CHAPTER II

THEORETICAL BACKGROUND
FIGURE 2.1
THEORETICAL BACKGROUND

STRESS

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CONCEPT OF STRESS

Scientific and technological progress all over the globe has made man highly sensitive, critical and creative. Associated with this growth is the emergence of stress. The term stress has become a part of our every day vocabulary. The concept of stress may differ according to the individual’s state of contexts and interpretations. It is recognized that certain amount of stress is desirable, tolerable, and productive and facilitates the individuals growing performance but the term stress has come into wide use in behaviour study only within the past two decades. But in this relatively short time it has all but preempted a field previously shared by a number of other concepts like anxiety, frustration, conflict, etc. The term originated in physical sciences and means “A force/pressure exerted upon a person, who resists the force/pressure in his effort to maintain his original state and, in the process, suffers some degree of discomfort”.

Lazarus (1966) states that stress is an internal state of the individual who perceives threats to physical and/or psychic well-being.

Denniston & McWilliams (1975) state that stress is any chemical or physical abnormality in the body, in the nervous system. It is caused by overload. When some physical or emotional pressure of experience distorts the system, that overload is stress. When the stresses are too deeply rooted or too numerous to be relieved by a good night’s sleep then they accumulate and a person becomes increasingly ineffective in his/her activity.

Bower et al. (1987) define stress as any stimulus that places a strain on a person’s physical or psychological capacity to adjust. They further state that stress is an internal response to some disruptive or disquieting situation.

Bhaggi and Sharma (1992) define stress as highly developed capacity to tolerate emotional strain.

Chrousos and Gold (1992) describe stress as state of disharmony of threatened homeostasis.

According to Furman (1995), “Stress is anything that imposes an extra demand on a child’s ability to cope, often something that is new and different.”
According to Khare (2003), “Stress originates from the French word ‘Retrecir’ meaning narrowness, a constriction or the limiting factor of power. The most harmful type of stress – negative stress – generally occurs when one’s view changes and pressure works as a burden that leads to perceive a rising demand as a threat. One feels a sense of frustration or helplessness and tends to consider oneself as a victim of circumstances.”

Causes of stress
- Physical: accidents, burns, surgery, infections, long sitting, backache, headache, weak eyesight, indigestion, lack of concentration.
- Psychological: conflicts, wrong notions, and doubts.
- Emotional: fear, anxiety, hate, greed, anger.
- Physiological: increased glucose levels in blood, increased heart rate and blood pressure.

Types of stress
According to Cofer and Appley (1964), stress is of two types:
- Systematic Stress
- Psychological Stress

Patri (1974) has classified stress on the basis of severity, duration, conscious and level given as under:
On the basis of Severity
- Mild stress
- Severe stress

On the basis of Duration
- Chronic stress
- Transient stress

On the basis of Conscious
- Conscious stress
- Unconscious stress

On the basis of Level
- Psychological stress
- Biological stress

**Eustress:** Eustress is a type of short-term stress that provides immediate strength. Eustress arises at points of increased physical activity, enthusiasm, and creativity. Eustress is a positive stress that arises when motivation and inspiration are needed. A gymnast experiences eustress before a competition.

**Distress:** Distress is a negative stress brought about by constant readjustments or alterations in a routine. Distress creates feelings of discomfort and unfamiliarity. There are two types of distress—acute and chronic. Acute stress is an intense stress that arrives and disappears quickly. Chronic stress is a prolonged stress that exists for weeks, months, or even years. Someone who is constantly relocating or changing jobs may experience distress.

**Hyperstress:** Hyperstress occurs when an individual is pushed beyond what he or she can handle. Hyperstress results from being overloaded or overworked. When someone is hyperstressed, even little things can trigger a strong emotional response. A Wall Street trader is likely to experience hyperstress.

**Hypostress:** Hypostress is the opposite of hyperstress. Hypostress occurs when an individual is bored or unchallenged. People who experience hypostress are often restless and uninspired. A factory worker who performs repetitive tasks might experience hypostress.

Bisht (1987) developed a scale on thirteen types of stresses in a “Battery” which are: existential stress, achievement stress, academic stress, self-concept stress, self-actualization stress, physical stress, social stress, role stress, institutional stress, family stress, financial stress, vocational stress and superstition stress. These stress types are having all the four components of stress viz. frustration, conflict, pressure and anxiety in them. Frustration items are based on delays, lack of resources, losses and failures. Conflict items show three types of conflict: approach-avoidance, double-approach and double-avoidance conflict. Pressure items are based on competitive
achievement, sustained concentration of efforts and rapid changes. The worry items of anxiety are on conscious concern about consequences, negative expectations and negative self-evaluation. The emotionality items of anxiety include uneasiness and nervousness.

ACADEMIC STRESS

Peace and stress-free life for today's student appears to be a mirage. He is caught in a dynamic technological whirlpool and seems to be precariously poised on the brink of disaster (Bector, 1995). According to Lazarus (1961), stress is the internal response of the individual to pressure, when the pressure experienced is greater than normal abilities. In the school situation, this pressure may be accountable for individual's success and failures. Hence, this kind of stress i.e. academic stress is an important factor accounting for venation in academic achievement. There was a time when the children used to say good night to their parents and go to bed; now a days often enough, the parents may say good night to the children and go to bed leaving the young scholars to finish their endless homework or prepare for an examination sometimes before dawn (Barnes, 1966).

Symptoms of academic stress

The Stress states may be expressed by apprehension, gloomy mood, foreboding, fear of dying, and feeling of insecurity and general excitement. Fatigue, insomnia, gastro-intestinal disturbances and depressions of spirits are found in many individuals. Many individuals exhibit cardio-disorders, emotional instability, inferiority feelings, panic and headaches. Indecision, intolerance, suicidal pre-occupation, panic states, subjective thought disturbances, strange fears, giddiness etc. are also noted in many cases. Many stress-ridden persons often complain of a general loss of interest and an inability to concentrate or think. Other symptoms of anxiety include heart palpitations, tremor of the hands, excessive perspiration and other physical symptoms like an increase in the frequency of muscle tremor in various parts of the body, increase in eye blink rate and a fast respiration.
The factors like test-anxiety, poor study skills, excessive academic load, professions and classroom environments were reposted to be the causes of academic stress which in turn form a major part of general stress in adolescent students (Archer and Lomnin, 1985; Edmunds, 1984; Kagan and Squires, 1984). The school-related problems, which were specified by the participants, were: teacher not liking them, fear of failing, not getting home work done and failing to meet parental expectations.

YOGA -STRESS-REDUCTION TECHNIQUE

There are many relaxation techniques that are used for stress reduction e.g. meditation, progressive muscle relaxation, visualization, music and Yoga breathing exercises. In the present study Yoga has been used as a relaxation technique to reduce academic stress of senior secondary students.

Historical Background of Yoga

It is believed that Yoga originated as an oral tradition that dates back over 5,000 years in India. Some believe that it originated around 500 B.C., which was the time of Gautama Buddha, the founder of Buddhism. In 1920 archeologists discovered an ancient "Indus" civilization, which flourished between round about 3000-1900 B.C. The archeological artifacts of the Indus valley provide a base of the early Sanskrit literature. It gave rise to the great religious and cultural tradition of Hinduism.

Vedic Yoga

Vedic Yoga teachings came from ancient hymnodies. The Sanskrit word “Veda” means “knowledge.” There are three Vedic hymnodies, which are the Yajur-Veda (“Knowledge of Sacrifice”), Sama-Veda (“Knowledge of Chants”), and Atharva-Veda (“Knowledge of Atharvan”). Vedic Yoga was connected with the ritual life of the ancient Indians. It revolved around the idea of sacrifice as a means of joining the material world with the invisible world of the spirit.
Pre-classical Yoga

Pre-classical Yoga covers the period of approximately 2,000 years until the second century A.D. The earliest practices were still based in sacrifices. Later, the rituals were left behind. One of the most influential scriptures of 700 verses is the “Bhagavad-Gita” (“Lord’s Song”), which was composed about 500 B.C. The various pre-classical schools developed techniques for achieving deep meditation through which yogis can transcend the body and mind and discover their true nature.

Classical Yoga

Classical Yoga is associated with the eightfold path also known as Raja Yoga, which was taught by Patanjali in his “Yoga-Sutra.” The text contains about 200 statements, which are often cryptic statements. Patanjali is often called the “father of Yoga.”

Post-classical Yoga

Post-classical Yoga refers to many types and schools of Yoga that have arisen after Patanjali’s Yoga-Sutra. Post-classical Yoga proclaims the ultimate unity of everything. Previous generations of yogis paid no attention to the body. They were more interested in contemplation. The new breed of Yoga masters created a system of practices to rejuvenate the body and prolong its life. This led to the creation of Hatha Yoga. The sage Svatmarama compiled the treatise on Yoga, “The Hathayoga Pradipika,” in the 15 century. He begins the treatise with the restraint of energy. Sighting the soul through the restraint of energy is called Hatha Yoga. Sighting the soul through the restraint of consciousness is called Raja Yoga. The goal of Yoga is a state of equilibrium and peace.

Modern Yoga

Modern Yoga is believed to begin with the Parliament of Religions held in Chicago in 1893. It was at that congress that Swami Vivekananda made an impression on the American public.
After Swami Vivekananda, the most popular Yoga teacher in the early years of Western Yoga was Paramahansa Yogananda, who came to Boston in 1920. Five years later, he established the Self-Realization Fellowship.

Swami Rama Tirtha was a former mathematics teacher who came to the United States in 1902 and founded a retreat center on Mount Shasta in California. After two years he drowned in the Ganges (Ganga) River in 1906 at the age of thirty-three. Yogendra Mastamani arrived in Long Island in 1919. For three years he demonstrated the power and elegance of Hatha Yoga. Before returning to India, he founded the American branch of Kaivalyadhama for the scientific study of Yoga.

Ramacharka was popular for some time after the 1920’s. The name was the pseudonym of two people: William Walker Atkinson, who had left his law practice in Chicago to practice Yoga, and his teacher Baba Bharata. Paul Brunton was a journalist and editor, who became known in 1934 with his book “A Search in Secret India,” which introduced the great sage Raman Maharishi to Westerners.

Jiddu Krishnamurti taught thousands of philosophically minded Westerners from the 1930’s until his death in 1986. Yoga came to America in the form of Hatha-Yoga by the Russian-born yogini Indra Devi, who has been called the “First Lady of Yoga.” She opened her Yoga studio in Hollywood in 1947 where she taught movie stars and trained hundreds of teachers. She is now in her nineties and living in Buenos Aires. She is still an influential voice for Yoga.

Selvarajan Yesudian appeared in the 1950’s with the book “Sport and Yoga,” which has been translated into fourteen or so languages, with more than 500,000 copies sold. In 1961, Richard Hittleman brought Hatha-Yoga to American television, and his book “The Twenty-Eight-Day Yoga Plan,” sold millions of copies.

In the mid-1960s, the Western Yoga movement became popular through Maharishi Mahesh Yogi, mainly because of his brief association with the Beatles. He popularized Transcendental Meditation. In 1965, Shriila Prabhupada came to New York and later founded the International Society for Krishna Consciousness (ISKCON).
In the 1960s and 1970s, many swamis trained by the Himalayan master Swami Sivananda, a former physician, opened their schools in Europe and America. Most of them are still active today including, Swami Vishnudevananda, Swami Satchidananda, Swami Sivananda Radha, Swami Satyananda, and Swami Chidananda. The last-mentioned master’s best-known American student is the gentle Lilias Folan, who was famous from her series Lilias, Yoga & You, during 1970 and 1979.

Other famous modern Yoga teachers include Sri Aurobindo, Ramana Maharshi, Papa Ramdas, Swami Nityananda, and his disciple Swami Muktananda, B. K. S. Iyengar, Sri Krishnamacharya, his son T. K. V. Desikachar.

Concept of Yoga

The term ‘Yoga’ has been derived from Sanskrit root-‘Ujir’, meaning yoke, to unite, to put together, to combine, to bind together in the union. Literally, it means the union of an individual soul with the universal spirit, which actually is the ultimate aim of the discipline of yoga.

‘Yoga’, tersely, being the yoga of the mind implies that the harnessing or disciplining of the mind is fundamental to all systems. This is clearly borne out by numerous authoritative statements quoted by Dr. Kumar Pal (1966) in his book, ‘Yoga and Psychoanalysis’:

“Yoga is the restraint of mental fluctuations and modifications”. - Patanjali

“Balance of mind is called Yoga”. - Gita

“Yoga is the best adaptive activity”. - Gita

However observations made by Dasgupta (1974) show ‘Yoga’ as a system of thought or discipline, apart from the general metaphysical position, which it holds in common with ‘Sankhya’. In ‘Prasna Upanishad’ it is said that the vital principle (Prana) derives its existence from the self and that it is from it that the other function of upward, downward and balancing activities of the body derive their power.

According to Anantharaman (1975), it (yoga) is unique science in that it encompasses matter, life and consciousness in one sweep and bridges the gap between the science (as it is understood today) and spirituality.
Swami Niranjanananda Saraswati, quoted in Gherand Samhita, Bihar Yoga Bharati (1997), is super power or strength and strength is one of the components of healthy life and can be obtained though yoga.

Mishra (1997), states that the union of Prana and Apana or that of one's own Rajas and Retas or that of the Sun and the Moon or that of the Jeevatama and Paramatma is called Yoga.

As understood from the above quotations, Yoga is a system of mental and spiritual development. Thus, for the practitioner, there is great scope of mental transformation. The basic approach to the practice of Yoga involves certain techniques and specific ethical values. The great Yoga classics of Patanjali, Shrimad Bhaghwat-Gita and Upanishads and others are united in this approach.

**Importance of Yoga**

Yoga is a complete science of life that originated in ancient India many thousands of years ago. It is the oldest system of personal development in the world, encompassing body, mind and spirit. According to Rele (1968), the ultimate aim of Yoga is to prepare the body to achieve that tranquility of mind, which may be necessary for the realization of the supreme. Taking into account the interrelationship between body and mind, the ancient sages formulated a unique method of maintaining a balance between the two—a method that combines purification and all the movements we need for physical health with the Shatkarma, physical postures, breathing and meditation techniques that ensure peace of mind.

According to Hath yoga, body of a yoga practitioner must be cleansed both internally and externally to run smoothly. Yogic shatkriyas cleanse and tone up the parts of the body. By the regular practice of these Shatkriyas the mind is made sharp, and the body’s resistance to disease is increased. The Yoga postures or asanas exercise every part of the body by stretching and toning the muscles and joints, the spine and the entire skeletal system. They work not only on the body's frame but on the internal organs, glands and nerves as well, keeping all systems in radiant health. By releasing physical and mental tension, Pranayama and Meditation also liberate vast resources of...
energy. The Yogic breathing exercises known as Pranayama revitalize the body and help to control the mind, leaving us feeling calm and refreshed, while the practice of Meditation gives increased clarity, mental power and concentration. Thus, the practice of Yoga significantly reduces the catabolic process of cell deterioration and aging process.

Yoga seems to be the most effective method for providing peace and tranquility of the mind to the students also. Today’s students are so busy, their syllabus is so vast and theoretically they don’t get time for their overall development (physical & mental). They are occupied with their own problems and tensions. Here Yoga comes as an important tool in combating academic stress including frustration, conflict, pressure and anxiety.

Types Of Yoga

Yoga is classified in different ways in different contexts, by different texts i.e. Hath Yoga, Patanjali Yoga, Kundilini Yoga, Karma Yoga, Dhyana Yoga, Janana Yoga, Bhakti Yoga, Raja Yoga, Prem Yoga, Mantra Yoga, Sahaj Yoga, and Laya Yoga. In the present study, yogic practices given by Patanjali and from Hath yoga given by Swatmarama have been taken. Hence, only Raja Yoga and Hath yoga are described as under:

Patanjali’s Raja yoga

The Raja yoga is the yoga of action i.e. doing actions, which purify the mind. This removes afflictions. The afflictions are attachment, aversion, nescience, egoism, and love of life; of which nescience is the root affliction from which the others proceed. Nescience is the cause of bondage between Purusha and the external world. The yogi gradually works towards emancipation by removal of false knowledge. Patanjali has given eight accessories of yoga: ‘yama’ (restraint), ‘niyama’ (observance), ‘asana’ (posture), ‘pranayama’ (regulation of breath), ‘pratyahara’ (abstraction), ‘dharana’ (concentration), ‘dhyana’ (meditation) and ‘samadhi’ (trance) known as ‘ashtanga Yoga’. Of these the first five are external observance, and the last three mental disciplines.
Yamas (Absentation): These bring about mental stability through social discipline. These are five main vows namely- Ahimsa, Satya, Asatya, Brahmacharya and Aparigrah.

Niyamas (Observance): Niyamas are the rules of conduct towards oneself, which consist of mental and physical disciplines. These are five- Succh (Purity of mind and body), Santosh (Contentment), Tapas (Austerity), Swadhyaya (Self study) and Ishwara Pranidhana (Truth of God).

Asana (Posture): Asanas have been evolved over the centuries so as to exercise every muscle, nerve and gland in the body.

Pranayama (regulates the breathing): Pranayama phase includes breathing exercise, which regulates the breathing pattern, in a rhythmic way. Pranayama helps in gaining control over the mind.

Pratyahara (abstraction): Pratyahara is withdrawal or withholding of all the senses.

Dharna (concentration): In dharna phase the mind is confined to a limited sphere. It is holding the mind's attention, fixed on a particular object for a long duration; it facilitates concentration, controls fluctuation of the mind and leads to development of inner strength and a strong will power and deep understanding of self.

Dhyana (meditation): Dhyana is a continuous flow of same knowledge or particular thought uninterrupted towards a chosen object, over a considerable length of time. It is a state of wonderful spontaneous control over all sorts of fluctuations of mind and body.

Smadhi (Trans-consciousness): Samadhi is the final phase, which facilitates complete integration and harmony of the individual soul with the supreme soul.

Hath yoga

Out of many authorities on Hatha Yoga, one outstanding personality is Swatmarama (1958) who compiled the Hatha Yoga Pradipika. It can also be translated as 'Light on Hath Yoga'. However, the term Pradipika actually means 'self-illuminating' or 'that which illumines'. It is a text, which illumines a multitude of physical, mental and spiritual problems for the aspirants.
Gorakhnath, the chief disciple of Matsyendranath, had earlier written books, poems and prose on the Hath Yoga system in the local dialect, but Swatmarama compiled the entire wisdom of hath yoga in Sanskrit. In common with the other texts, he has expounded the techniques such as asana, pranayama and shatkriya.

Swatmarama goes on to explain that hath yoga is to be utilized as a means of preparing oneself for raja yoga, the supreme state of yoga. The word Hatha is made up of two Sanskrit roots, ‘ha’ and ‘tha’. Ha means ‘moon’ and tha means ‘sun’. This is symbolic of the two energy forces, which exist in everything. It represents the forces of mind, and prana or vitality, which constitute the body and mind. The moon is the mental energy of chitta. It is the subtle force, which is concerned with the mental layers. The pranic force is like the sun; dynamic and active. The two create the extremities of introversion and extroversion. It is the practice of Hatha yoga, which enables the fluctuations between these two energies to become harmonious and unified into one force.

Hatha yoga is the process of establishing perfect physical, mental, emotional and psychic equilibrium by manipulating the energies of the body. It is through Hatha yoga that one prepares for the higher spiritual experience (Iyengar, 1993).

Traditionally, Hatha yoga consisted only of six kriyas known as Shatkriyas. These were the practices of dhauti, basti, neti, trataka, kapalbhati and nauli. Later, Hatha yoga also included asana, pranayama, mudra and bandha, and the shatkriyas were practiced afterwards by advanced practitioners. Through these practices the consciousness can be raised without having to come into a direct confrontation with the mind. Hatha yoga regulates the body secretions, hormones, breath, brain waves and prana; then the mind automatically becomes harmonious.

Hath yoga is the means and raja yoga is the goal. Hatha yoga is the stairway leading to raja yoga. Once the sadhaka reaches the stage of raja yoga, hatha yoga ceases to be necessary for him. In the present study, Shatkriyas and Pranayamas have been taken from Hatha Yoga as techniques to reduce academic stress. Hence these are described in detail as under:
Shatkriyas

Shatkriyas is formed by the union of two words i.e., Shat+Kriyas, Shat means ‘Six’ and Kriyas means ‘procedure’. These are six Kriyas, which are performed to remove various unwanted waste products from the body. Shatkriyas are the best and most effective way to keep our body sound, healthy, beautiful and clean. Human body is made up of “Trigunas” namely Vata, Pitta and Kapha. If these are balanced in one’s body, one can be free of diseases, but unfortunately, if this balance is disturbed then one gets prone to many diseases. According to Ayurveda, there were three entities in the beginning of the universe. These were Air, Water, and Fire. The imbalance of the above three entities causes the diseases in biological world. Air called Vata in bio-life, has power to stimulate. Pitta and Kapha cannot move without Vata. Vata maintains the balance and sensitiveness in the body. Pitta is responsible for all chemical changes and metabolism in the body; its deformities cause diseases of metabolism. Kapha provides gravity, security and shape to the body. Every guna (vata, pitta and kapha) has its own quality. Vat is light, cool, dry and stimulating. Kapha is wet, cool, heavy, sticky and stable. Pitta is light, hot and fluid.

These gunas have their specific effect on body and mind. Vata is responsible for various movements, etc. All the processes of the body work in co-ordination with each other under the guidance of vata. Vat is most important dosha. It also controls the functions of other two doshas in the body. It is responsible for the stimulation but excessive stimulation can have bad effect on the body and mind. So, one should maintain a balanced life style. Every dosha is stimulated at a specific place inside the body. Vat resides in colon (gastro – intestinal track, thigh, waste, ear, bones and skin and specifically in the colon). Pitta lives in small intestine, adipose tissues, blood, eyes, glands, but in specifically, in the small intestine. Kapha lives in chest, neck, head, pancreas, stomach, limbs, nose and tongue.

When these gunas get concentrated at above places in excessive amount, then they become dosha and the body gets diseased and the proper treatment of these doshas at these places eradicates the disease completely.
Shatkiriyas help to make a balance between these three doshas (vata, pitta and kapha). In our daily life, due to some bad eating and living habits, we are heading towards many diseases. The accumulation of waste products results in occurrence of disease.

Accumulated wastes are removed from the body by practicing the yogic Shatkriyas. Though this process of cleaning, the internal organ, which was functioning sluggishly, works properly and efficiently.

**Types of Shatkriyas**

Shatkriyas have six main parts- *Neti, Dhauti, Nauli, Basti, Kapalbhati, and Trataka.*

*Neti*: ‘Neti’ means ‘Kriyas’ or ’purification’. When Neti is done with water then it is called Jal Neti. Jal Neti means to purify the nose and to clean our upper respiratory tract with water. It purifies the nose with water, suter, rubber, ghee, oil, honey, and milk.
**Dhauti:** Dhauti means the cleaning of the stomach and esophagus. It gives relief from the various problems caused by the mucous of the stomach, food pipe etc. Dhauti is of many types e.g., Anta, Hridya, Danta, and Mulashoudhana.

**Nauli:** The word Nauli comes from the root nala or nali, which means a `reed` or `hollow stalk` and refers to a tubular vessel, vein or nerve of the body. The word nala is the Sanskrit term for the rectus abdominal muscles. Nauli is also known as lauliki karma. The word lauliki is derived from the root Lola, which means `to move hither and thither` which is exactly, what this technique does. It rolls, rotates and agitates the entire abdomen and the associated muscles and nerves. Nauli is of many types as under: Madhya, Vama, Dakshina.

**Basti (Yogic enema):** The word ‘basti’, also widely written as vasti or wasti, as a general term pertaining to lower abdomen, belly, pelvis and bladder. The technique is also known as basti karma, karma meaning ‘process’ or ‘technique’.

**Kapalbhati:** The Sanskrit word ‘Kapal’ means, ‘cranium’ or ‘forehead’ and ‘bhati’ means ‘light’ or ‘splendour’ and also `perception` or `knowledge`. Hence Kapalbhati is the practice, which brings a state of light or clarity to the frontal region of the brain. Another name for this practice is kapalshoudhana, the word `shodhana` meaning `to purify`.

**Kapalbhati is of three types:**
- Vatkrama Kapalbhati (Frontal brain cleansing breath)
- Vyutkrama Kapalbhati (sinus cleansing).
- Sheetkrama Kapalbhati (mucus cleansing).

**Benefits of Kapalbhati**
Kapalbhati purifies Ida and pingala nadi, and also removes sensory distractions from the mind. It is used to energize the mind for mental work, to remove sleepiness and to prepare the mind for meditation.
It has a similar cleansing effect on the lungs to bhastrika and is, therefore, a good practice for asthmatics and those suffering from emphysema, bronchitis and tuberculosis. After a few months of proper preparation, it can be effective for women to use during childbirth. It balances and strengthens the nervous system and tones the digestive organs. For spiritual aspirant, this practice arrests thoughts and visions.

**Trataka:** Trataka means to gaze steadily. There are two forms of the practice, one is bahiranga or external trataka and the other is antaranga or internal trataka. Bahiranga is simpler to practise because one just have to gaze at an object or symbol. However, Antaranga trataka involves clear and stable inner visualization of an object e.g. shivalingam, mantra, rose, tree or mountain etc.

Swatmarama suggests gazing at a small point or sukshma lakshyam. Sukshma can mean ‘small’ or ‘subtle’. In the practice of trataka an object is gazed at until its subtle form manifests in front of the closed eyes.

The point of concentration is usually a symbol or object, which activates the inner potential, and can absorb the mind. The object most commonly used is a Deya flame, because even after closing the eyes, the impression of the flame remains for sometime and antaranga trataka can easily be practiced. The purpose of focusing the eyes on an external object is to arouse the internal vision and to make that vision steady by stopping the eye movements.

At a certain stage of concentration the individual will see a point of light in front of the closed eyes. This has to be developed and made steady because initially it tends to waver or even disappear.

Trataka is a process of concentrating the mind and curbing its oscillating tendencies. The purpose is to make the mind completely one pointed and to arouse inner vision. One – pointed concentration of mind is called ‘ekagrata’.
Benefits of Trataka

This practice makes the eyes clear and bright. It balances the nervous system, relieves nervous tension, anxiety, depression and insomnia. It improves the memory and helps to develop good concentration and strong will-power. It activates ajna chakra and is an excellent preparation for meditation.

Trataka benefits not only the eyes, but also a whole range of physiological and mental functions. It is therapeutic in depression, insomnia, allergy, anxiety, postural problems, poor concentration and memory. It's most important effect is on ajna chakra and the brain. The Gherand Samhita mentions that it promotes clairvoyance or perception of subtle manifestations. Physiologically trataka relieves eye ailments such as eyestrain and headache, myopia, astigmatism and even early stages of cataract. The eyes become clear and bright, able to see the reality beyond appearances.

Variations

Trataka may be practiced on any object of personal choice. However, it is not advisable to do trataka on the moon, a crystal ball, a mirror or darkness, as the experience may be too powerful to handle. Practicing trataka on the sun may damage delicate membranes of the eyes.

Once the object has been chosen it should not be changed, otherwise the mind will have to start from the beginning again to assimilate the new object. So, choose carefully and then stick to the choice.

Concept of Pranayama

The Sanskrit word ‘Prana’ means ‘vital force’ or ‘cosmic energy’. It also signifies ‘life’ or ‘breath’; ‘Ayama’ means the control of the Prana. Hence, Pranayama means the control of the vital force by concentration and regulated breathing. The vital force or primordial life force (Prana) manifests itself in the body as a respiratory function. It is the force motivating several other voluntary functions, like the blinking of the eyes and even yawning. The
Prana not only ensures the proper functioning of the body (including the glandular system), but is also the regulator and animator of the psyche. It is, in every sense of the word, the breath of the spirit. Pranayama, therefore, provides a remedy for several of the physical and psychic disturbances of which modern man is the victim.

Everything called energy or force evolves out of Prana. Without Prana, there can be no life, for it is the soul of all force and energy. It is found in the air, water and food. Prana is the vital force inside each living being, and thought is the highest and most refined action of Prana.

Yoga Shastra states that Prana in the air breath fulfills several functions in the human body. Each of these has a special name:

- **Prana** - (Here the general term takes on a specific meaning) circulates in the area around the heart and controls breathing.
- **Apana** - circulates in the lower regions of the abdomen and controls excretory functions (urine and faeces).
- **Samana** - stimulates the gastric juices, thus facilitating digestion.
- **Udana** - remains in the thoracic cage, controls the absorption of air and food.
- **Vyana** - spreads throughout the body and distributes the energy from food and breath.

"Chale vaatai chalam chitam nischale nischalam bhawait,
Yogi sathanu-tawam-arnaum tatu vayun nirodheyet." *(Hath Yoga Pradipika)*

This means that when prana moves; chitta (the mental force) moves. When prana is without movement, chitta is without movement. By this (Steadiness of prana) the yogi attains steadiness and should thus restrain the vayu (air).

'Tasmin sati svasa prasvasayho gativichhedaya pranayamah':

This means that pranayama is the regulation of the incoming and outgoing flow of breath with retention.

**According to Velan (1936),** "It is science of breathing, the life force".

**Joshi (1964)** defines pranayama as "The yogic breathing process by which the Prana is made silent".

**According to Kuvalayananda (1968),** "The word Pranayama has a deeper meaning. 'Prana' means the vital force and 'Ayama' means controlling it. So
Pranayama means the science, which deals with the origin of the mysterious and invisible power, its nature and its control. The mechanism of pranayama can be explained in terms of manipulation, regulations and control of breath, vital energy or the psychic forces by introducing variations in Puraka (inhalation), Kumbhaka (retention), Rechaka (exhalation) and process”.

**Types of Pranayama (Kumbhaka)**

**Sheet Kari Pranayama:** Through perfection of this practice, the adept becomes like the god Kamadeva. Kama means ‘desire’ and deva means ‘master’, therefore, through this practice desire is mastered and a state of balanced purification is achieved.

**Sheetali Pranayama:** The Sanskrit word Sheetali is derived from the root sheet, which means ‘cold’. Sheetali means ‘that which is calm, passionless and soothing’.

**Ujjayi Pranayama:** The Sanskrit word ‘Ujjayi’ means victorious. It is derived from the root ‘Ud’, which means ‘to conquer’ or ‘to acquire by conquest’, and the prefix ‘ud’, means ‘bondage’. Ujjayi is therefore the pranayama, which gives freedom from bondage. It is also known as the psychic breath, as it leads to subtle states of mind.

**Bhastrika Pranayama:** The Sanskrit word Bhastrika means ‘bellows’. Thus, Bhastrika pranayama is also known as the bellows breath, as air is drawn forcefully in and out of the lungs like the bellows of a village blacksmith. The bellows increases the flow of air into the fire, producing more heat. Similarly, Bhastrika pranayama increases the flow of air into the body to produce inner heat at both the physical and subtle levels, stroking the inner fire of mind/body.

**Moorchha Pranayama:** Swooping or fainting breathes.

**Plavini Pranayama:** Plavana means ‘to float’.

**Surya Bhedhana Pranayama:** The Sanskrit word Surya means ‘sun’, which refers to pingala nadi, while bhedhana means ‘pass through’ or ‘awaken’. Surya bhedhana, then, means to pierce or purify pingala nadi.
Anulom- Vilom\ Nadi Shoudhan Pranayama: The word ‘Nadi’ means ‘channel’ or ‘flow’ of energy and shodhana means ‘purification’. Nadi shodhana, therefore, means that practice which purifies the nadis. Nadi is a tubular organ of the body like an artery or a vein for the passage of prana or energy. A nadi has three layers like an insulated electric wire. The innermost layer is called sira, the middle layer damani and the entire organ as well as the outer layer is called nadi. Soudhana mean purifying or cleansing, so the object of Nadi Sodhana Pranayama is the purification of the nerves. A little obstruction in a water pipe can cut off the supply completely. A little obstruction in the nerves can cause great discomfort and paralyze a limb or organ.

Benefits of Anulom- Vilom\ Nadi Shoudhan Pranayama

Nadi shodhana ensures that the whole body is nourished by an extra supply of oxygen. Carbon dioxide is efficiently expelled and the blood is purified of toxins. The brain centers are stimulated to work nearer to their optimum capacity. It also induces tranquility, clarity of thought and concentration, and is recommended for those engaged in mental work. It increases vitality and lowers levels of stress and anxiety by harmonizing the pranas. It clears panic blockages and balances Ida and pingala nadis, causing sushumna nadi to flow, which leads to deep states of meditation and spiritual awakening. The pranayama practices can prove beneficial in developing the respiratory organs improving vital capacity (lungs capacity); aiding the circulation of the blood; producing inner organic and natural harmony; and providing efficient control over the respiratory movement. Longer and deeper breathing produces sedative effect on nerves. Pranayamas are useful for emotional control. These helps in the steadiness of the mind and in concentration. More bio energy is absorbed and stored in the body. Preparation for meditation takes place when breathing becomes subtle.
**Bhramri Pranayama:** It is humming bee breath.

**Benefit of Bhramri Pranayama**

Bhramri relieves stress and cerebral tension, alleviating anger, anxiety and insomnia, and reducing blood pressure. It speeds up the healing of body tissue and may be practiced after operations. It strengthens and improves the voice and eliminates throat ailments. Through practice of this pranayama, all diseases of the throat are radically cured. The larynx becomes strong, the voice sweet.

**Concept of Meditation**

Man always likes to mould his psychosomatic apparatus in such a way that he can boldly face the stresses and strains of modern life without much difficulty. In fact, the problem of man, today, is to learn how to increase his stress threshold or stress competence.

Meditation is an age-old technique of yoga, which is supposed to bring about deep relaxation of the body and mind. This helps a great deal to relieve tensions and establish harmony in one’s life. Meditation is a means to overcome stress and the disorders caused by it.

Meditation follows concentration and concentration merges into meditation. Concentration is holding the mind on to some particular object. An unbroken flow of knowledge in that subject is meditation. Meditation is regular flow of thought with regard to the object of concentration. Meditation opens the door of the mind to intuitive knowledge and many powers. During meditation all worldly thoughts are shut out from the mind.

**According to Denniston and McWilliams (1975),** "Meditation is a natural state of consciousness that is not ‘learned’ any more than you learn to sleep. When the mind becomes one-pointed and steady, it will naturally go beyond the normal mundane awareness into the state referred to as meditation”.

**Denniston and McWilliams (1975)** further state that ‘transcendental’ meditation is a technique for expanding conscious awareness and for
reducing stress and tension. The word “Transcendental” means, ‘going beyond’. The technique claims to take the practitioner beyond the familiar of profound rest coupled with heightened awareness. Transcendental meditation is the Saguna kind of meditation technique.

According to Anand (1981), "Meditation helps us to rid ourselves of emotional conflict, inner discord and psychological tension. It completely purifies the mind and releases it from unconscious obstruction. Meditation enables the inner light to manifest itself. This is responsible for the awakening of self-awareness; hence one may penetrate to the very centre of life’s highest values by transcending the external and logical world”.

According to Devananda (1984), "Meditation is a continuous flow of perception or thought like the flow of water in river".

According to Chopra (1993)," TM (Transcendental meditation) is based on the silent repetition of a specific Sanskrit word, or mantra, whose sound vibrations gradually lead the mind out of its normal thinking process and into the silence that underlies thoughts. As such, a mantra is a very specific message inserted into the nervous system. Since mantras have been in use for thousands of years in India, their precise effect on the physiology is well known as part of the science of Yoga, or union. The aim of Yoga is to unite the thinking mind with its source in pure awareness. In modern terms, “pure awareness” means quantum space, the silent, empty void that is the womb of all matter and energy. Pure awareness exists in the gap between thoughts; it is the unchanging background against which all mental activity takes place”.

Chopra (1993) further states, “In meditation the active mind is withdrawn to its source; just as this changing universe had to have a source beyond change, your mind, with all its restless activity, arises from a state of awareness beyond thought, sensation, emotion, desire, and memory. This is a profound personal experience. In the state of timeless or transcendent awareness, you have the sensation of fullness. In place of change, loss, and decay, there is steadiness and fulfillment. You sense that the infinite is everywhere. When this experience becomes a reality, the fears associated with change
disappear; the fragmentation of eternity into seconds, hours, days, and years becomes secondary, and the perfection of every moment becomes primary”.

According to Osho (1995), “Meditation is just being delighted in your own presence; meditation is a delight in your own being. It is very simple – a totally relaxed state of consciousness where you are not doing anything”.

According to Patanjali (quoted by Iyengar, 1999), “tattar partayaiktanta dhyanam” This mean that a steady, continuous flow of attention directed towards the same point or region is meditation.

Meditation is the practice by which there is constant observation of the mind. It means focusing the mind on one point, stilling the mind in order to perceive the Self. Focusing on the flame of a candle or on a mantra, one repeatedly brings one’s attention back to the object of concentration, reducing the movement of the mind to a small circle. At first, the thoughts will insist on wandering; but with steady practice one will succeed in keeping the mind focused for longer period. In the beginning, while attention still wavers, meditation is more properly called concentration; in meditation, one achieves an unbroken flow of thoughts. The difference between the two is one of degree, not of technique. Swami Vishnu explains it this way: “During concentration, one keeps a tight rein on the mind; during meditation, the rein is no longer necessary, for the mind stays of its own accord on one single thought wave.”

Types of Meditation

Saguna: In Saguna meditation one focuses on a concrete object on which the mind can easily dwell-on: an image or visual symbol, perhaps, or a mantra, which brings him/her to unity. Saguna meditation is dualistic- the mediator considers himself separate from the object of Meditation. Transcendental Meditation is also a kind of Saguna type meditation.

Nirguna: In Nirguna meditation, the point of focus is an abstract idea, such as the Absolute, a concept that is indescribable in words. In Nirguna meditation the mediator perceives him as one with the object.
Saguna and Nirguna Meditation: In this type of meditation one imagines oneself as sitting in the center of a sphere, which represents the Absolute. In Saguna meditation (top), one focuses on and become one with a symbol on the sphere's surface, such as 'OM' or the Cross. In Nirguna meditation (above) one does not identify with any symbols and expand to merge with the sphere itself.

Benefits of Transcendental Meditation

Rama (1998) states that meditation is therapeutic from the beginning. It helps relax muscular tension and the autonomic nervous system, and provides freedom from mental stress. A person in meditation attains a tranquil mind, and this helps the immune system by limiting its reaction to stress and strain.

Following are the benefits of TM:

1. Through TM the mind becomes expanded; awareness increases. Transcendental Meditation directly improves the ability to learn.

2. Transcendental Meditation increases the clarity and efficiency of conscious thought processes and at the same time improves the unconscious processes leading to spontaneous and purposeful organization of thought. More spontaneous computing of orderly, purposeful, intelligent thought indicates enfoldment of full mental potential.

3. Transcendental Meditation naturally brings about improvement in a holistic measure of mental effectiveness, the ability to succeed in academic studies, and improved job performance.

4. TM brings about improved relationships at all levels of organization, indicating more harmonious interaction among different individuals working together within an organization.

5. There is increased vital capacity, increased respiratory efficiency, improved resistance to disease, faster recovery from sleep deprivation, relief from insomnia, beneficial effects on bronchial asthma, and normalization of weight through TM.
Further, TM increases emotional stability, decreases anxiety, reduces depression and neuroticism, makes intellect stronger, increases inner control, increases self-confidence, stabilizes organized memory and attention.

Meditation greatly reduces stress levels by reducing heart rate and consumption of oxygen. Meditation helps to prolong the body's period of growth and cell production and reduces the decaying process. After the age of 35, our brain cells die off at the rate of 100,000 per day, and they are not replaced but meditation can reduce this decline, as it changes the vibratory make-up of both the body and the mind.

In meditation new patterns of thinking come to the surface and develop as one experience a new view of the universe, a vision of unity, happiness, harmony, and inner peace. Negative tendencies vanish, and the mind becomes steady. Meditation brings freedom from fear. People who meditate regularly tend to develop magnetic and dynamic personalities, cheerfulness, powerful speech, lustrous eyes, physical health, and boundless energy. Others draw strength from such people and feel elevated in their presence. Meditation is only possible when all mental modifications (thought waves) have been stilled, and with this comes mental peace.

Hence, meditation is the most effective method to cope with the stress and strain of modern life. It doesn't need either costly medicines or elaborate paraphernalia. This is a technique for expanding conscious awareness and for reducing stress and tension. The technique takes the practitioner beyond the familiar level of wakeful experience to a state of profound rest, coupled with heightened awareness.