jnana Yoga

Jnana Yoga is the process of converting intellectual knowledge into practical wisdom. It is a discovery of human dharma in relation to nature and the universe. Jnana Yoga is described by tradition as a means to obtain the highest meditative state and inner knowledge.

Jnana literally means 'knowledge', but in the context of yoga it means the process of meditative awareness which leads to illuminative wisdom. It is not a method by which we try to find rational answers to eternal questions, rather it is a part of meditation leading to self-enquiry and self-realisation.

4.6 Kundalini Yoga

This system of Yoga is concerned with awakening of the psychic centers or chakras, which exists in every individual. (Please refer to the figure) There are six main chakras in the human beings.

The mind is made up of different subtle layers. Each of these layers progressively is associated with the higher levels of consciousness. Each of these levels is related to the different chakra or psychic center located throughout the psychic body. There are no of other chakras apart from the six main, which are associated with planes below the human level. In all we have chakras that connect us to animal levels of mind, to the instinctive realms of being or to the sublime heights of consciousness.

In Kundalini Yoga, higher-level chakras are awakened and also the activities associated with these higher psychic centers. The basic method of awakening involves deep concentration on these chakras and forcing their arousal. Asanas, pranayama, mudra and bandha and other forms of Yoga such as Mantra Yoga are also used to stimulate the awakening.

4.7 Kriya Yoga

The word kriya means 'activity' or 'movement' and refers to the activity or movement of consciousness. Kriya also refers to a type of practical or preliminary practice leading to total union, the final result of practice. Kriya Yoga does not curb mental fluctuations but purposely creates activity and awakening in consciousness. In this way all faculties are harmonised and flower into their fullest potential.

4.8 Raja Yoga

Raja Yoga usually refers to the system of yoga that is described in the Yoga Sutras of Sage Patanjali. In this ancient text Sage Patanjali describes eight stages of yoga which are known collectively as Raja Yoga.

Raja Yoga is a comprehensive yoga system which deals with the refinement of human behaviour and personality through the practice of the yamas (restraint) and niyamas (disciplines); attainment of physical health and vitality through asanas (postures) and pranayamas (pranic breathing techniques); management of mental and emotional conflicts and development of awareness and concentration through pratyahara (sensory withdrawal) and dharana (concentration); and developing the creative aspect of consciousness for transcendental awareness through dhyana (meditation) and samadhi (absorption in the universal identity).

4.9 Swara Yoga

Swara is Sanskrit word, meaning sound or note. It is also a continuous flow of air through one nostril. Yoga means

union, so Swara yoga is a science which is realization of cosmic consciousness through control and manipulation of breath.

Swara Yoga is science which is a complete study, observations, control and manipulation of breath or Swara. Pranayama is only related to control of breath in various ways. In Swara yoga, you will find association of breath in relation to activities of sun, moon, various seasons, physical and mental conditions of individuals etc. So Swara Yoga is more comprehensive in theory and practices related to breath.

5. The Scientific Basis of Yoga Therapy

In just the last few years, research has documented the efficacy of yoga for such conditions as back pain, multiple sclerosis, insomnia, cancer, heart disease, and even tuberculosis. Studies are also increasingly documenting how yoga works. Among its many beneficial effects, yoga has been shown to increase strength, flexibility, and balance; enhance immune function; lower blood sugar and cholesterol levels; and improve psychological well-being. One of yoga's most prominent effects, of course, is stress reduction.

5.1 Stress and the Autonomic Nervous System

Although yoga is much more than a stress-reduction method, stress adversely affects a wide range of health conditions, and yoga is arguably the most comprehensive approach to fighting stress ever invented. Stress isn't just a factor in conditions commonly labeled "stress-related," such as migraines, ulcers, and irritable bowel syndrome, but it appears to contribute to such major killers as heart attacks, diabetes, and osteoporosis. Even diseases such as cancer—for which there is surprisingly little evidence that stress is a causative factor—are extremely stressful once a person has been diagnosed and begins treatment. Yoga can improve not only the quality of life after diagnosis, but it appears to diminish the side effects of surgery, radiation, chemotherapy, and other treatments, and may increase the odds of survival. To appreciate the role of stress in disease and of relaxation in prevention and recovery, it's important to understand the function of the autonomic nervous system (ANS), which controls the function of the heart, liver, intestines, and other internal organs. The ANS has two branches that work in conjunction: the sympathetic nervous system (SNS) and the parasympathetic nervous system (PNS). In general, when activity is high in the SNS, it is lower in the PNS, and vice versa.

The SNS, in conjunction with such stress hormones as adrenaline and cortisol, initiate a series of changes in the body, including raising blood pressure, heart rate, and blood sugar levels. These changes help a person deal with a crisis situation. They mean more energy and more blood and oxygen flowing to the large muscles of the trunk, arms, and legs, allowing the person to run from danger or do battle (the so-called "fight-or-flight" response). The PNS, in contrast, tends to slow the heart and lower the blood pressure, allowing recovery after a stressful event. Blood flow that was diverted away from the intestines and reproductive organs, whose function isn't essential in an emergency, returns. In contrast to fight or flight, these more restorative functions can be thought of as "rest and digest." They are also sometimes dubbed the relaxation response.

Many yoga practices, including quiet asana, slow breathing, meditation, and guided imagery, increase activation of the

PNS and lead to mental relaxation. Yoga techniques are more than just relaxation, however. Practices like vigorous sun salutations, kaphalabhati breathing, and breath retentions actually activate the SNS. One of yoga's secrets, documented in research from the Swami Vivekananda Yoga Research Foundation near Bangalore, is that more active practices followed by relaxing ones lead to deeper relaxation than relaxing practices alone.

5.2 Neuroplasticity

It is believed that some of yoga's most profound effects on health have to do with its ability to alter long-standing dysfunctional behaviour. People often have unhealthy habits of thought and deed that undermine their health—habits they may recognize but haven't been able to change. In addition to the direct health benefits of asana, pranayama, meditation, and other yoga practices, it's not uncommon for regular practitioners to start eating better, to cut back on caffeine or alcohol, to quit jobs with unreasonable demands, or to spend more time in nature. Once people become more sensitive to the effects of different actions on their bodies and minds (whether it is practicing alternate nostril breathing or eating huge, fatty meals), they increasingly want to do what makes them feel better. The modern understanding of the brain is that rather than being a static structure (which is what I was taught in medical school), this organ is constantly remodelling itself, a phenomenon scientists call neuroplasticity. Repeated thoughts and actions can rewire your brain, and the more you do something, the stronger those new neural networks become. Almost 2,000 years ago, Patanjali was onto this when he suggested that the key to success in yoga is dedicated, uninterrupted practice over a long period of time. The resulting neural networks — or samskaras, as yogis call them—get stronger and stronger as you stay with the practice. Slowly but surely, these healthy grooves of thought and action help guide people out of the ruts in which they've been stuck.

6. Importance of Yoga in the modern world

In this modern world our environment is fighting for survival and we humans suffer from more and more physical and psychological stress, we cannot always control them but can learn how to face them and to this end Yoga is as good an invention it has ever been. The aim of yoga is attainment of physical, mental and spiritual health. The main credit of systematizing yoga goes to Patanjali who wrote the "yoga sutra" two thousand years ago. He has recommended 8 stages of yoga discipline.

Yoga has gained tremendous popularity in the last few years, it is the most rapidly growing health movement despite it was developed thousands of years ago. Age, religion, caste; sex is no bar with breathing and meditation techniques. There are many types of yoga and it may be hard for the beginners which yoga type he or she wants to do. The most important benefit of yoga is the physical and mental therapy, the very essence of yoga lies in attaining mental peace, improved concentration power and a relaxed state of living.

6.1 Physical benefits

There are many health benefits from yoga, studies have shown that yoga can relieve many common and life threatening illness such as arthritis, chronic fatigue, diabetes, AIDS, asthma high blood pressure, back pain, weight reduction, obesity, common cold, constipation, epilepsy, skin

problems and respiration problems. Yoga also helps in rehabilitation of new and old injuries.

6.2 Psychological benefits

Regular yoga practice creates mental clarity and calmness, increase body awareness, relives stress patterns, relaxes the minds and sharpens concentration. Yoga provides tools through which one can cope with the pain and helps counter with the feeling of helplessness and depression. Yogic breathing and stretching exercises have been seen to result in better mental and physical energy and improved mood. The mental performance also increases with yoga and doctors suggest that yoga can enhance cognitive performance.

6.3 Spiritual benefits

If one succeeds in achieving skills which provide health and self-confidence, one can justly raise his self-esteem simply by observing himself living the improved result as an achieved fact. Yogic therapy leads to increase self-knowledge, this is not just the practical knowledge this includes knowledge pertaining to grasping something.

7. Conclusion

Today yoga is thoroughly globalised phenomenon, yoga has taken the world by storm and is gaining popularity day by day. A last word is due about the acknowledged fact that Yoga also offers us numerous side benefits (unlike the side effects of modern medicine) such as the improved quality of life and healthy sense of wellbeing that are the keystone to attaining and maintaining as well as regaining good health.

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