

CHAPTER - I

INTRODUCTION

The Health is usually measured in terms of life expectancy at birth, infant mortality rate, fertility rate, crude birth rate and crude death rate. These indicators of health are determined by numerous factors such as per capita income, nutrition, housing, sanitation, safe drinking water, social infrastructure, health and medical care services provided by government, geographical climate, employment status, incidence of poverty and the like (**Reddy and Selvaraju** 1994; **Dadibhavi and Bagalkoti** 1994).

1.1. CRICKET

Cricket is a major international sport played in more than 105 countries. There is no exact record available which shows when and by whom this game was started in England. The game of Cricket has had its origin in England and it has developed from a crude game, which was played as early as 12th century. Cricket is played between two teams normally eleven a side, and gives the maximum opportunity for combining team effort with individual skill and initiative. Each team bats or takes its innings, in turn, the choice for first innings being divided by toss. The game is played on a pitch on which two wickets are placed twenty two yards apart, though this distance may be reduced for young boys. The batsmen defend their wickets against the bowling of the fielding side and when a batsman is out, another takes his place and so on until ten batsmen are out or until the innings has been declared closed. Cricket is the game of bat and ball in which each team has to bowl and bat according to certain rules and regulations. A team, which scores greater number of runs, will be the winner.

Cricket is basically a bat and ball game and it is one of the oldest sports in the world. The expansion of the British Empire spread this once colonial recreational sport into a spirited game to all corners. Today cricket seems to be a virtual lifeline of many commonwealth nations. Cricket is a game in which each team has to bowl and bat according to certain rules and regulations. A team which scores greater number of runs will be the winner.

In olden days, the game was played in different names in different countries. The game of Cricket is developed from a simple game of hitting an object with a piece of wood. Basically it is the battle between bat and the ball, but the approach has changed from time to time. Cricket is played in many forms such as Test, One day International, First class Twenty 20, Super Six, Eight-a-side, Indoor Cricket Max Cricket, Double wicket and Single wicket.

The game of Cricket is passing through an exciting period of change and development that is making coaches to re-evaluate the coaching methods, techniques and tactics. Sports performance is a complex mixture of genetics make –up and environmental influences like training etcetera. Performance in Cricket is determined by several factors namely skill, technique, tactics, fitness, training etcetera. Both physical and mental fitness play vital role in performance, **(Sisodiya et.al, 2005)**.

1.1.1 PHYSICAL FITNESS AND CRICKET

Cricket is a sport in which fitness is traditionally not thought of as very important. However, the success in the 1990s and 2000s of the world beating Australian team has been attributed to their professionalism, and in part to the way they address their fitness. The other test playing nations have rightfully put more emphasis on fitness recently and are reaping the benefits. With the introduction of one day Cricket and more recently Twenty20, the game has gone through major changes and the

physical demands made on a Cricketer's body have also increased dramatically. Depending on the version of the game being played and the role of the player in the team, the importance of fitness will vary: the fitness requirements of a fast bowler will be greater and also different than that of an opening batsman, and one-day Cricket will be more demanding than a test match.

Kapil Dev former Indian Cricket team captain and one of the best all rounder's in the world of cricket started training at a very young age and he firmly believes that it is complete physical fitness that has contributed to his overall success in all aspects of the game-bowling, batting and fielding. He contends that physical fitness achieved during off-season periods helped him in bowling long spells over and over again without fatigue or lapse of concentration. Kapil began his test career in 1978. A truly remarkable accomplishment! Even as a boy, he would go in for energetic jogging, springing and stretching exercises. Also he would bowl at the nets for as long as possible till the point of exhaustion (**Amarnath, 1996**).

Bompa (1996) observe that, almost all physical activities incorporate one or more of the elements of force, quickness, duration and the range of motion. When a given exercise is required to overcome resistance, it is called a strength exercise. When quickness and high frequency is maximized, it is referred to as a speed exercise. If distance, duration or the number of repetitions is high, an endurance exercise is performed. On the other hand, if the range of motion is maximized, a flexibility movement is being performed. And finally, when in a given exercise a high degree of complexity is required, this is known as co- ordination exercise.

Buchanan (2010) former Cricket Australia national coach says that there are four major performance skills for all elite sportsmen and women, these being technical, physical, tactical and mental. The later skill is one that can make the crucial difference for athletes performing

consistently to their abilities. Sport psychology has played a significant role in the understanding, training and ultimately the use of mental skills for peak performance.

Batsmen stay at the crease for as long as possible, sometimes for periods of over four hours. In order to occupy this position, a good batsman must be able to stay focused, have good ball / eye skills, and have the strength and fitness to make each played shot productive. On the other hand, power comes from having a strong core, abdominal mid-section and the ability to generate explosive upper body actions. While on the other, the kinetic energy of the ball may be used to score four runs by the batsman by a slight change in direction. Unfortunately this skill has only been given to a few class batsmen. Fielders need the ability to sustain a concentrated effort for a period of six hours or more without fatigue and in sometimes very warm conditions. The body must be capable of explosive bursts at any given time - such as racing for a ball, jumping for a catch. Every cricket player can contribute his part to fielding unlike batting and bowling. In a tight game, fielding performance will invariably be the decisive factor between winning a match and losing it. **(Muralikrishnan, 2010).**

Cricketers while progressing through different stages of their development should find fielding enjoyable rather than a tiresome chore. Fielding drills and mechanisms thereof are taught from a very young stage. Even in international cricket one could observe fielders picking up the ball with improper balance and finding it difficult to make accurate throws to effect a run out. Learning to pick up the ball on either side will make the fielder confident to stop the ball and this makes the batsman a little nervous to start for a run especially when the ball is within the 30 yards circle. Fielding too is an important skill of the game. In recent times, more attention is being paid to fielding.

The thrill that spectators get with a brilliant piece of fielding can seldom be matched by a huge six or the sight of the stumps sent flying by a quick bowler. Good fielders like Rhodes are always more popular than big hitters. Fielding is a regular part of every cricket game, big hitting may not always be seen in every match (**Muralikrishnan, 2010**).

Bowlers require both explosive strength and speed, combined with good muscular endurance, in order to be able to maintain a high count of number of overs. Poor fitness and muscular strength will result in inaccurate bowling and greater risk of injury, especially for high speed bowlers and also allows the batsmen to settle down in the wicket to score more runs. All players will at some time in the game, bat and field. A cricket training programme shall be designed with these as objectives in the mind.

1.1.2 SPORTS PHYSIOLOGY AND CRICKET PERFORMANCE

When physical training is done, the physiological changes occur in almost every system of the human body. These changes depend on frequency, duration and intensity. Sports Physiology tells about the complete story of various internal functions of the body during rest and play. Traditionally, Cricket has been perceived as a relatively mild sport from a physiological point of view. The intermittent nature of the game with its long rest intervals provides plenty of recovery time between any short spells of higher intensity activity. However, the demands of cricket may be underestimated (**Noakes & Durandt, 2000**).

High level of performance of a Cricketer might be dependent upon his physiological make up and it is recognized that physiological fitness is much needed for high level performance. It has numerous parameters such as aerobic capacity, anaerobic capacity, pulse, vital capacity, blood pressure, breath holding time and etcetera. Certain physiological variables

play important role in Cricket. Most of physiological variables can be tested only in laboratory. **Foster, et al., (1986)** opines that fast bowling is predominantly an anaerobic activity which requires an aerobic base. In one study of the 1999 South African World Cup side, a number of physiological tests for explosive power and aerobic endurance capacity showed they were as 'fit' as the South African national rugby side.

1.1.3 SPORT PSYCHOLOGY AND CRICKET PERFORMANCE

Cox et.al (1993) defines Sports Psychology as the Science of applying psychology to sports. It is a study of behavioral science in sports setting. Sports psychology is gradually and steadily gaining momentum in the field of training of high level sportspersons. Today, sport is no more a recreation. It is not just a game of nerves as well. With the winning margin of competitive sport narrowing down to fraction of seconds, modern day sport warrants an essential supply of psychological support to come to term with reality.

Tendulkar, Indian Cricketer, who holds the record of most number of runs both Test and One day International Cricket, In press conference (2010) he said, "When pressure builds up in the game I try to focus on the next ball with calmness without thinking of the future course of the match. My mood undergoes a change before every match as I start mentally preparing myself for the game," he added.

Weinberg et.al. (1995) wrote that in any sport, a player's success or failure results from a combination of physical and mental abilities. Most coaches consider that sport is atleast fifty percent mental, with certain sports such as golf, tennis and figure skating, consistently receiving percentages in the 80 percent to 90 percent range. According to **Smith (1994)**, a former English Cricketer, "Cricket is played in the mind, more than any other game". Anxiety and Self

confidence also play important role in Cricket. Anxiety is a negative emotional state with feelings of nervousness, worry and apprehension associated with activation or arousal of the body. **(Weingberg and Gould, 1995)**.

Anxiety depending upon the degree is defined indifferent ways such as tension, panic, etcetera. Self confidence is being confident of one's own abilities. In other words, it is the Cricketer who realistically believes that he is capable of performing well. **Gould, Weiss & Weinberg, (1981)** opine that the most consistent factor distinguishing highly successful from less successful athlete is 'confidence' This means that top athletes, regardless of the sport, consistently display a strong belief in themselves and their abilities.

Preponderance of scientific evidence obtained from different investigations has revealed that apart from physical and physiological variables, techniques and tactics, high level performance of a sportsman is dependent upon his psychological makeup. Different psychic abilities play decisive roles in achieving top level performance in track and field athletics. Therefore superb psychological fitness and training of the "individual" are important factors, which help in achieving outstanding performance **(Manicam,2009)**

The concept of Anxiety occupies a very important place in the study of human personality and multitude activities of the mind. Trends were the first to define Anxiety within the context of Psychological theory. According to him, "Anxiety is something felt unpleasant effect of state or Condition". **Spielberger (1966)**, had defined Anxiety in different angles. These definitions lead to the conceptualization of 'Anxiety' as "a combination of apprehension, uncertainty and fear". Many studies of the past reveal that anxiety plays influential role in Cricket.

Success in sports depends on trust in your own strength and ability. If an athlete is well prepared for competition from a physical, technical and tactical point of view, the most important factor deciding about his/her degree of success is Self-Confidence. Self-Confidence is considered to be one of the leading elements for a successful athlete. Believe in one's self is the centre of sports performance. One of the most important factors determining Self-Confidence involves trust in our ability to execute a task. Like any other sport, in Cricket also self-confidence as well as Sports Achievement Motivation plays critical role.

1.2. YOGIC CONCEPT OF BODY

Humans are like a lamp that has five lampshades over a light. Each of the lampshades is a different color and density. As a light shines through the lampshades, it is progressively changed in color and nature. It is a bitter – sweet coloring. On the other hand, the shades provide the individualized beauty of each lamp. Yet, the lampshades also obscure the pure light.

The Yoga path of Self – realization is one of progressively moving inward, through each of those lampshades, so as to experience the purity at the eternal center of consciousness, while at the same time allowing that purity to animate through our individuality. These five levels are called koshas, which literally means sheaths. Kosha means sheath, like the lampshades covering the light, or like the series of wooden dolls pictured below. Maya means appearance, as if something appears to be one way, but is really another. Advaita Vedanta suggests that you imagine a dark night in which you think you see a man, only to find that it was an old fence post that was hard to see at first; that is maya. Here, it means that each of the sheathes or koshas is only an appearances. In truth, all of the levels, layers, koshas, or sheaths of our reality is only appearance, or maya (while also very real in the sense of dealing with the external world), and

that underneath all of those appearances, we are pure, divine, eternal consciousness, or whatever name you prefer to call it. This is one of the fundamental principles of Advaita Vedanta meditation. While some view maya as meaning that nothing is real, and turn this into a cold – hearted intellectual practice, others view the illusion of maya as being shakti, the creative force of the universe. In this way, the maya of the koshas is experienced both as unreal and, at the same time, as the beautiful manifestations of the universal oneness.

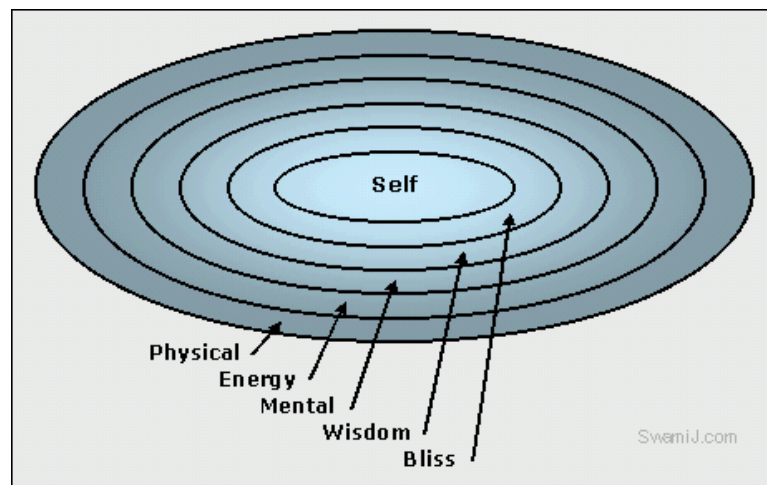


Figure – 1 (Koshas)

1. ANNAMAYA KOSHA (Physical Body / Food Sheath)

Anna means food. All of the physical aspects of life come and go, and are consumed by another aspect of external reality. Thus, the outermost of the kosha is called the sheath of food, or Annamaya kosha. It is the physical body with its biological function and materials needs and wants. All living beings in this world are born from food and remain alive by the consumption of food and drink. In fact even after death, the body can be consumed as food by animals, insects or other beings. Our physical health depends significantly on the foods that we eat and

therefore, a diet that a person follows can be used to determine his or her nature. Food is also regarded as a medicine, as it can help improve a person's overall health.

2. PRANAMAYA KOSHA (Pranic or Energy Sheath / Vital Sheath / Vital Body)

The next of the koshas is Pranamaya kosha. Prana means energy. It is the vital force that produces the subtle vibrations related to breath, and which are the driving force behind the physical aspect of the senses and the operation of the physical body. It allows the invisible indweller, our True Self to be able to animate in the external world. At the same time, however, it allows the eternally still, silent center of consciousness to be mistakenly identified as the moving, visible physical body. The prana flows through the invisible channels called Nadis. The balanced flow of prana is necessary for good health. It is said that all birth and death in the universe are a result of prana. The pranamaya kosha controls annamaya kosha. With the help of prana, a person can control the speed at which life of energy flows through his body. Therefore, people could have the ability to control their metabolism, by practicing pranamaya kosha. This sheath can be further divided into five forces (pancha vayus)

Table – I (Five Pranas)

Prana	Chest
Apana	Bowel movement
Samana	Digestion
Vyana	Throughout the body
Udhana	Chest (control food and air)

Table – II (Five Upa Pranas)

Naga	Hiccup
Korma	Eye blinking
Krikara	Sneeze, cough
Thevathatta	Yawning
Thananjaya	After death

3. MANOMAYA KOSHA (Mental or Psycho – emotional Sheath)

The next of the koshas is Manomaya kosha. Mana means mind. It is the level of processing thoughts and emotions. It is in direct control of the operation, through the prana, of the physical body and senses. It is like a supervisor in a factory, in that it gives instructions, but is not supposed to be the manager of the factory of life. Because of this, it naturally has doubts, and created illusions. When it receives clear instructions from the deeper level, it functions quite well. However, when it is clouded over by its illusions, the deeper wisdom is clouded over. This sheath not only deals with mind but also the organs within the body. The manomaya kosha influences the pranamaya kosha. When prana or life and anna or food, operate together, mana or the awareness does not really exist, because we do not think or feel anything else. The strength or weakness of this sheath decides whether a person is emotional or unemotional, easily or uneasily moved, gross or sensitive.

4. VIJNANAMAYA KOSHA (Intellectual Sheath / Wisdom Body)

The next of the koshas is Vijnanamaya kosha. Vijnana means knowing. It is the sheath of wisdom that is underneath the processing, thinking aspect of mind. It knows, decides, judges, and discriminates between this and that, between useful and not useful. It is also the level of ego

consciousness, meaning the powerful wave of I-am-ness. This I-am-ness itself is a positive influence, but when it gets co-mingled with the memories, and is clouded over by the manas, it loses its positive strength. This sheath represents the skill and the intelligence of the conscious human mind. Vijnanamaya kosha is formed when a person's ignorance extends further. In Sanskrit this is referred as "aham" from the word "ahamkara" that means seat of the ego.

5. ANANDAMAYA KOSHA (Bliss Sheath)

This is the most interior of the koshas, the first of the koshas surrounding the Atman, the eternal center of consciousness. Ananda means bliss. However, it is not bliss as a mere emotion experienced at the level of the sheath of mind. Ananda is whole different order of reality from that of the mind. It is peace, joy, and love that is underneath, beyond the mind, independent of any reason or stimulus to cause a happy mental reaction. It is simply being, resting in bliss called ananda. Since the self is the cause of all things, everything gets dissolved into it. Things are born, they grow and then they eventually die all because of ananda. This shows that ananda is the root of all human life. It is our ignorance that covers the bliss, just like how the skin covers the body. Yoga veterans recommend that pancha kosha yoga or five sheaths should be activated in equal parts. **(Bhavanani Anandha Balayogi, 2004).**

Table – III (Koshas)

Sanskrit	Translation	Explanation	Activated by
Anna-Maya Kosha	full of food	Physical body	Asanas
Prana-Maya kosha	full of energy	Energetic body	Pranayamas
Mana-Maya Kosha	full of instinct & emotion	Psychic body	Relaxation with affirmations
Vijnana- Maya Kosh	full of knowledge	Consciousness body	Ethics and moral
Ananda-Maya Kosha	full of bliss	Transcendental body	Meditation

ATMAN (Self)

Atman is the Self, the eternal of consciousness, which was never born and never dies. In the metaphor of the lamp and the lampshades, Atman is the light itself, though to even describe it as that is incomplete and incorrect. The deepest light shines through the koshas, and takes on their colorings. Atman, the Self, has been described as indescribable. The realization of that, in direct experience, is the goal of Yoga meditation, Advaita Vedanta, and Tantra practices taught in the Himalayan tradition.

CHAKRAS

Chakras are energy points or knots in the subtle body. They are located at the physical counterparts of the major plexuses of arteries, veins and nerves. Chakras are part of the subtle body, not the physical body, and as such are the meeting points of the subtle (non-physical) energy channels, called nadiis. Nadiis are channels in the subtle body through which the life force (prana), or vital energy moves. Various scriptural texts and teachings present a different number of chakras. There are many chakras in the subtle human body according to the tantric texts, but there are 7 chakras that are considered to be the most important ones.

The spine and the human energy field contain chakras, or energy centers, that vibrate at different frequencies. Each chakra presents us with the opportunity to establish a root relationship and to satisfy a deep soul desire. Each frequency holds the gift of a certain power, which enhances our human experience on Planet Earth. As we tune into this power, we are internally empowered to deal with the specific life challenges of that energy center or chakra and as a consequence to live more whole, meaningful and fulfilling lives.

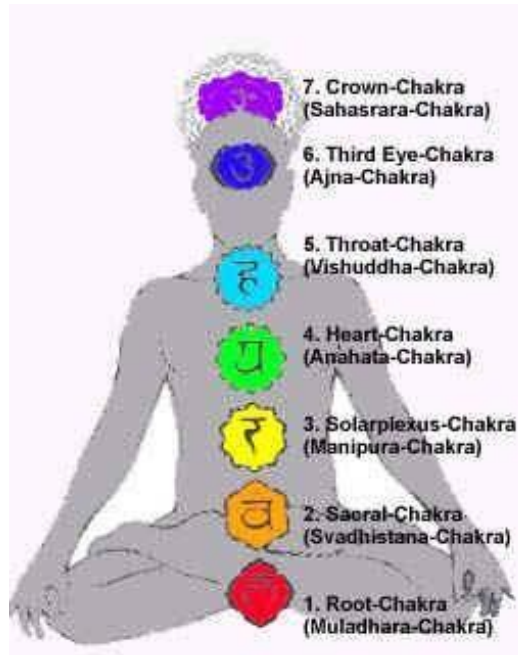


Figure – 2 (Chakras)

THREE BODIES

1. Stula Sharira – Gross or Physical Body

It is the outer most, or visible material aspect of a thing. “Coarse body” means Physical frame. Gross body is physical body that is made up of the Panchmahabhutas – the five primordial elements, i.e., Akash (vacuum), Vayu (air), Agni (fire), Jal (water) and Prithvi (earth) and is subject to a sixfold change: birth, subsistence, growth, maturity, decay, and death. This is the dense physical body. Gross body is simply the vehicle of all the other Principles (bodies) during physical incarnation. Annamaya & part (physical manifestation) of Pranamaya Kosh reside in Gross (physical) body. Gross body needs gross food, drink and air which it gets from Annamaya and Pranamaya Kosha. At death the physical body perishes and its five constituent elements are dissolved.

2. Sukshma Sharira – Subtle or Pranic Body

Subtle or astral body (Linga Sharira) is where lives mind and intellect. Manomaya and Gyanamaya Kosh and part of pranamaya kosha resides in Astral or Subtle body. Linga Sharira contains pranamaya kosha, movement of the pranic force directing our physical and mental activities. This movement happens through nadis or channels, conductors of energy which are controlled by the six chakras. Vital sheath is a subtler sheath when compared to annamaya kosha. This is composed of vital energy. As long as this vital energy exists in the organisms, life continues. This sheath is responsible for our physiological functions namely breathing, digesting, metabolizing, circulation, endocrinal, neural, skeletal, muscular etc.

The Linga sharira (subtle body) surrounds the Sthula Sharira (physical body) as an aura of energy. The Nadis (subtle energy channels) exist in this subtle medium through a fine merger into the physical medium. This is the “vital body” and the prototype and reflection of the physical body. It comes into existence before the physical body as the latter is built and formed upon and around it and it only fully fades out and dies when the very last remaining particle of the deceased physical body disappears and disintegrates. In the internal astral body there are counterparts of organs outside. They are called astral senses. A yogi hears through astral ears and sees through astral eyes. Thus he can hear sounds from distant lands, he can see objects in distant localities. This is called clairvoyance and clairaudience.

When a person dies, his or her gross body (sthula sharira) is burnt. This being in fact the ‘Antya ishthi’ (antyeshthi) the last sacrifice offered in fire, but the soul cannot quit the gross body without a vehicle of some kind. This vehicle is the Linga-sharira or subtle body, sometimes

described as angustha-matra (of the size of a thumb), invested in which the deceased person remains hovering near the burning ground or crematorium. It is the vehicle for and of Prana.

The Upanishadic texts reiterate the existence of a purusha (being) of the size of the thumb (angustha matram) enshrined in the interiors of the heart - "The self (purusha), that is of the size of a thumb (angustha), resides in the cave of the heart. The self who is the size of a thumb is a light (jyoti) without smoke." This "being" dwelling inside the heart has been equated with the 'jiva' or the 'self' which carries the consciousness and a meta-physical body (prakriti), also termed as the karana sharira. Kathopanishad says "This shining, luminous angustha-matra entity residing in the cave of our heart is "vibhrajate because of which the whole world is illuminated."

It comprises the individual mind and intuitive level of mind, the entire psychomental complex that can exist independent of the physical or gross body. Even though not seen to the naked eye, yogis, through their higher level of intuition have been able to identify it. It has now, over the centuries been proven to exist as also its direct connection to our Sthula Sharira - Physical body. In matter of fact, it influences it in more ways than one. And just as the Gross body has nadis (three) this one too has its own nadis (nerves or channels). Roughly they are estimated to be in the region of 3,64,000. We routinely 'ingest', or 'breathe in' vast quantities of air. Likewise, sights and sound through the various media. Most of what goes on in everyday life feeds this level of our being. And, even though tough to quantify the effect such a diet has on the mind and energy, it is, in effect, far greater than we realise. Hence the importance of pranayama in cleansing the pranic nadis and channelizing the flow of prana.

3. Karana Sharira – Casual Body

Anandmaya Kosh resides in Causal body (Karana Sharira). Causal body needs bliss or peace which it gets from Anandmaya Kosh. Karana Sharira or Causal body is the map template which is the sole cause for the gross and subtle bodies in the future birth of the soul that is not liberated or detached from the causal body. Karana Sharira controls the formation and growth of the other two bodies, and determine every aspect of the next birth.

Karana Sharira is the doorway to the higher consciousness. It is associated with the state of dreamless sleep and samadhi. It links individual consciousness with the collective consciousness. Experiences (samskaras) from our past lives are stored in the causal body, it carries the information and knowledge acquired during the previous births. The attachment of Maya and intense desires for the worldly objects and pleasures, called “vasanas” also go along with Karana Sharira.

At the time of death, both the causal and astral bodies (that remain together) separate from the physical body. Once the soul is completely detached from its causal body it goes to the abode of God. The soul never needs to come back to the world again except for the God’s wish. When they come back to the world they come in the form of Gurus (Perfect masters). Guru is the one who leads the created to the creator. Guru is the descent of the Divine in human form to create the right conditions for the seekers to ascend to his Divine essence (Moksha or Enlightenment or Chaitanya).

Time and again, in the ancient teachings of Yoga and Indian Philosophy one encounters the concept of the 'beyond'. Here the absolute essence of the mystery of the jiva (individual soul) is hidden, known without words. Here the mystery of the absolute is represented as the infinite potential that permeates time and space. This is the essence of all essentials, the causal essence, that which embodies the seed of all seeds. **(Stuart Ray Sarbacker 2005)**

1.3. YOGA FOR HEALTH

Yogic exercises recharge the body with cosmic energy. This facilitates

- Attainment of perfect equilibrium and harmony
- Promotes self- healing.
- Removes negative blocks from the mind and toxins from the body
- Enhances Personal power
- Increases self-awareness
- Helps in attention focus and concentration, especially important for children
- Reduces stress and tension in the physical body by activating the parasympathetic nervous system.

According to Patanjali, one can attain this (the individual self with the Supreme One) union by controlling and eliminating the ever- arising 'vrittis' or modifications of the mind. He also suggests that the mind, in turn, can be controlled through the right kind of discipline and

training. Patanjali says that there are basic obstacles pervading the mind that are not conducive to yoga practice.

He divides these **obstacles** into two groups:

- 1. Antarayas (intruders in the path of yoga)**
- 2. Viksepasahabhuvah (co-existing with mental distraction)**

There are nine Antarayas. They are,

1. Vyadhi (physical disease)
2. Styana (mental laziness)
3. Samsaya (doubt)
4. Pramada (heedlessness)
5. Alasya (physical laziness)
6. Avirati (detachment)
7. Bhrantidarsana (false perception)
8. Alabdha- bhumikatva (non-attainment of yogic states)
9. Anavasthitatva (falling away from yogic states attained)

The above obstacles blocks the flow of prana (life force) in Astral body (koshas and chakras) leads to ATHI.

This ATHI (stress) spread from one place to and occupy the entire body known as Vyathi (diseases). If stress occurs in the Astral body (sukshuma sarira) it reflects in the physical body (sthoola sarira). So as the result the entire body became prey to deadly diseases and disorder.

(Yogachariya Sundaram, 2004)

1.4. CLASSICAL LITERATURE THE ORIGIN OF YOGA

1.4.1. RAMAYANA

Two magnificent epic tales, the RAMAYANA and the MAHABHARATA, represent perhaps the most important factors which shaped the Hindu culture of India over the ages. Both still exert tremendous cultural influence throughout India and Southeast Asia today.

Hindu tradition holds that Lord Rama lived in treta yuga, and the story of his life was written by Sage Valmiki, about 7,000 years ago. The RAMAYANA is the story of Rama and his wife Sita as they went into exile, accompanied by Rama's brother, Lakshmana. Sita was then abducted by the demon-king Ravana, and rescued by Rama with the help of Hanuman, the monkey warrior. But as Smt. Meenakshi Devi Bhavanani points out:

"The RAMAYANA is also an allegory for the principles of Yogic living. Lord Rama was the supreme Yogi: firmly wedded to Dharma, or Righteous Living; an upholder of satya, or Truth at all costs. A supreme ascetic, or tapasin, he was firmly in control of his senses. His one-pointed mind manifested itself in his 'skill in action' as a warrior, a king, a husband, a son, a friend and a companion. Lord Rama is the role model for all yogic qualities.

The RAMAYANA is a 'practical yoga manual' showing mankind how to live a spiritual life. Proper attitudes to take towards all the challenges of worldly life are elaborated in detail in the work."

Rama himself was a prince from the reigning monarch in the ancient city of Ayodhya. In the Hindu pantheon he is considered the 7th main incarnation of the Supreme Lord Vishnu. The name Rama comes from the roots Ra (positive) and Ma (negative), and is literally representative

of 'the perfectly balanced being'. Therefore, 'Rama' is the mantric sound associated with balance and harmony.

1.4.2. MAHABHARATA

It the most wonderful Epic ever written in the history of mankind! Only through Mahabharata does one come to know of Gita, the song Eternal ... The messages of Cosmic wisdom conveyed by Lord Krishna to Arjuna in the battlefield of Kurushetra!

There comes a stage in the Cosmic cycle when Adharma tries to takeover Dharma! As per Indian mythology to set everything right ... At this stage the Lord himself manifests on Mother Earth!!

About 3600 years ago when forces of destruction were raising their hood and it was becoming difficult for a common man to continue living with honest means ... Lord Krishna came and by his proper guidance and blessings to Humanity saved the World from destruction!

1.4.3. BAGAVAT GITA

In the Bhagavad Gita, a main yoga text, the first time the word yoga appears it is as a solution Krishna offers Arjuna for overcoming his inability to participate in his life. Arjuna had fallen into despondence and Krishna presents yoga to him as an alternative way of being. Yoga appeared to Arjuna via his friend and chariot driver, Krishna, when Arjuna was feeling most stuck in his life.

So what does Krishna say is yoga? Well, Krishna uses the word yoga over 100 times in the Bhagavad Gita, so he has plenty to say about it! In its original Sanskrit text, the word yoga

appears in the Bhagavad Gita seventy-eight times as a noun and thirty-six times in its verbal form as yukta.

When we take all of the ways in which Krishna defines yoga in the Bhagavad Gita, it appears as if everyone around us is practicing yoga! For yoga in the Gita is a rich, complex and colorful experience engaging so much of life and human existence.

The Bhagavad Gita's yoga is something nearly every human participates in, to one degree or another, in one form or another. They just don't know it. Some important points about yoga in Gita are as follows

- Yoga is clear, discerning, totally voluntary, dynamic participation in one's life.
- Yoga is everlasting, primal, revealing, the archetypal light fueled by love.
- Yoga is sacrifice that elevates us, motivates us, actively engages us and does so in a manner that is harmonious to all other living beings.
- Yoga is selfless, cleansing, freeing, balancing, inspiring, and joyfully performed: a vision in which one experiences peaceful interconnectedness with all life around them.
- Yoga is nourished in the company of other yoga practitioners, by offerings of love, and the understandings they give rise to.
- Yoga is a heightened sensitivity and awareness of all life around us and within us, and an outpour of love in reciprocation with life's wonder and beauty.
- Yoga is fearless, is illuminating, and is a journey that does not end with death.
- Yoga is a vision that excludes nothing from its practice.
- Yoga is our intimate connection with the whole universe, with eternal realms even beyond the manifested universe, and with our own being's endless capacity to love.

- Yoga is a pure, determined force that moves us toward the mysterious and secret, and connects us with the wonderfulness of existence, of being, and of all life itself.
- As one of the world's most important yoga texts, the Gita stands to illumine the areas in our lives we get stuck in -just as Arjuna was in his- and offer us an alternative way of being through practicing yoga: an experience that can potentially include everything!

1.4.4. UPANISHAD

The basic philosophy of Yoga has been described in the Vedic texts that establish the correlation between the two. But a richer context is available in “The Upanishads”. The word Upanishad translates as “secret teaching” or “esoteric doctrine” that is intended to expound the spiritual philosophy of the Vedas. The earliest Upanishads were “attached to one of the first three Vedas namely the Rig, Sama and Yajur Veda. Associated Upanishads to Rig veda are Atareya and Kausitaki Upanishad. Sama veda is associated with Chandogya and Kena Upanishad. Yajur veda (black) is related with Taittiriya, mahanarayana, katha, svetasvatara and Maitri Upanishad. Yajur veda (white) is said to inspire Brhadranayaka and is a Upanishad. **Asana Andiappan, (2004)**

1.5. PATANJALI YOGA SUTRAS

The Yoga Sutras of Patañjali are 196 Indian sutras (aphorisms) that constitute the foundational text of Ashtanga Yoga, also called Raja Yoga. The Yoga sutras incorporated the teachings of many other Indian philosophical systems prevalent at the time. Samkhya and Yoga are thought to be two of the many colleges of philosophy that originated over the centuries that had common roots in the non-Vedic cultures and traditions of India. The orthodox Hindu philosophies of Samkhya, Yoga, Vedanta, as well as the non-orthodox Nastika systems of

Jainism and Buddhism can all be seen as representing one stream of spiritual activity in ancient India, in contrast to the Bhakti traditions and Vedic ritualism which were also prevalent at the same time. The Vedanta-Sramana traditions, Idol worship and Vedic rituals can be identified with the Jnana marga, Bhakti marga and the Karma marga respectively that are outlined in the Bhagavad Gita. **Iyengar. B. K. S, (2001),**

1.6. SCIENTIFIC BASIS OF APPLYING YOGA AS A THERAPY

Numerous studies have been done in the past few decades on psycho-physiological and biochemical changes occurring practice of yoga. Some of the researched benefits that are quite well proven are given below to facilitate an understanding of how yoga works at least at the physical level though we are yet to research and understand subtler effects of Yoga. (Dr. Moorthy)

1.7. INTRODUCTION TO YOGA

1.7.1. DEFINITION

The word YOGA is derived from the Sanskrit word YUJ meaning to bind, join and attach. It is defined as “Union of body, emotion and mind”. The practice of yoga integrates the body with the mind and the mind with the soul. All irrespective of race, color, caste, creed, sex and age can practice yoga. A YOGI is an accomplished male student of yoga. A YOGINI is an accomplished female student of yoga. A perfect yogic student is one who controls his body, mind, intellect and self being absorbed in the spirit within him. His/her mind is very stable like the un-flickered lamp inside a cane, which cannot be affected by any wind.

1.7.2. EXPLANATION

Yoga is said to be the mother of all sciences. It is the perfect way of life by mastering the mind in the right way. Yoga form a comprehensive and integrated working model to address all aspects of our health and well being – both for maintaining health and for resolving conditions of ill-health. On the basis of this model, it is possible to explain about the six factors

- Diet
- Environment
- Life style
- Postures (asanas)
- Breathing techniques (pranayama)
- Mental techniques (concentration and meditation)

A recent definition of health by W.H.O. is “a state of complete physical, mental and social well being and not merely absence of diseases or infirmity”. So health is not just physical fitness. It is physical, mental, emotional, psychological, spiritual and moral. It is the pre-requisite for every kind of happiness. Yoga is a science and an art. It is the most ancient sacred tradition known to humanity, which shows the perfect way to perfect health. One is not required to be in perfect physical shape to practice yoga. Yoga is vastly adaptable to every person’s particular needs.

Many people have practiced yoga for more than thousands or years in order to feel at peace within them. Moving your body into postures and exercises is the most commonly known form of yoga. In yoga, the one who practices it will become more aware of his/her breathe and inner function of his/her body and mind. Every philosophy, every religion and every therapy

addresses the human needs to feel whole. Because when you feel whole, you feel happy, with everything finding its places and its peace. This is where yoga comes in, harmonizing body, mind and spirit.

1.7.3. YOGA PATHS

Yoga is an ancient philosophical and religious tradition which is thought to have originated in India in at least 1000B.C. Over the centuries, the techniques of yoga evolved into a number of different paths, any of which are said to lead a person to self-realization. Four of the major paths are:

- Karma Yoga - which is the pathway of selfless service through charity work
- Jnana Yoga - which means intellectual understanding through philosophical study
- Bhakti Yoga - which is the practice of love and devotion
- Raja Yoga - which translates as the “royal path”

Raja Yoga is a psychological approach, which incorporates guidelines about behaviour, physical posture and exercises for steadying the breath and ultimately the mind. The method of Raja Yoga was formally systematized in a body of writing known as the Yoga Sutras, authored by Patanjali sometime between 200B.C. and 300A.D. (Feuerstein, 1990).

Hatha Yoga, also known as the yoga of physical discipline (Feuerstein, 1990), is a form of Raja Yoga (Sivananda Yoga Vedanta Centre, 1996) which has recently become extremely popular in the West (Feuerstein, 1990; Corliss, 2001). The techniques of Hatha Yoga place particular emphasis on physical, breathing and concentration methods for the regulation of the body’s energy (Iyengar, 2001).

1.8. DEFINITION FOR POSITIVE HEALTH

It is clear that health cannot be conceptualized in terms of the physical body alone, but must also include the mental and social spheres of functioning. In accordance with this view, the World Health Organization (WHO) has defined health as “a state of complete physical, mental and social wellbeing and not merely the absence of disease” (World Health Organization, 1946). It is important to note that this definition structures health as a continuum. In other words, one is not simply healthy or sick. There are many degrees of health between morbidity and optimal functioning in life. This is also reflected in the definition of health determined by recent international proceedings on physical activity, fitness and health: positive health is “associated with a capacity to enjoy life and withstand its challenges”, whereas negative health can be defined as “any departure, subjective or objective, from a state of physical or psychological wellbeing short of death” (Shirley Telles, et.al, 1994).

1.9. DEFINITION AND MEASUREMENT OF PHYSICAL WELLBEING

The assessment of physical health has been dominated by a focus on the presence or absence of disease (Bernard & Krupat, 1994); however, it is clear that when it comes to the measurement of positive health, that is, moving beyond a neutral state to an optimum state of functioning, the notion of disease is no longer relevant. Indicators of positive physical health therefore tend to centre on physiological and biochemical processes such as physical fitness or fluctuating levels of immunity and stress hormone levels (Seeman, 1989). Physical fitness for example has been used as an indicator of positive health because of its association with reduced heart disease risk, hypertension and diabetes, and because it enables individuals to comfortably carries out physical tasks and recreation activities (Bouchard et al., 1994).

Another important factor which has recently been identified as contributing to optimum functioning is the ability to relax when needed (Gilbert & Orlick, 1996; Hassed, 2000). This has been found to be particularly significant in situations which require high-level performance and have the potential to induce stress (Gilbert & Orlick, 1996). Researchers in the relaxation and stress reduction fields have found that physical relaxation can contribute to the reduction of blood pressure, heart rate and levels of stress hormones such as cortisol and adrenalin, in lowered levels of cholesterol, and in increased immune function (Hassed, 2000). Relaxation of the skeletal musculature reduces activity in neuromuscular circuits including the brain itself (McGuigan, 1993). Therefore, the ability to relax voluntarily suggests that a person is able to develop some level of control over his or her own levels of autonomic arousal.

Relaxation can be examined in several different ways. For example, one can focus on general base levels of relaxation, or on rates of return to a state of relaxation following exposure to a stressor (Dunn & Blair, 1997; Bera, Gore, & Oak, 1998). Alternatively, as has been conceived in some of the positive health literature, one can view relaxation as a skill which can be practiced and developed for use at any time (Gilbert & Orlick, 1996; Setterlind, 1983). The state of relaxation is associated with reduced sympathetic arousal and increased parasympathetic activity (Rice, 1987). These processes can be observed via multiple physiological indicators, some of which are discussed in greater detail in the following section.

1.10. PHYSIOLOGICAL INDICES

The state of relaxation can be identified via multiple physiological parameters. For instance, it is associated with a decrease in oxygen consumption, respiratory rate and heart rate (Patel, 1993). Other indicators include but are not limited to: increased electrical skin resistance,

reduced sweat gland activity, reduced muscle tension, blood pressure, and changes in brain activity patterns (Lehrer & Woolfolk, 1993a).

The simplest way to measure heart rate is by manually feeling for pulse at the wrist or neck. More accurate methods include electrocardiography, which uses a set of electrodes at the body's surface to record cardiac electrical activity on a computer screen.

Regular abdominal breathing is a pattern which is associated with reduced sympathetic arousal and a calm emotional state, and which also underlies many stress management techniques (Lehrer & Woolfolk, 1993). Berger and Owen (1988) point out that rapid shallow thoracic breathing is a common stress symptom and that slow deep abdominal breathing is thought to help regulate the autonomic nervous system.

Abdominal breathing has been found to be related to reductions in blood pressure and anxiety (Patel, 1993). This view is supported by traditional yoga texts, where breath is considered to be the regulator of the autonomic nervous system, and quality of respiration is said to be a barometer of physical and psychological well-being (Harvey, 1983). According to yoga theory, healthy respiration is: slow, deep, nasal, abdominal, quiet, even and regular (Morse, Cohen, Furst, & Martin, 1984). By contrast, unhealthy respiration is said to be rapid, oral, noisy, uneven, and predominantly in the chest (Morse et al., 1984).

Techniques for respiration measurement range in complexity. Many studies in this area have simply measured breath rate over a set period of time by placing a piece of cardboard on participants' abdomens and counting the rise and fall of the cardboard (Zaichkowsky & Zaichkowsky, 1984; Zaichkowsky, Zaichkowsky, & Yeager, 1986; Jacobson, 1978). Others have utilised more sophisticated equipment such as a volumetric pressure transducer, which allows

researchers to gauge the regularity of breath as well (Telles, Narendran, Raghuraj, Nagarathna, & Nagendra, 1997).

1.11. DEFINITION AND MEASUREMENT OF PSYCHOLOGICAL WELLBEING

Psychological wellbeing is a broad term which encompasses but is not limited to the notions of happiness, morale, life satisfaction, social support, depression and elation (Bowling, 1997). Research into psychological wellbeing typically includes some study of emotion, where wellbeing is said to denote a preponderance of positive over negative emotion (Diener, 1984). This is not limited to a person's disposition to feel a particular emotion. It could also refer to a person's actual experience of a particular emotion (Diener, 1984). Emotion is a term which is said to cover at least two categories of feeling: affect and mood. Considerable debate exists as to the distinctions between these two kinds of emotion (Morris, 1989). For the purposes of this thesis, mood is considered to be more pervasive and less specific than affect; in other words, whereas affect tends to be directed towards a particular object, mood does not (Morris, 1989). Mood is an important aspect of mental health which has been found to significantly impact upon memory, coping ability and other health-related behaviour (Morris, 1989; Wankel & Berger, 1991).

Self-esteem has also been regarded as a major component of the construct of well-being, closely connected to subjective well-being and happiness (Diener, 1984; Fox, 2000) and associated with adaptability and resilience to stress (Wylie, 1989). High self-esteem is associated with choice, persistence and success in a range of health related behaviours and is one of the most widely used indicators of psychological health (Fox, 2000). The following sections define

mood and self-esteem in greater detail, as well as physical self-worth, a highly significant aspect of self-esteem.

- Mood
- Global Self-Esteem
- Physical self-worth

1.12. YOGA FOR PLAYERS

Gymnastics, swimming, dance, martial arts, basketball, soccer... There are already many choices available to parents for physical, movement based extracurricular classes for their children. What makes yoga different? And what are the benefits for yoga for children? In a yoga class, children often go on a magical journey around the world, and learn about many cultures and places. Since many of the yoga poses are of animals, children also learn about different animal habitats, endangered species, and even recycling!

Yoga (meaning union or yoke) is the practice of accessing and integrating all aspects of our true nature -- body, mind, and spirit -- in the pursuit of inner harmony.

- Controversy
 - As yoga becomes more popular in colleges through physical education classes and after-school programs, that popularity comes with controversy.
 - Although many adults like the benefits of yoga, some parents feel that the practice might have a religious association (like prayer) and shouldn't be allowed in a public space.

- They argue that yoga is an offshoot of Hinduism and that it disseminates religious and meditation principles with its use of "om" and "namaste" chanting.
- Some also believe that the asanas, or postures, such as the sun salutation, are a form of Hindu religious worship.
- Overcoming the controversy
 - To dispel this notion and avoid any religious or cultural messages, most yoga teachers focus on the benefits of the exercises and use generic terms, instead of the Sanskrit names, for the poses, renaming them cat, bridge, table, tree, downward-facing dog, volcano, and so forth.
 - Yoga's rising popularity can be attributed to its basic stretching advantages and improved body awareness, with the added component of a mind-body connection.

Despite the controversy, yoga is beneficial to kids in many ways. Because children encounter emotional, social, and physical challenges or conflicts, a dedicated and intentional yoga practice that includes breathing techniques, behavioral guidelines, and physical postures can be incredibly valuable for them. Yoga is something children can practice anywhere and that the breathing, the concentration, the poses, and the way kids learn to act or react to situations, will lead to constant self-discovery. Plus, yoga is portable, and no mat, special clothing, or special pillow is absolutely necessary.

A child's yoga practice is a rare opportunity to experience play and focus without worrying about being wrong. Yoga is an option for children who shy away from physical activity or group activities for fear of failure or being picked last, and it helps athletic children excel in other physical activities and sports. Yoga introduces cornerstone values "such as non-harming, truthfulness, moderation, cleanliness, gratitude, and self-discipline."

1.12.1. BENEFITS OF YOGA FOR PLAYERS

- Teaching children how to take care of themselves is one way to show love.
- The beauty of yoga is that children can practice alone, with a friend or with a group.
- The benefits of children practicing yoga are similar to the benefits of yoga for adults.
- Yoga reduces feelings of helplessness and aggression, and in the long term helps emotional balance.
- Yoga is beneficial to children of all ages, but it has been found to be particularly so for kids with special needs. Studies have shown that yoga benefits children with autism.
- Parents may notice how yoga benefits their kids, but the best judges are the kids themselves. Children who have practiced yoga tell teachers and parents that they are able to concentrate better during the day, focus better on their activities, and pay attention to their tasks -- all the finest endorsements.
- The emotional benefits are greater optimism and a less reactive nature.
- The mental benefits of increased focus and concentration, and improvements in the quality of sleep have been reported.
- Yoga practitioners are more tolerant of differences and improvements in personal relationships have been noted.
- Academic performance has been noted to improve with a yoga practice and an increase in confidence in physical abilities and athletic performance has also been reported.
- Yoga has a more comprehensive effect as compared to traditional therapies that mostly target specific problems. It is used to aid conventional medical treatment and helps to stimulate the development of a child.

- By practicing yoga poses, children can learn how to exercise, develop confidence, and concentrate better.

1.12.2. YOGA TIPS FOR PARENTS & PLAYERS

- Students (and parents) should not eat right before doing yoga. It is best not to have a full stomach when practicing the postures.
- Pick a quiet place to do yoga with your child. Preferably practice on a yoga mat or soft carpet. Using a yoga mat helps ground kids and gives them a personal space to do the postures.
- Do the poses with your child.
- Enjoy being with your child and try to be in the moment rather than letting your mind wander to things you need to get done.
- Start in the Candle pose by kneeling on the floor with your hands in prayer position in front of your heart. Take several breaths in and out through your nose before advancing to other poses.
- Remember to always breathe in and out of your nose when practicing yoga postures.
- Keep the tone light and fun, and never push your child to do more than they are capable of.
- Give your child positive reinforcement to help him or her learn and improve.
- Your final posture should be the Do Nothing Pose, where you and your child lie on your backs with your arms alongside your body and your palms facing towards the ceiling. If you have an eye pillow or small towel to cover your eyes, it helps to keep the light out.

- Play a soothing children’s lullaby when doing the Do Nothing Pose. See if you and your child can lie still for the duration of the song. See how relaxed and rejuvenated you both are when you are done!

1.12.3. PLAYERS FIND BALANCE WITH YOGA

The yoga practice is adapted for each grade level, addressing the students’ needs, abilities and developmental levels and focusing on age-appropriate themes. Classes for early childhood students last 30 minutes and take on a more creative form, using rhymes and associating poses with familiar objects, like animals. Poses focus on awareness of one’s own space and building the core strength that helps the younger ones sit up tall to be ready to learn. At the middlecollege level, students might be more physically active, so yoga poses are more interactive. Highcollege students focus on the symbolism of support and strength in the poses, engaging in discussions about self-respect and self-care and learning how to becoming more aware of the moment.

1.13. LEARNING OBJECTIVES

1.13.1. PHYSICAL

- Improved overall health
- Increased strength & flexibility
- Improved body image
- Better sleep quality

1.13.2. MENTAL

- Improved executive function

- Improved focus & attention skills
- Increased engagement
- Greater sensory integration

1.13.3. EMOTIONAL

- Improved emotional regulation
- Greater self confidence
- Increased resilience
- Decreased stress and anxiety

1.13.4. SOCIAL

- Greater compassion & empathy
- Improved communication skills
- Increased leadership skills
- Reduced bullying
- Greater sense of community & safer college climate

1.14. HOW TO COPE WITH STRESS AT PLAYING

1.14.1. STEPS

- Keep a routine. Keeping a schedule can help students tackle one hurdle at a time, and as a result, feel more in control. Get a schedule from a supply store or make one yourself and hang it up in your room. Write down everything you need to do in order not to miss things out.
- Get enough sleep. Students should at least sleep 7 to 8 hours a day to make it easier for them to cope with stressful situations. Students will also be less irritable and tense.
- Exercise regularly. Exercising at least 30 minutes a day can help alleviate stress, tension, and boost confidence.
- Try to relax. Listen to relaxing music, take a long bath, watch a nice movie or meditate. Relaxing for at least an hour per day can help you get rid of that stress building up inside.
- Have fun. Take a step back and remember to have fun with friends. It can be helpful to have a group study session. It will be entertaining and instructional at the same time.
- Stay calm. Do not rush yourself and then start to panic. This will only add to your stress level. Just take it slow and be steady. Take deep breathes. Breathing will physically and emotionally relax your body.

1.14.2. TIPS

- Learning to cope with stress will help students find a better quality of life and enjoy these precious highcollege or middlecollege years.

- As typical as it sounds, yoga is a great solution. It is good physical activity and you relax. Meditation is actually very effective too. Do this right before bed, no matter how tired you are. It helps you have a more effective sleep as well.
- You will feel much more relaxed INcollege and OUT ofcollege too.
- It can make you a more responsible person.

1.14.3. WARNINGS

- Don't drop out of college.
- Don't be afraid to say no to responsibilities if you simply cannot handle the additional stress/pressure to do them. You need rest and relaxation at some point in your life.
- Don't GIVE UP.
- In order not to get too stressed at home, try to finish your homework atcollege.

1.15. ASANA

Sanskrit word for posture or seat. The physical type of yoga that is a form of exercise. Used as a suffix in the Sanskrit names for yoga poses. One of the eight limbs of yoga.

1.15.1 CHARACTERISTICS

- Yoga posture in the hatha yoga system.
- Third limb of the ashtanga yoga system. Explained as a steady and comfortable meditative posture.
- Seat. In the yogic sense, refers to the pillow or apparatus we sit on for meditation and pranayama.

- Seat. In bhakti yoga, refers to the seat the deity is sitting on, either on photos or the actual physical seat we offer during a puja ritual.

1.15.2 THREE GENERAL TYPES OF ASANAS

Asanas can be divided into meditative, relaxing, and cultural asanas. These three types of postures are quite different in their purpose and technique.

1.15.3 MEDITATIVE ASANAS

These are cross-legged sitting postures which allow you to sit upright and relaxed for a longer time. They provide a stable seat for meditation. The aim is to train your body so you can sit a long time without moving any part of your body. This is important if you are practicing meditation or pranayama and want to come to a deep concentration.

You should choose the posture that is most comfortable for you and start practicing it for 15 minutes. You can increase the length gradually.

In the raja yoga sutras the asana is defined as a steady, firm, and comfortable posture.

There are five main meditative postures:

- Padmasana or lotus
- Siddhasana or adept's pose
- Swastikasana or locked-ankles pose
- Sukhasana or easy pose
- Vajrasana for people who cannot sit cross-legged

1.15.4 ASANAS FOR RELAXATION

The asanas for relaxation are designed in a way that there is no need to contract any muscle. It is important to practice them exactly so your body can come to a deep relaxation and is not just lying on the floor.

There are three main relaxation postures:

- Savasana or corpse pose
- Abdominal relaxation pose
- Garbhasana or child's pose

The first asana of this type, savasana, is also used for yoga nidra, the powerful system of deep relaxation, visualization and self transformation.

1.15.5 CULTURAL ASANAS

There are three important phases in the practice of cultural asanas — each of them equally important and should be paid equal attention:

- Coming into the position
- Holding the position
- Getting out of the position

This group contains by far the largest amount of asanas. It is said that there are 84 lakhs (8.4 million) yoga postures. Of these, 84 are more important and 12 of them constitute the structure of the Rishikesh sequence sometimes called Sivananda series or Yoga Vidya series.

The cultural asanas can be divided in seven groups:

- Dynamic sequences - such as the sun salutation
- Inverted postures - such as the headstand or the shoulder stand
- Forward bending postures - such as the sitting forwardbend Paschimottanasana.
- Backward bending postures - such as the cobra , locust , or bow poses
- Twisting postures - such as the half spinal twist
- Side ward bending postures - such as the triangle pose
- Standing postures including balancing poses - such as the tree pose.

□ Based on positions, the Asanas can be classified as:

- **Supine posture** –Halasana (plough pose), Chkrasana (wheel pose) and Sarvangasana (shoulder stand pose).
- **Prone posture** – Bhujangasana (Cobra pose), Dhanurasana(bow pose), Shalabhasana (locust pose) and Noukasana (boat pose).
- **Sitting posture** - Paschimottasana (forward bend pose), Matsyendrasana (spinal twist pose), vajrasana (thunderbolt pose) and Padmasana (lotus pose).
- **Standing posture** – Vrikshasana (tree pose), Veerasana (warrior pose) etc. There are various other ways to classify the Asanas, these are only a few of such Asanas.

1.15.6 PRANAYAMA

Breath control. Although breathing is one of our involuntary bodily functions (it happens whether you think about it or not, if you are alive) we can also control the breath to some extent.

Exercises in breath control, such as breath retention and deliberate methods inhalation and exhalation for specific mental and physical benefits are called pranayama.

“Prana” means control of life force through the art of breathing pranayama is the fourth part of the eight fold yoga described in the yoga sutra of patanjali.

Iyengar describes pranayama as follows.

“Prana” means breath, respiration, life, vitality energy or strength when used in the plural, it denotes certain vital or currents of energy (prana-vayus) “ayama” means stretch, extension, expansion, length, breath, regulation, prolongation, restraint or control. ‘Pranayama’, thus means the prolongation of breath and its restraint. The Siva samita calls it vayu sadana (Vayu:breath, sadhana: practice). Patanjali in his describes pranayama as the controlled intake and out flow of breath in a firmly established posture.

In Indian Yoga therapy, Pranayama holds a place of special significance. To understand the nitty-gritty of this Yoga, one first needs to describe the meaning of the Pranayama. The whole word Pranayama can be dissect into two separate words, both originated from Sanskrit language - "Prana" means breathe while "Ayama" denotes a pause, the meaning of pranayama therefore stands as a pause and then breath. Some have denoted the meaning of Pranayama, as a `subtle psychic force or subtle cosmic element`.

The word Prana had its origin in Yoga Sutra, the Sanskrit literature propounded by Bhagavan Patanjali. However, the meaning of Pranayama, as a whole, was not found in this Sanskrit text. In this book, Patanjali, the great Indian Yogist and sage has mentioned about various actions like how to exhale, inhale and take pause etc with no proper names being given

to them. The words Rechaka means exhalation, kumbhaka means pause and puraka means inhalation and are definitely the important role players in the whole yogic system of pranayama.

Patajanli`s Yoga narrated that inhaling can also control one`s mind and expelling breathe. The term, "Pracchardana" that he has used, means expulsion thereby refers to breath and not to any insidious psychical force or `cosmic element`. The word Vidharana emphasizes `retention`. There is no doubt about the fact that all these words used by Patanjali, taken together, naturally lead one to conclude that Prana of the word Pranayama denote to breath only.

Vyasa and other commentators too interpreted Prana as passing of air from the chest. To be specific, in first of the two Yogic Sutras of Patanjali, eight successive items have been described and the esteemed Pranayama stands fourth in the list. The second sutra defines the word Pranayama in details. Prana is associated with Ayama. Here the words Svasa and Prasvasa, which means air flowing in and out simultaneously, actually make the meaning of Pranayama clearer. Thus Pranayama means nothing but a pause occurs in the movement. Apart from Patanjali, other commentators too have accepted this meaning of Pranayama.

1.16 TYPES OF PRANAYAMA

In the period of ancient India, eminent yogic scholars have enumerated different types of Pranayama. Separate colleges have originated each throwing insight into their own viewpoints and concepts.

1.16.1 PATANJALI'S TYPES OF PRANAYAMA: Bhagavan Patanjali have distinguished four types of Pranayama, depending upon the nature of taking pauses. In the first type, the pause is made after a thorough exhalation. When the pause is made after a deep inhaling, it would comprise of second type. In both first and second types, the students need to take special efforts

to hold his breath out or in. No special efforts are needed to undertake in the third and fourth types. In the third type, the student has the liberty to stop respiring at his will and also continues it for quite some time very easily without much physical exertion. Like the third type, in the fourth type too, a student can take pauses. However one needs to exhale air for sometimes before inhalation and then takes pauses. In the literary works of the later period various names have been given to these types of Pranayama. The first type of Pranayama is known as Bahya ` Kumbhaka while the second type is called Abhyantara ` Kumbhaka, `Kevala Kumbhakas` refer to both third and fourth types is Pranayama.

1.162 SVATMARAMAS'S TYPES OF PRANAYAMA: In the famous book of Hatha Yoga, namely, Hatha-Pradipika, the writer Svatmarama Suri categorized 8 types of Kumbhaka, an alternative name given for Pranayama. Ujjayi and Bhastrika are the names of the first two most significant types of Pranayama or Kumbhaka. Suri also made the segregation as per the nature of each and every Kumbhaka.

Thus both Patanjali and Svatmarama had maintained uniqueness in categorizing different types of Pranayama.

1.163 BREATHING (PRANAYAMAS) AND CHILDREN

Kids may think that breathing is boring, but they can relate to smelling. Exaggerate smelling things that are delicious, sweet, stinky, yucky etc. As the instructor, exaggerate your body movements. Kids will relate and begin to imitate. Using props like pinwheels, ping pong balls, feathers, scarves and straws help children to develop awareness of how their breath moves. Keeping a box of tissues nearby is suggested when practicing pranayamas. Breath retention is not recommended for children unless specified in an age appropriate exercise. Emphasize

movement with inhalation and surrender or relaxation with exhalation. In Yoga, always try to breathe through your nose except when instructed to breathe through the mouth.

1.164 ARE YOU BREATHING PROPERLY?

Balanced breath means feelings and frequency of breath. In one minute we breathe nearly sixteen to seventeen times. If you are:

- Upset - it may go up to twenty
- Extremely tense and angry - it could total twenty-five times per minute
- Very calm and happy – ten
- In meditation - two to three breaths

Deep meditation can reduce the number of breaths you take. And that is why we need to learn yoga.

1.17. PHYSICAL FITNESS COMPONENTS

The goal of physical fitness programme is to improve the performance in activities of daily living, job demands, sports and recreational activities which was said by Craig Liebenson(2003)

Donald (1958) quoted that, “Fitness is composed of many complex factors where complete evaluation cannot be done by testing a single factor. Many variables such as those included in measuring cardio-respiratory balance, flexibility and nutrition reflex each in special way, some aspect of total physical fitness.”

Motor ability has been defined as the present acquired and innate ability to perform motor skills of a general or fundamental nature exclusive of high specialized sports and gymnastic techniques. This definition capacity and diverse training and experience is further implies that a valid measure of it must avoid highly specialized skills as revealed in dance or sports. For the purpose of this research the following motor fitness variables were selected.

1.17.1. FLEXIBILITY

Flexibility refers to the absolute range of movement in a joint or series of joints, and length in muscles that cross the joints. Flexibility is variable between individuals, particularly in terms of differences in muscle length of multi-joint muscles. Flexibility in some joints can be increased to a certain degree by exercise, with stretching a common exercise component to maintain or improve flexibility.

Quality of life is enhanced by improving and maintaining a good range of motion in the joints. Overall flexibility should be developed with specific joint range of motion needs in mind as the individual joints vary from one to another. Loss of flexibility can be a predisposing factor for physical issues such as pain syndromes or balance disorders

Gender, age, and genetics are important for range of motion. Exercise including stretching often helps improve flexibility.

Many factors are taken into account when establishing personal flexibility: joint structure, ligaments, tendons, muscles, skin, tissue injury, fat (or adipose) tissue, body temperature, age and gender all influence an individual's range of motion about a joint.

1.17.2. CARDIO VASCULAR ENDURANCE

Cardio Vascular endurance is defined as the capacity to continue to work under strain for a long period of time without undue fatigue (Fall and Bigbee, 1968).

It is the ability to persist in strenuous activity this definition, may apply to the body as a whole, to a particular body system or to a local area of the muscular system. Endurance is one of the basic components of general athletic ability and it is usually considered to be the most important component of physiological fitness. Some activities of which endurance is of prime importance are running, swimming, cycling, wrestling, basketball, handball, soccer, rugby and football. In all these activities endurance training occupies an important place in preparation for performance. (Jenson and Fisher, 1972)

1.18 PSYCHOLOGICAL VARIABLES

Yoga induces a "relaxation response" associated with reduced nervous system activity and a feeling of well-being probably due to an increase in antioxidants and lower levels of the stress hormone cortisol; Yoga not only helps in prevention of lifestyle diseases, but can also be "a powerful adjunct therapy when these diseases arise,"

Yoga is a form of exercise and it's this form of activity provides great benefits psychologically. In studies done in Finland in 2000, participants were asked to partake in exercises. Based on this study, scientists discovered a connection between mood and recreational exercise. Those who participated in exercise at least two times a week had some positive effects on mood. There were fewer signs of depression and anger found among these individuals.

Moreover, the ones who participated in these exercises more than twice a week were prone to be sociable, allowing one to be less stressful.

1.18.1 ANXIETY

While doing any job when one suspects about the proportion of possibility of success is known as anxiety. Anxiety is psychological factor which differs from arousal. It encompasses some degree of activation and an unpleasant emotional state. This form anxiety is used to describe the combination of intensity of behaviour and directional effect or emotion.

Anxiety plays an important role in the acquisition of motor skills as well as in athletic performance. Anxiety can either enhance or inhibit performance whether its effect is positive or negative depends on how an individual athlete perceives the situation.

People with low trait level has been known to perform better in selected motor skills than those with high or trait levels. There is also positive relationship between participants in athletic competition.

A moderate level of anxiety seems best for the acquisition and performance of motor skills levels of anxiety either too high or too low tend to inhibit learning and performance.(Lewellyn and Blucker, 1974)

1.18.2 AGGRESSION

Any behavior that is hostile, destructive, and/or violent. Generally, aggressive behavior has the potential to inflict injury or damage to the target person or object. Examples of aggressive behavior include physical assault, throwing objects, property destruction, self-harming behaviors, and verbal threats. Aggression can have mental aspects, as well.

1.19. PERFORMANCE RELATED COMPONENTS

1.19.1 PLAYING ABILITY

It is the ability to excel the performance in the sports and games within the rules and regulations governed by the chosen game. Ability to pursue the excellence in a particular game or sport with reference to their playing positions is termed as playing ability (batting, bowling and fielding). In team sport, it includes both defensive and offensive abilities (Atkins, 2004).

1.20 OBJECTIVES OF THE STUDY

1. To explore whether yogasanas and pranayama shows any changes on selected physical, psychological and performance variables among State level cricket players .
2. To analyze the influence of yogasanas and pranayama on Selected physical, psychological and performance variables in State level cricket players.

1.21 REASONS FOR THE SELECTION OF THE TOPIC

The researcher has taken interest on State level cricket players, because in this modern world the lifestyle and food habits are changing day by day. Hence most of the cricket players are affected by stress. To create awareness to the State level cricket players the researcher has selected this topic. The researcher selected yogic practices to identify the changes on physical, psychological and performance variables among State level cricket players . Physical, psychological and performance variables are needed to analyze the various changes take place in their physical and mental level before and after the training period.

The researcher took this topic because there are lacks of literature and limited studies in this field and especially for State level cricket players . Hence the researcher wants to find out the effect and influence of yogasanas and pranayamas separately on State level cricket players .

1.22 REASONS FOR THE SELECTION OF THE VARIABLES

The State level cricket players were increasing day by day because of current life style and food habits and lack of exercises. State level cricket players have less performances in physical variables like flexibility, cardio vascular endurance and psychological like anxiety and aggression etc and the performance variables like batting, bowling and fielding. Thus the investigator has chosen these variables for the present study. Physical, psychological and performance variables are selected as dependent variables where yogasanas and pranayamas and combined practices were selected as independent variables.

1.23 STATEMENT OF THE PROBLEM

The purpose of the study was to find out effects of selected yogic practices on selected physical, psychological and performance variables among state level cricket players.

1.24 HYPOTHESIS

On the basis of conclusion drawn through review related to the study the investigator has framed the following hypotheses

1. It was hypothesized that there would be significant differences in yogasanas than control group on selected physical, psychological and performance variables among State level cricket players .

2. It was hypothesized that there would be significant differences in pranayama than control group on selected physical, psychological and performance variables among State level cricket players .
3. It was hypothesized that there would be significant differences in combined (yogasanas & pranayama) than control group on selected physical, psychological and performance variables among State level cricket players .
4. It was hypothesized that there would be significant differences between yogasanas, pranayama and combined (yogasanas & pranayamas) on selected physical, psychological and performance variables among State level cricket players .

1.25 SIGNIFICANCE OF THE STUDY

1. The findings of the study would help to explore the status of the yogic practices among State level cricket players .
2. This study would bring out the effect of yogic practices among State level cricket players.
3. This study will describe the changes in physical, psychological and performance variables due to yogic practices among state level cricket players .
4. This study helps for the state level cricket players in maintaining their mental and emotional stability i.e. by reducing anxiety and aggression.
5. This study would give an idea in to increase the flexibility and cardiovascular endurance.
6. This study would give an idea in to increase the batting, bowling and fielding.
7. The findings of the study would help to adopt the suitable training programme to maintain the good health for state level cricket players .
8. The findings of the study would be helpful for the further research studies, also helpful for the academy of state level cricket players.

1.26. DELIMITATIONS

The following delimitations were taken into consideration in the interpretation of results:

1. The study was confined to students who have state level cricket players.
2. The age of the subjects were ranging from 17 to 25 years.
3. The total numbers of subjects were 60 state level cricket players , in which 15 for experimental group I (yogasanas), and 15 for experimental group II (pranayamas) and 15 for experimental group III (combined) and 15 for control group, were taken for the study.
4. The subjects were selected from Tamilnadu Cricket Academy, chennai.
5. The subjects were experimentally treated with yogasanas, pranayamas as well as combined training.
6. The study was conducted on dependent variables such as flexibility, cardio vascular endurance, anxiety, and aggression, batting, bowling and fielding.
7. The experimental period was fixed as 12 weeks and six days in a week between 6am to 8.30 am

1.27 LIMITATIONS

The study was limited in the following aspects.

1. The socio-economical status was not taken into consideration.
2. Certain factors like life style, body structure, personal habits and family heredity were not taken into consideration for this study.

1.28 MEANING AND DEFINITION OF THE TERMS

YOGA

The term yoga comes from a Sanskrit word which means yoke or union. Traditionally, yoga is a method joining the individual self with the Divine, Universal Spirit, or Cosmic Consciousness. Physical and mental exercises are designed to help achieve this goal, also called self-transcendence or enlightenment (**Stuart Ray Sarbacker, 2005**).

FLEXIBILITY

Flexibility is the ability to execute a wide range of movement in the joints while for repetition of work done in natural speed. Flexibility is most important. Flexibility helps to move bodily parts easily, takes less time, energy to perform a task. Elasticity in muscle reduces tension and provides maximum length. Thus yielding passive physical stretch.(Cureton, 1941)

CARDIO VASCULAR ENDURANCE

Cardio respiratory endurance is the ability to continue activities that tax the cardiac circulatory and respiratory functions. (Franks, 1992) .

ANXIETY

While doing any job when one suspects about the proportion of possibility of success is known as anxiety. Anxiety is psychological factor which differs from arousal. It encompasses some degree of activation and an unpleasant emotional state. This form anxiety is used to describe the combination of intensity of behaviour and directional effect or emotion.A moderate level of anxiety seems best for the acquisition and performance of motor skills levels of anxiety either too high or too low tend to inhibit learning and performance.(Lewellyn and Blucker, 1974)

AGGRESSION

Any behavior that is hostile, destructive, and/or violent. Generally, aggressive behavior has the potential to inflict injury or damage to the target person or object. Examples of aggressive behavior include physical assault, throwing objects, property destruction, self-harming behaviors, and verbal threats. Aggression can have mental aspects, as well.

PLAYING ABILITY

It is the ability to excel the performance in the sports and games within the rules and regulations governed by the chosen game. Ability to pursue the excellence in a particular game or sport with reference to their playing positions is termed as playing ability (batting, bowling and fielding). In team sport, it includes both defensive and offensive abilities (**Atkins, 2004**).