CHAPTER II

REVIEW OF RELATED LITERATURE

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2.1 INTRODUCTION

The importance and relevance of the review of the related literature in the process of research work is indisputable. Getting familiarized with the fund of knowledge created through strenuous and perpetual inquiry in the field concerned is sine qua non for every bonafide researcher. No one can start a research in a vacuum.

The investigator should have keen interest in what has already been kept in the treasure house of knowledge in the area of his choice. Though respectful, he or she is not guided by a blind admiration but a critical, truth-seeking mind beset with genuine curiosity. The researcher is expected to bear in his mind that the new that he or she is going to make emerges only from a matrix that perpetually needs rediscoveries of the past.

The review of the related literature makes the researcher familiar with the current knowledge in the arena of his or her research. Keeping abreast of the up-to-date knowledge is essential for any researcher. This apart, the review helps the investigator to define the limits of his or her study. This is for the purpose of definition and delimitation of the problem. The review also enables the researcher to avoid unnecessary duplication in the field of research. Because others may have already been established firmly the facts the present investigator is trying to explore and find out. The review of the related literature will make the researcher conversant with the recommendations made by the previous researchers in the form of suggestions for further research.

It is possible that earlier research activity has generated enough knowledge to address the investigator’s felt need. But the researcher has to be exposed to the
literature relating to the problem. McGrath (1970) categorically states that designing a research project without discovering the existing knowledge or evidence is a wasteful and inefficient procedure. The essential purpose of the review component is to learn what is known about a particular knowledge system. In order to apply the review component to desirable practice, it is convenient to consider the review in three ways: 1)delineation or extending one’s knowledge; 2)delimitation or focusing one’s attention on a particular aspect of that knowledge system; and 3)sampling as a review process. The author writes about the utility of the review.” The review component serves in the formation of tentative and testable hypothesis and it is spread as a record of delineation and delimitation generally in a formal report or thesis.” (McGrath, 1970) A suggestion is put forward that the review component should be utilized in the discussions of the researcher’s findings, conclusions and recommendations.

The research in Education needs much background knowledge to gain a thorough understanding of the phenomenon or problem of the study. The present study is an intervention study seeking the efficacy of an Instructional Package in Yoga in improving the Emotional Intelligence and Academic Achievement of Secondary School Students.

This chapter deals with an overview of theories of Yoga and Emotional Intelligence and a detailed review of research studies conducted in these disciplines. The first section is devoted to the theoretical overview and it is followed by related studies.
2.1 THEORETICAL OVERVIEW

2.1.1 Yoga Through Ages

The word ‘Yoga’ has been derived from the Sanskrit word ‘Yuj’ which means ‘to join’, ‘to unite’, ‘to combine’, or ‘to integrate’. Yoga thus means integration at three levels: body, mind and soul (Datey et al., 2007).

Yoga is the ancient art and science of attaining complete harmony and ultimately leading to liberation of the human being from the cycle of repeated births and deaths. It has been mentioned and described in great details in various texts of Hindu mythological origin. The first recorded modern day compilations are available from the time of Indus Valley Civilization (3000 BC). Various statues, paintings and other artifacts suggesting the practice of Yoga have been found during the excavations of this civilization.

The history of Yoga clearly dates back to 5000 to 8000 years. Harappa and Mohenjodaro excavations have revealed seals with Yogic figures on them. Thus it can be concluded that Yoga was practiced then also. Though the exact date of compilation of Vedas is disputed and perhaps the dispute can never be resolved, it is still generally believed that Yoga was practiced in some form or the other even before the Vedic civilizations. Rig Veda considered to be the oldest Veda has descriptions of Yogic asanas and process of meditation. It is believed to be the earliest recorded version of Yoga. Vedanta and Upnishads considered to be the end of Vedas also have elaborate references to Yogic philosophies. A lot of the history of Yoga cannot be traced because many practices and principles have been transmitted over the years by word
of mouth. But most of the historians agree upon some distinct time periods whereby Yogic practices and philosophies can be marked. They are:

1. **Vedic Period:** The Vedic period mainly consists of the time when Vedas were composed. Yogic teachings mainly imparted by Rishis are the main highlight of this period. These historical accounts may be created by the students of the Ashram of the Rishis they were attached with. Many Rishis were considered to be in divine communication with the ultimate creator. Yoga was a medium for this communication. Emphasis on purity of thoughts and deeds was the prime objective. This period signifies the highest order of Raj Yoga.

2. **Pre-classical Period:** This is the period of creation of Upnishads and Vedantas. The Bhagwad Gita was composed around 500 BC and it is one of the oldest scriptures that have the philosophy of yoga incorporated in it at every stage. The Upnishads and Vedantas also propagate a lifestyle replete with yogic practices. The Upnishads further embark upon a journey of explanation of the Vedas and give detailed meaning to the Vedic philosophies with a completely new dimension.

3. **Classical Period:** This is the period when Patanjali’s Yoga Sutras was composed. It is still considered to be the base of many different styles of yoga practices. Patanjali is considered to be the father of yoga and various commentaries on his original work are still given by various gurus. He gave the eight limbed practice of Ashtang yoga, which is practiced till date in many forms. Many different styles of yoga derive their methods in part or principle from this methodology.

4. **Post-classical Period:** Throughout the ancient ages to the current times, Yoga has passed the test of time and is still considered to be the most wholesome and complete
way of rejuvenation. Many different cultures and religions have adapted and imbibed the Yogic philosophies and made them an inseparable part of their chosen lifestyle. Thus Yoga may have initiated essentially from Hindu philosophy but it has transgressed all boundaries and become an integral part of many different religions and cultures, the main ones being Buddhism, Jainism and Tibetan Buddhism. Even Western world has adapted Yoga into its lifestyle with many followers from all across the world. In this period the most important development that happened was to digress from the ancient practices where mind was considered most important tool to direct the self towards the divine. In this period the body was given prime importance and various techniques and asanas were developed to develop the body as a means of attainment of the divine. Various techniques of Tantra yoga, Kundalini yoga and Hatha yoga are a product of this period.

5. **Modern Period**: In the modern period of 19th century and 20th century yoga was propagated to the Western world by many gurus. This signifies the modern period. The Western world which was technologically very advanced accepted and embraced the methodology of yoga with open arms. In this period the various techniques of yoga also underwent a great change so as to suit the convenience of Western temperament and thus they digressed considerably from the ancient practices. A lot of new methodologies suiting the inclinations of the modern world have come into being

2.1.2 **The Four Paths of Yoga**

There are four paths of yoga as per the yoga sasthra, such as Jnana Yoga, Raja Yoga, Bhakti Yoga and Karma Yoga.
1. **JnanaYoga**

   Jnana Yoga is the process of converting intellectual knowledge into practical wisdom. Jnana literally means 'Knowledge', but in the context of yoga it means the process of improving awareness which leads to illuminative wisdom. This path involves study of true knowledge through ancient scriptures and self-reflection. It is a part of study leading to self-enquiry and self-realization.

2. **RajaYoga**

   Raja Yoga is known as the ‘Royal Road’ and it offers a comprehensive method for controlling the waves of thought by turning our mental and physical energy into spiritual energy. The chief practice of Raja Yoga is Hatha Yoga and Meditation. It includes the methods to control body, energy, senses and mind. In Raja Yoga, Yamas (restraint), Niyamas (disciplines), Asanas (postures) and Pranayamas (pranic breathing techniques) Dhyana (meditation) and Samadhi (absorption in the universal identity) etc. are practiced to gain control of the physical body and the subtle life force called Prana. Meditation naturally comes when body and energy are under control.

3. **BhaktiYoga**

   Bhakti is a Yoga of devotion and complete faith. Through prayer, worship and ritual one surrenders himself to God or his object of faith, channelling and transmuting his emotions into unconditional love and devotion. Continuous meditation on God or object of faith gradually decreases the ego of the practitioner. As a result suppressed emotions get released and the purification of the inner self
takes place. Slowly the practitioner loses the self-identity and becomes one with God or the object of faith; this is the state of self-realization.

4. **KarmaYoga**

Karma Yoga is a path of selfless service. The aim is to surrender the ego and realize the true self by accepting universal unity. When non-attachment with the result of the action is attained the action becomes worship to God, it becomes spiritual. The practitioner achieves stability of mind in all conditions; he can disassociate himself from the ego.

The essence of Karma Yoga as extracted from Bhagavad Gita which says the world confined in its own activity except when actions are performed as worship of God. Therefore one must perform every action with sacrament and free from attachment to its results. Self-realization can be attained by following any of these four paths of Yoga.

2.1.3 **The Five Principles of Yoga**

The science of Yoga was once considered to be very mysterious and difficult to follow. Swami Vishnu Devananda, disciple of Swami Sivananda summarized the five principles of Yoga. The purpose was to make the Hatha Yoga philosophy simple and understandable for the common people.

1. **Proper exercise**

Unlike many modern physical exercise systems, Yogic physical exercises are designed to develop the body, to calm the mind and to lead to spiritual growth. Yoga asanas (Yoga poses) are steady poses which are held for some time. According to Patanjali, an asana is that bodily posture which confirms to steadiness but is at the
same time pleasant and comfortable. In other words the pose must make one steady and also create feeling of pleasure and comfort. The ancient Indian scriptures hold the view that it is impossible to get mental harmony without a steady, comfortable and balanced pose (Datey and Gharote, 2007).

Yoga exercises focus on the flexibility and strength of the spine. In the spinal column the all-important nervous system is located. By maintaining the spine’s healthy state of flexibility and strength the circulation is increased and the nerves receive the needed supply of nutrients and oxygen. This also has positive effects on the internal organs and the endocrine system.

2. **Proper breathing**

Yogic breathing is deep abdominal breathing. It brings air to the lowest and largest part of the lungs. It ensures that the body receives its supply of oxygen. It prevents painful muscle tension in the body, headaches and breathlessness. Controlling the vital energy of breath, Prana, Yogic breathing exercises help to calm and control the mind.

3. **Proper relaxation**

Even while trying to rest, the average person wastes a lot of physical and mental energy through tension. In the course of one day, our body usually produces all the substances and energy necessary for the next day. But it often happens that all these substances and energy may be consumed within a few minutes by bad moods, worry and unnecessary tension. This leads to tiredness, headaches, and exhaustions and over a long period it may lead to serious illness.
During proper relaxation, there is practically no energy being consumed or expended. Only a little of the energy is used to keep the body in normal condition while the remaining portion is being stored and conserved. This relaxation recharges physically, mentally and spiritually and leads to more abundance and vitality.

4. **Proper diet**

Diet has profound effect on the physical, mental and spiritual spheres. The quality and nature of food affects the body as well as thoughts directly. The unhealthy diet brings disease, laziness, inertia and negative thinking. The yogic diet consists of vegetarian, pure, simple and natural foods which are easy to digest. The purpose of eating is to supply the body with the life-force, the cosmic energy ‘Prana’. The best nutrition plan for a yoga student is the simple diet of natural, fresh foods, avoiding foods which are overly stimulating like meats, fish, eggs, onions, garlic, coffee, white sugar, tea (except herbal), alcohol and drugs.

5. **Meditation**

The mental ability to concentrate is inherent to all; it is not extraordinary or mysterious. Meditation is the external or internal concentration of the mind. The goal in meditation is not to become thoughtless but to ignore the thoughts arising from our five senses. In order to achieve true and lasting state of happiness and peace, the ability to calm the mind must be learned. All happiness achieved through the mind is temporary and fleeting.
2.1.4 Different Schools of Yoga

Yoga has undergone diversification as well as modification paving way for different styles of yoga. They can be roughly be classified into two groups: traditional styles and contemporary styles. The traditional schools of yoga comprise Ashtanga, Iyengar, Viniyoga schools, Integral and Sivananda schools. Though there are no differences in poses there is shift in emphasis such as focusing on strict alignment of the body, coordination of breath and movement, holding the postures, or the flow from one posture to another one cannot say that a particular style is better. Choice of a style is personal and only that it should suit one’s body and personality. There evolved are some contemporary styles too such as Anusara yoga, Bikram yoga, Jeevamukthi yoga, and Yoga Nidra.

Ashtanga vinyasa yoga facilitates a dynamic vigorous flow where as Iyengar Yoga focuses on symmetry and alignment. Vini yoga has a marked preference for gentle flow. Integral yoga utilizes the healing power of relaxation. Kundalini yoga is particularly known for its potential to awaken a vital energy. The focus of sivananda yoga falls on a healthy life style.

Ashtanga Yoga

In Sanskrit "Ashta + anga" is Ashtanga. "Ashta" means Eight and "Anga" is limbs so it means Eight Limb path, ashtanga yoga is based on Yoga Philosophy of Patanjali. The asanas, Pranayamas or the dharana which we have studied earlier or the yam and niyam are based on the Yoga Sutras of Patanjali. Hence, we will acquaint ourselves with the fundamentals as stated by Patanjali first.
Yoga has its roots about 5000 years BC as described in Vedic Philosophy and Tantras. Patanjali, great sage composed this path into a Darshan (Philosophy) in his Book Patanjali Yoga Sutra. In which he has formulated Yoga as an Eight Limbs or Eight Fold path.

Eight limbs of ashtanga yoga are:

1. **Yama (Principles of moral code)**
   - Ahimsa - A principle of non-violence
   - Satya - A principle of truthfulness
   - Asteya - A principle of non stealing
   - Brahmacharya - Continence/Celibacy
   - Aparigah - A principle of non- hoarding or non possessiveness

2. **Niyama (Personal discipline)**
   - Shoucha - Purity
   - Santosh - Contentment
   - Tapa - Endurance
   - Swadhyaya - Self study
   - Eshwar Pranidhan - Dedication

3. **Asana (Yoga Postures/positions)**
   A stable and comfortable posture which helps to attain mental equilibrium.

4. **Pranayama (Yoga Breathing)**
   Extension and control of breath.

5. **Pratyahara (Withdrawal of Senses)**
   A mental preparation to increase the power of mind.
6. Dharana (Concentration on objects)

Concentration of mind on one object and its field.

7. Dhyan (Meditation)

Withdrawing mind from all external objects and focusing it on one point and meditating on it.

8. Samadhi (Salvation)

State of super bliss, joy and merging individual consciousness into universal consciousness. Union between Jivatman and Paramatman. Realising the Brahman (pure consciousness) or realization of God is the ultimate achievement of human birth.

2.1.5 Yoga and Physical Health

It is a widely accepted fact that yoga practice has pronounced health benefits at restorative, preventive and curative levels. The aerobic, stretching exercises called asanas, breathing exercises called pranayama and healthy dieting and positive emotional and behavioural regulation and wholesome life styles as part of yoga practice promote the general health condition of a yoga practitioner. It helps the person to improve both physical and mental health. It stabilizes autonomic nervous system equilibrium and regulates pulse rate and respiratory rate. It has been found to be effective to prevent and control pulmonary diseases like asthma and bronchitis.

Yoga practice influences the effective functioning of the nervous system. A healthy nervous system does the regulatory and communicating functions of the body diligently. The asanas in the yoga practice cleanse the tissues of the various toxic substances and thus streamline neurotransmissions at the nerve endings and synapses.
between nerves. Yoga has marked bearing upon the stress regulation process of the brain by stabilizing its responses to the stress conditions. It also removes the muscular tension and calms the involuntary symptoms of fight or flight emergency such as heart pounding, sweating and anxiety. Yoga has potential to bring about a harmonious balance between sympathetic and parasympathetic nerves system. Thus it promotes homeostasis of a person’s body. Yoga is found to have therapeutic value for migraine and other neuro psychotic problems. Kapalabhati, Padmasana, Bhujangasana, are among the asanas which are beneficial for the health and wholesome conditions of the nerves system.

There are certain asanas such as sukhasana, surya namaskaara, bhujangasana etc. can control hypertension and cholesterol. Regular practice of Asanas improves movement in joints, cures different kinds of arthritis problems and corrects the postural defects. Backache muscle spasm, prolapsed inter-vertebral disc may get relief by yogic practices (Udupa, et al., 1975). Pranayama or breathing techniques such as Kapalabhati, Ujjay and Bhastrika have direct effect on respiratory system. Kapalabhati is a practice which involves rapid and forceful inhalations and exhalations and they help to clear the respiratory passages. It is diaphragmatic breathing or bellow type breathing. It is also known as sinus cleanser. A variety of pranayama, Ujjay has a smoothing effect on the body, calming effect on mind and power to improve the respiratory efficiency. These yogic breathing techniques were also proved to be useful in delaying exhaustion in asthma attacks and respiratory insufficiency. The sticky phlegm of asthma is drawn out from bronchi.
Yoga promotes cardiovascular health and addresses problems of the system. The gravitation effect during inverted positions like Viparitakarani, Sarvangasana influences functioning of lungs, brain, heart, intestines and movement of body fluids and so on. So it is a method of treatment for migraine, premenstrual tension. Pranayama extends the walls of blood vessels resulting in increased blood flow to the areas of heart and lungs. The mild retention of carbon dioxide and slow breathing during Pranayama help to dilate blood vessels of the brain, skin and of the coronary system. It is a treatment for angina pectoris. It reduces the workload of heart. Reduction of hypertension through muscular relaxation can be possible by the practice of Savasana and muscular relaxation (Datey et al., 2007).

Yoga influences the endocrine system positively. Yogic postures and breathing exercises help to correct the dysfunctions of the system. Sugar level in the body is optimally controlled and it also regulates the salt and water excretions from the kidneys. The secondary sexual characteristics benefit from such practices.

All the Asanas bring about good muscular equilibrium. It permits the movement with an economy of energy. The stability of the body-parts leads to the emotional stability and psychological well being. Regular practice of Asanas improves movement in joints, cures different kinds of arthritis problems and corrects the postural defects. Backache muscle spasm, prolapsed inter-vertebral disc may get relief by yogic practices (Udupa, et al., 1975).

2.1.6 Yoga for Mental Well Being

The philosophy of yoga has moorings on the inter-dependence of mind and body. It posits that psyche cannot be separated from the physique as the existence of a
person relies on the harmonious and symbiotic relationship of both. Fundamentally, yoga practice aims at the positive mental health, the ultimate aim being ananda or blissfulness. This yogic concept corroborates with the definition of mental health given by WHO: mental health is a state of psychological well-being in which a person can realize his or her potentials, is able to cope with the normal stresses of life and contribute to the welfare of community. It is not merely the absence of mental disorders. Patanjali, the philosopher and proponent of Astanga Yoga, has defined Yoga as the suppression of mental activities such as thinking and feeling. That mind control is essential for the psychological well-being is a fact widely agreed upon. Swami Vivekananda, Sri Arabindo and others are of opinion that mind cannot be killed but transformed into its simplest nature, that is, the pure consciousness (Swami Abhedananda, 2002). Patanjali has attributed primacy to the solution of emotional conflicts in order to realize psychological well-being through the practice of Yama and Niyama, the first two steps of the Ashtanga Yoga.

The master proposes that the observance of Yama and Niyama is useful for the effective management of conscious emotional conflicts. They are the prerequisites for Asana and Pranayaama. Asana and Pranayaama are prescribed for remedying the subconscious emotional conflicts. Dhyana and Samadhi are for redemption the unconscious emotional conflicts. Prathyahaara makes the mind introspective. It is a psychological method of directing the mind towards one object.

Stability of body, brought about by the practice of Asana may lead to the emotional stability and psychological well being. Asanas release tensions which are subconscious in nature. It makes the body function harmoniously and restores the
natural reciprocity of visceral functions. Asanas contributing to the alignment of body and changing the postural reflexes, naturally, produces indirect psychological changes. The psycho-physiological modelling, caused by the practice of Asanas, moderating the functions of autonomic nervous system, induces a balance in the psycho-pranic system. The mental conditions like anxiety, restlessness and neurosis can be treated by yogic postures.

Due to the over-oxidation because of the agitated state of vegetative system causes unfavourable metabolic changes in the organism. On the other hand, slow breathing, causing mental relaxation induces good amount of alpha brain waves. It is also found that psychological factors have significant effect on breathing pattern. Its vice versa may also be possible. And it is being observed that voluntary positive control on breathing i.e. Pranayama may change the state of mind.

As far as the applications of yoga-practices for management of mental problems are concerned, the yogic techniques are mostly being used as adjunct to the other psychotherapeutic systems and as a part of psychosomatic rehabilitation and relaxation training. Many psychologists on the basis of their experimental results and clinical experiences found that Yoga is an effective instrument of modification of human behaviour. Yoga more closely resembles the methods of psychotherapy rather than a religion or a philosophy (Fritjof Capra, The Turning Point, 1981).

Stress can be controlled by recommended Yogic technique (Udupa, 1978). The Yoga along-with recommended Yogic diet, reduces tension. The practice of Pratyahara controlling the activities of senses, at both internal and external levels, manages the stresses of personal life and brings composure. The meditation on
respiration, as in Vipasana of Baudhha system, was found to modify the state of mind. Moreover, transcendental meditation, which is a meditation on Mantra, was found to have the power of physical changes (Vallace, 1970) like reduction in muscle tone and blood lactate of stress, slowing down of respiration, decrease in metabolism and positive changes on electroencephalogram. One can attain a complete isolation from interior and exterior stimuli. Yoga, taking in above-said techniques, appears as a system of self-healing. Meditation stabilizing the functioning of autonomic nervous system causes remarkable reduction in anxiety and hypertension. The Yogic refinement in psychological attitude (Yama and Niyama of yoga) can reduce tension, improve health and resolve psychological conflicts. Both the internal and external environments can be balanced by such Yogic practice (Tripathi & Singh, 1984).

With the practice of yoga, the mind gets trained and disciplined and this is what diminishes the urge for tobacco and gradually frees one from this injurious habit (Datey K. et al., 2007). The same way redemption from alcohol and other intoxicants can also be gained through practice of yoga. Yoga practices were found to be effective in the management of personality disorders (Singh 1986; Tripathi, 1987), mental retardation, hyperkinetic behavior (Subramanyam & Porkodi, 1981; and Singh, 1986; Nagendra & Nagarathna, 1984; Maria Bullard, 1985); and neurotic reactions (Meares, 1976; Puryear, 1976; Nagarathna et al., 1984). Meti (1997) reported electrical activity of the brain like mild electroconvulsive seizure effect as a result of Pranayama, irrespective of types. The research report of Johnson deduced significant difference with higher scores for self-esteem, identity, self-satisfaction,
personal worth, behaviour and the emotional adjustment seemed to be more positive, less feeling of general maladjustment, less personality disorder and less neurosis.

2.1.7 Yoga: A Powerful Means of Self-Management

Modern life is beset with different types of conundrums which people normally find difficult to cope with effectively. Sustainable and perennial solutions to such problems cannot satisfactorily be formulated only through situational modifications. Attribution to situational factors is the usual way of causation. But the fact is that many of the problems can be remedied through attribution to individual disposition. Dispositional or temperamental change at individual level can be made possible through self-management process. The quality of the person is as significant as that of environment for the quality of life. Among the self-management strategies, yoga has wider reputation as a more powerful means. It helps the person to consolidate his or her inner as well as physical strengths. It enables a person to channel her or his potentials to tangible accomplishments. Being a total self-management intervention, yoga has received much attention and acceptance from every nook and corner of the world. There is hardly any walk of modern life that has disregarded yoga. As a means of self-organization, everyone needs it to excel in their respective fields of work. Yoga has curative, preventive and preservative functions. It helps not only the employer but the employee as well. It enhances the quality of the teacher and the learner alike.

Various techniques in yoga have been documented to help in stress management. These techniques work at an individual level and also at a collective level to ensure that there is significant respite from the condition of extreme stress.
They help in relieving the physical as well as the psychological negative effects of the problem by ensuring a healthy and productive response to the stress stimuli.

Yoga can have a positive effect on the parasympathetic nervous system and aid in lowering heartbeat and blood pressure. This reduces the demand of the body for oxygen. Yoga can also improve digestion, strengthen immunity, help in effective elimination of toxic wastes and also increase lung capacity. Effective use of this practice can also reduce the chances of stress culminating in anxiety and depression. The practice of yoga involves forming various body postures, slow stretching movements, breathing exercises that can at times lead to progressive relaxation, imagery and meditation. All these specific techniques are meant for a specific purpose and they culminate into a higher awareness of what is happening to oneself during stress – emotionally, physically, mentally and energetically. One develops an understanding of each part of the body by being more aware of it. The practice includes paying attention to each and every part and therefore ensures a holistic therapy.

2.1.8 Theories of Emotional Intelligence

Mayer and Salovy (1990) in their persistent efforts for going into the nature of emotional intelligence tried to define emotional intelligence as the ability to perceive accurately, appraise and express emotions, generate feelings that facilitate thoughts and an ability to regulate emotions to promote growth. This definition points towards ability of an individual. In contrast, Goldman model of emotional intelligence is a mixed one. A more comprehensive definition was given by Bar-on (1997) where he defined emotional intelligence as an array of non-cognitive capabilities, competencies
and skills that influence one’s ability to succeed in coping with environmental
demands and pressure.

### 2.1.9 The Importance of Emotional Intelligence

It seems obvious that emotions are important and that play a critical role in
human lives. They are integral to healthy and successful personal relationships. They
influence both the content and way of thinking. Emotions are critically important to
success and survival of an individual. There are many reasons for this. First, emotions
contain data and information about the individual, other people and the world around
him. Secondly, emotions assist a person in thinking and decision making. Thirdly,
emotions are not chaotic, they can be understand and predicted and often follow
certain rules patterns. And fourthly, because emotions contain data, an individual
must be aware of them and utilize these data points in his or her thinking, decisions
making and actions.

Emotional intelligence (EI), often measured as emotional intelligence quotient
(EQ) is described as the ability, capacity or skill to perceive, assess, and manage the
emotions of one’s self of others, and of groups. As a relatively new area of
psychological research, the definition of EI is constantly changing.

### 2.1.10 Emergence of the Concept of Emotional Intelligence

The roots of EI can be traced back to Darwin’s early work on the importance
of emotional expression for survival and adaptation. In the 1990’s even though
traditional definitions of intelligence emphasized cognitive aspect such as memory
and problem solving, several influential researches in the intelligence field of study
had begun to recognize the importance of the non-cognitive aspects. For instance, as
early as 1920, EL Throndike at Columbia University used the term social intelligence to describe the skill of understanding and managing other people. The first explicit application of the term ‘Emotional Intelligence’ is mostly attributed to Wayne Payne’s doctoral thesis (1985). Payne however did not publish his theory, so the article published in 1990 by Mayer and Peter Salovy is generally regarded as the first systematic theoretical account of the construct. Daniel Goleman’s works on emotional intelligence also made this concept very popular.

- 1930s – Edward Thorndike describes the concept of ‘social intelligence” as the ability to get along with other people.
- 1940s – David Wechsler suggests that affective components of intelligence may be essential to success in life.
- 1950s – Humanistic psychologists such as Abraham Maslow describe how people can build emotional strength.
- 1975 – Howard Gardner publishes The Shattered Mind, which introduces the concept of multiple intelligences.
- 1987 – In an article published in Mensa Magazine, Keith Beasley uses the term” emotional quotient”. It has been suggested that this is the first
published use of the term, although Reuven Bar-On claims to have used the term in an unpublished version of his graduate thesis.


2.1.11 Models of Emotional Intelligence

**Bar-on’s model of Emotional Intelligence**

In the early 1980’s, Dr. Bar-on began the development of the emotional quotient inventory (EQ-I). Bar-on reported that the EQ-I was originally constructed as an experimental instrument designed to examine the concept of emotional and social functioning (Bar-on, 2005). Dr. Baron created the term Emotional Quotient (EQ) to describe his mixed approach to the evaluation of an individual’s general intelligence. He explained that the emotional quotient reflects a person’s ability to operate successfully with other people and with his or her own feelings (Bar-on, 2005).

2.1.12 Salovey and Mayer’s Model of Emotional Intelligence

Mayer and Salovey (2001) worked diligently to refine their academic and scientific model of emotional intelligence. Their current model, developed in 1997, is decidedly cognitive in focus and revolves around four tiers or ratings that are not
genetically fixed or set in early childhood. As people grow and develop, they also seem to develop a greater sense of emotional intelligence suggesting that these traits of emotional intelligence can be developed over time.

The newest model begins with the idea that emotions contain information about relationship (Mayer, Salovey, Carnso and Sitarenios, 2001).

**The Mayer & Salovey Model of Emotional Intelligence**

<table>
<thead>
<tr>
<th>Emotional intelligence is viewed as consisting of four separate components of branches</th>
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<tbody>
<tr>
<td>1. Perceiving and identifying emotions</td>
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<tr>
<td>2. Facilitation of thought</td>
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<tr>
<td>3. Understanding emotions</td>
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<tr>
<td>4. Managing emotions</td>
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<tr>
<td>The ability to recognize how you and those around you are feeling</td>
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<tr>
<td>The ability to generate emotions and then reason with this emotions</td>
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<tr>
<td>The ability to understanding complex emotions and emotional chains now emotional transition from one stage to another</td>
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<tr>
<td>The ability which allows you to manage emotions in yourself in others.</td>
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According to Mayer et al. (1995), individuals need to be able identify their emotions as well as the emotions of others. Using those emotions is also required to be successful, relater that when an individual work us an administrative or work environment that requires the co-operation and collaboration, the skills of emotional intelligence become even more essential also report that emotional intelligence can assist in facilitating this work in helping to generate new and creative ideas and solutions to problems. All times some of the problems that are challenging an
individual can be very complex. While at other times the problem solving task may be effortless. According to problem solving requires erative thought to generate ideal solutions

2.1.13 Goleman’s Theory of Emotional Intelligence

According to Daniel Goleman, Emotional Intelligence refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves and for motivating well in ourselves and in our relationships. It describes abilities distinct from but complementary to academic intelligence.


- **Self-awareness**

  The key to success knows oneself. Self-awareness knows one’s internal states, preferences, resources, intuitions, etc. It indicates the ability to recognize, understand and accept one’s moods, emotions, drives, strengths and shortcomings as well as to see how these affect other people.

- **Self-regulation**

  Self-regulation refers to managing and handling impulses, distressing feelings and upsets rather than denying or repressing these feelings. It implies making a choice as to how we express our feelings. Self-regulation helps in staying composed, focused, calm and helps think clearly even under pressure.
Motivation helps in the achievement of goals. It is an ability to pursue goals with energy and persistence. It provides the drive and zeal to shape our thoughts and actions.

Empathy

It refers to the ability to put oneself into another’s shown and look at things or think from his point of view. It can be called the foundation skill for all social competencies. Emotionally balanced people are generally empathetic and not sympathetic.

Social Skills

Social skill is ability to built rapport with various sections of society and create network of people.

2.1.14 Emotional Quotient (EQ) Vs. Intelligence Quotient (IQ)

Emotional quotient motivates us to purpose our unique potential, purpose and activities our innermost values aspirations, transforming them from things we think about to what we live. Emotional Quotient is perceived as the capacity to create positive outcomes in our relationships with ourselves and others. These learnable skills create joy, love and success of all kinds. EQ stands for Emotional Quotient, adopted from the term Intelligence Quotient. A high Emotional Quotient is exhibited by tolerance, empathy and compassion for others, the ability to verbalize feelings and the resilience to bounce back from emotional upset. Teachers with high Emotional
Quotient will have more confidence and trust in them and will experience more love and joy in their life.

“Emotional Quotient” (EQ) represents a relative measure of a person’s healthy or unhealthy development of their innate emotional intelligence. It is possible for a teacher to start out with relatively low emotional intelligence, but receive healthy emotional modelling, nurturing etc. which will result in moderately high Emotional Quotient. Emotional Quotient is one of the greatest contributors to a person’s excellence and leadership. Increased Emotional Quotient moves individual and terms to stronger resilience enhanced performance and greater success.

William Strem introduced Intelligence Quotient. The performance of any one or any intelligent test would be very well indicated by the ratio of the mental age to the chronological age, which for reason of convenience may be expressed a percentage.

\[
IQ = \left( \frac{\text{Mental age}}{\text{Chronological age}} \right) \times 100
\]

A high Intelligence Quotient is all about how quickly you can do puzzles and how many words you know. It might get a person a high grade or marks. According to Goleman (1996) an individual’s success at work is 80 per cent dependent on emotional intelligence and only 20 per cent dependent on Intelligence Quotient (IQ). However, an Emotional Quotient matter more in shaping the individual personality than Intelligence Quotient (IQ).
Suggestions for Enhancing Emotional Intelligence

- As inspirational subject like art, literature, poetry and music help in developing an appreciation of the beautiful and sublime emotions in life. They should be included in the curriculum.

- Religious beliefs and an abiding faith in God help in tolerance and stability of emotions. Hence ecumenical subjects at the preliminary level can be taught to students.

- There should be no suppression of emotions. They should be sublimated through constructive activities. Here sports, games, dramatics, and similar co-curricular activities are of great value.

- Skill, confidence and involvement in work as well as a healthy sense of humour are basic to emotional intelligence. Therefore work ethics and balance work and healthy living must be stressed in due course of study.

- Emotions should be concentrated or directed towards some good object or healthy idea. Such a direction and concentration can lead to development like justice, patriotism and other moral qualities.

Emotions as an array of non-cognitive capabilities competencies and skills that influence one’s ability to succeed in coping with environmental demand and pressure (Bar-on, 2003). Emotional intelligence, like general intelligence is the product of one’s heredity and its interaction with his environmental forces. Until, recently we have been led to belief that a person’s general intelligence measured as lie or intelligence quotient is the greatest predicator of success in any walks of life.
academic, social, vocational or professional. Consequently the intelligence scores are often used for courses and job placements, etc.

However, researchers and experiments conducted in the 90’s onwards have tried to challenge over dominance of the intelligence and its Intelligent Quotient (IQ) by replacing it with the concept of Emotional Intelligence. These have revealed that a person’s Emotional Intelligence may be a greater predictor of success than his or her IQ.

Historically speaking, the term Emotional Intelligence was introduced in 1990 by two American University Professors Dr. John Mayer and Dr. Peter Salovery in their attempt to develop a scientific measure for knowing the difference in people’s ability in the areas of emotions. However the credit for popularizing the concept of Emotional Intelligence goes to another American Psychologist Daniel Goleman (1995).

Daniel Goleman defined Emotional Intelligence as the capacity for recognizing our own feeling and those of others, for motivating ourselves and for managing emotions well in us and in our relationships. Mayer et al. (2001) defined it as the capacity to reason with emotion in socio areas to per cure emotion, to integrate in thought to understand at and mange it.

Based on these it is understood that one’s emotional intelligence as a unitary ability helpful in knowing, feeling, and judging emotions in close co-operation with one’s thinking process to behave in a proper way, for the alternate realize of happiness and welfare.
2.1.15 KAB Model of Emotional Intelligence

KAB Model of Emotional Intelligence introduced by Emily A. Sterrett (2008) has focus on two dimensions: Self and Social. The common areas of these dimensions are Knowledge, Attitude and Behaviour. Hence the term KAB, that stands for Knowledge, Attitude and Behaviour. There are six areas in total. Knowledge in Self dimension is known as Self-awareness. It refers to precisely comprehending one’s own feelings, preferences, goals and values: sensing how others feel about oneself and using that information to guide one’s behaviour.

Attitude in Self dimension is called Self confidence. It implies a “can do” attitude. It is a belief in oneself helping one overcome self doubt and take reasonable risk. It refers to being assertive and not aggressive; being goal directed; admitting mistakes and moving on. Behaviour in the self dimension is referred to as Self control. It dwells on coping with stress, controlling emotional moods or outbursts without over control; being adaptable; balancing rational and emotional considerations.

Knowledge in social dimension is termed as Empathy. It means easily reading and understanding others; having empathy; listening well; reading non-verbal cues. Attitude in social dimension is labelled as Motivation. It implies taking initiative; having a positive outlook; being creative; inspiring others; doing things one believes in and is committed to. Behaviour in social dimension is dubbed as Social Competency. It deals with finding common grounds to establish rapport and minimize conflict; persuading and influencing others; being likeable and having positive relationships; having integrity.
KAB MODEL OF EMOTIONAL INTELLIGENCE

**SELF Dimension of Emotional Intelligence**

- **KNOWLEDGE**: Self-awareness
- **ATTITUDE**: Self-confidence
- **BEHAVIOUR**: Self-control

**SOCIAL Dimension of Emotional Intelligence**

- **KNOWLEDGE**: Empathy
- **ATTITUDE**: Motivation:
- **BEHAVIOUR**: Social Competency
2.1.16 Influence of Emotional Intelligence on Academic Achievement

It goes without saying that emotional health of a person influences his or her learning process. It indicates that one’s emotional brain has direct bearing upon one’s rational brain. The application of emotional intelligence in learning has profound impact on children’s lives. Marc Brackett, director of the Yale Center for Emotional Intelligence says that “The feelings of students and teachers have at school affect their ability to teach, learn and interact with others. Learning effective strategies for managing our emotions, as well as helping others in manage theirs, is critical for creating a positive classroom environment and laying a strong foundation for the development of positive relationships and early learning” (Marc Brackett, 2014).

Research conducted by Yale Center for Emotional Intelligence shows that students with higher emotional intelligence are better prepared to manage their emotional lives, so they can focus, learn and do their best in school. The academic achievement of a student is, thus, partly the product of his or her emotional intelligence. There is an obvious relationship between social-emotional factors and academic performance (Menzie, 2005). “Many schools around the world teach emotional intelligence through programmes in ‘social-emotional learning’ (SEL) with great success. It makes the students more focused on learning, better behaved and motivated, and improves their scores on achievement tests” says Daniel Goleman, who made emotional intelligence popular with his landmark book titled Emotional Intelligence: Why It Can Matter More Than IQ.
2.2 REVIEW OF RELATED STUDIES

Over the last three decades a number of studies have been done to evaluate the effect of yoga on certain physiological and psychological variables and therapeutic benefits of yoga and meditation. Most of the studies are conducted in foreign countries than in India.

The review of related literature is presented under the following heads:

1. Studies related to Yoga and Mental Health
2. Studies related to Yoga as a Therapy
3. Studies related to Yoga and Academic Achievement
4. Studies related to Yoga and physiological variables
5. Studies related to Emotional Intelligence and Academic Achievement.

2.2.1 Studies Related to Yoga and Mental Health

Aminabhavi and Vijayalaxmi (1986) conducted a study on effect of yogic practice on attitudes towards yoga and mental health of adults. The objective was to find out the impact of yoga on mental health of adults. Major findings show that attitudes of adults towards yoga before and after attending training course in yoga differed significantly. The mental health scores of adults, before and after training in yoga differed significantly very high from each other.

Schell and Schonecke (1994) studied the physiological and psychological effects of yoga. They measured heart rate, blood pressure, the hormones, cortisol, prolactin and growth hormone and certain psychological parameters in a yoga parching group and a control group of young female volunteers reading in a
comfortable position during the experimental period. There were no substantial differences between the group concerning endocrine parameters and blood pressure. The course of heart rate was significantly different; the yoga group had a decrease during the yoga practice. Significant differences between both groups were found in psychological parameters. In the personality inventory the yoga group showed markedly higher scores in life satisfaction and lower scores in excitability aggressiveness, openness, emotionality and somatic complaints. Significant differences could also be observed concerning coping with stress and the mood at the end of the experiment.

Mishra and Sinha (2001) studied the effect of yogic practices on depression and anxiety. Twenty-five adults (12 males and 10 females) in the age range of 22 to 70 years who were suffering from gastro intestinal problems, anxiety, and depression, The yoga therapy session was conducted for 15 days, Results indicated that there occurs a remarkable change in all dimensions of health, stress, anxiety and depression.

Rajan (2001) made a study on the role of yoga and meditation in Women’s Liberation in the Philosophy of Education of the Mother of Sri Aurobindo Ashram. The objective was to investigate whether yoga meditation and women’s liberation could be integrated from the perspective of women’s education through the writings of the mother of Sri Aurobindo Ashram. The study concluded that a physically fit woman will be strong both in her body and mind. She will have the stamina to cope with both her responsibilities of a house wife and a bread winner. An emotionally balanced woman shall learn to nurture only positive emotions like love and kindness
while negative emotions like anger and jealousy she shall control and conquer. An intellectually cultivated woman will be efficient enough to compete with men in all intellectual pursuits, in all walks of life and shall manage it with ease and efficiency. A spiritually inclined woman will be endowed with a well-trained, straight forward, fearless mind. The study also concluded that there is a need to introduce the new philosophy of education for women in school curriculum. Changes need to be made in school administration and curriculum work attitudes and skills.

Bhushan (2004) reported the results of a study conducted on prisoners lodged in different jails in Bihar. In 1995 a pilot study was done on a yoga group of prisoners. The participants were given one hour of yoga training in selected asana and pranayamas in the morning about 45 minutes of yoga nidra in the afternoon and about one hour of kirtan (divine song), prayers and satsang in the evening led by sanyasinis of the yoga Institute. From the results it was noticed that after their participation in the yoga program, the subjects found themselves physically more fit and energetic, and reported improvements in digestion and sleep and felt themselves happier. They also reported substantial reduction in there negative feeling and emotions like anger, anxiety depression and improvements in happiness.

Casden (2005) has studied the effects of ashtanga yoga on autonomic, respiratory and cognitive functioning; psychological symptoms and somatic complaints. The purpose of this study was to assess the effects of Ashtanga yoga on autonomic homeostasis and respiratory function, as a mediator for improved cognitive functioning, psychological symptoms and somatic complaints in healthy adults. Participants were recruited from Alliant International University and the San Diego
community. Forty-eight participants were randomly assigned to an Ashtanga yoga group or a wait-list control group. The yoga group practiced a modified beginner's version of Ashtanga yoga twice a week over a 6-week period. Assessments were conducted at baseline and after the 6-week intervention. Outcome measures included autonomic functions, respiratory parameters, cognitive functions, psychological symptoms and physical symptoms. Data were analyzed for 48 healthy participants (22 yoga intervention, 26 wait-list control), ages 19-38. Participants in the yoga group showed significant differential improvements in breath holding time, abdominal style breathing, positive mood, fatigue, energy, quality of life, sleep quality, concentration and short-term memory and cardiovascular fitness, compared to controls. Results suggest that Ashtanga style yoga may be used as an intervention in a variety of clinical settings.

Sakthignanavel (2006) conducted study in the effect of continuous running, yogic pranayama and combination of continuous running and pranayama on mental health. Sixty normal male volunteers underwent a 14 weeks training course of continuous running, yogic pranayama, and combined continuous running and yogic pranayama. Peter Becker’s Trier Personality Inventory (TPI) was used to measure the mental health before and after the training. The result shows that the mental health of the pranayama group had significantly increased when compared with that of the continuous running group and control group.

Granath et al. (2006) conducted a study on stress reduction by comparing the impacts of Cognitive Behavior Therapy (CBT) and yoga on an adult sample (N=33). The authors cited research noting the differences between physiological and
psychological outcomes based on the type of treatment. The measurements used in the study to monitor change included five self-report questionnaires for changes in psychological functioning. Physiological measurements were used to measure noradrenalin and cortisol levels as well as changes in heart rate and blood pressure. The results of the study demonstrated that both CBT and yoga had positive impacts on stress reduction for the participants. More specifically, participants in the yoga group noted a decrease in perceived stress, behavioural stress, and noradrenalin levels.

Voll (2006) conducted a study on the effects of yoga on attention and self-concept in special education preschoolers. This study examined the effectiveness of yoga as an intervention for increasing on-task behaviour and self-concept in special education preschool children who demonstrate attention problems. It was hypothesized yoga, as an intervention, would significantly increase on-task behaviour in preschool children during intervention phases as compared to baseline phases. Additionally, it was hypothesized yoga would significantly increase self-concept in preschool children from pretest to Post Test. The participants were eight preschool children who were enrolled in a self-contained, special education classroom. Yoga sessions were conducted using a video that required the children to follow along with the exercises demonstrated by an instructor and three children. Sessions lasted for 30 minutes, three times a week, for a period of two weeks. On-task behavior was measured by calculating the percentage of 10-second intervals where the children were orienting toward the teacher or task and remained in their seats. The means, standard deviations, and effect sizes were calculated for each student. Inter observer agreement was calculated for approximately 30% of all observation sessions across
the four phases. The results of this study did not find support for either of the original
two hypotheses. In fact, for half of the participants in this study, their levels of on-task
behavior decreased during intervention phases. The intervention had no effect at all
on the other four participants. The results of the present study indicate that yoga was
not an effective intervention with this small group of special education preschoolers.
Suggestions for future research involving other samples and other methods of
presenting yoga were suggested.

Bonura (2007) conducted a study of the impact of yoga on psychological
health in older adults. In this study, the researcher states that it is important to
understand how yoga impacts older population because increasing numbers of older
adults are engaged in yoga. He studied the impact of a six-week yoga intervention on
the psychological health of senior citizens. Older adults were randomly assigned to 3
groups: Chair Yoga, Chair Exercise, and no-treatment control group. Classes were
held for 45-minute weekly sessions, over six weeks, and daily home practice was
supported. All participants were assessed pre-intervention, post-intervention, and at
one-month follow-up for anger, anxiety, depression, well-being, general self-efficacy,
and self-efficacy for daily living. Times by group interactions were significant for all
trait variables. Yoga participants improved more than both exercise and control
participants, in anger. Changes in self-control were associated with changes in general
self-efficacy and trait anxiety. Self-control is proposed as a mechanism underlying the
impact of yoga on psychological health.

Shapiro et al. (2007) conducted a study to measure the impact that yoga had
on depression in an adult sample of 17 participants. The participants in the study
included individuals with a diagnosis of unipolar major depression who were both in remission from their symptoms and also taking anti-depressant medications. Similar to the study by Granath et al. (2006), psychological and physiological variables were acknowledged, and measures were administered both before and after the completion of 20 yoga classes. Some of the instruments measuring the participants’ change in mood were administered after every class to provide a more in depth understanding of how quickly yoga began affecting the participants’ moods. Mood was broken apart into three categories: positive, negative, and energy/arousal. Positive moods included happy, relaxed, optimistic, confident, and content. Negative moods included stressed, sad, frustrated, irritated, depressed, anxious, blue, and pessimistic. Items related to energy/arousal included attentive, fatigued, alert, tried, energetic, and sleepy. The results demonstrated an increase in all positive moods, a decrease in all negative moods, and changes in energy and arousal related to increased attentiveness and energy, and decreased feelings of fatigue and sleepiness. Overall, the study demonstrated that participating in yoga classes decreased symptoms of depression. The benefit of measuring other positive and negative attributes of mood and behavior also allowed for the results to show how yoga can decrease other symptoms such as anxiety, anger, and neurotic symptoms. The implications of this study speak to the effectiveness of yoga in treating depression, the effectiveness of coupling yoga and anti-depressant medication, and further evidence that the benefits of practicing yoga can yield positive results of both a psychological and physiological nature.

Berger, et al. (2009) has studied the effects of yoga on inner-city children's well-being: the objective of the study is to examine yoga's effects on inner-city
children's well-being. This pilot study compared fourth- and fifth-grade students at 2 after-school programs in Bronx, New York. One program offered yoga 1 hour per week for 12 weeks (yoga) and the other program (non-yoga) did not. Pre-intervention and post-intervention emotional well-being was assessed by Harter's Global Self-Worth and Physical Appearance subscales, which were the study's primary outcome measures. Secondary outcomes included other measures of emotional well-being assessed by 2 new scales: Perceptions of Physical Health and Yoga Teachings (including Negative Behaviours, Positive Behaviours, and Focusing/relaxation subscales). Pre-intervention and post-intervention, physical well-being was assessed by measures of flexibility and balance. Subjective ratings of yoga's effects on well-being were evaluated by an additional questionnaire completed by the yoga group only. No differences in baseline demographics were found. Controlling for pre-intervention well-being differences using analysis of covariance, it is found that children in the yoga group had better post-intervention. Negative Behaviours scores and balance than the non-yoga group. The majority of children participated in yoga reported enhanced well-being, as reflected by perceived improvements in behaviours directly targeted by yoga. Although no significant differences were found in the study's primary outcomes, children participating in yoga reported using fewer negative behaviours in response to stress and had better balance than a comparison group. Improvements in well-being, specifically in behaviours directly targeted by yoga, were reported. These results suggest a possible role of yoga as a preventive intervention as well as a means of improving children's perceived well-being.
Dunn (2009) conducted a study on the effectiveness of Hatha yoga on symptoms of anxiety and related vulnerabilities, mindfulness, and psychological wellbeing in female health care employees. The purpose of this study was to examine the effectiveness of a Hatha yoga program to reduce anxiety symptoms, and related vulnerabilities, and promote well-being in 6 health care employees. The women in this study reported no previous experience with a regular yoga or meditation practice, no current diagnosis of an anxiety disorder, and were not currently under psychological treatment. Baseline and post-treatment scores on measures to assess anxiety symptoms and related vulnerabilities, perceived stress, mindfulness, self-efficacy, and psychological well-being were examined. In addition, growth over time was examined for anxiety symptoms, perceived stress, mindfulness, and self-efficacy to reveal change at the individual and group level on these variables. It was expected that participants would report decreases in anxiety symptoms, and related vulnerabilities in post-treatment assessments, relative to baseline. In addition, it was also expected that participants would report increases in psychological wellbeing, mindfulness, and self-efficacy compared to post-treatment. Finally, it was hypothesized that participants would experience growth (anxiety symptoms, perceived stress, mindfulness, and self-efficacy) over time. Partial support was found for the hypotheses. Specifically, participants experienced a significant improvement in self-efficacy from baseline to post-treatment. In addition, the women in this sample reported growth over time for anxiety symptoms and self-efficacy. Women with higher baseline symptoms of anxiety experienced the most growth over time on this variable.
Chapter II

Review of Related Literature

Gonzalez et al. (2010) conducted a study on correlations among yoga enhancement design and cognition of college student learning and practitioner success. The purpose of this study was to measure the impact of a yoga enhancement design and intervention on college student test anxiety and computer anxiety within the occupational therapy curriculum. Also studied was the extent to which the enhancement promoted a difference in lifestyle that would influence practice as well as one's well being. For this investigation, containing both quantitative and qualitative data collection procedures, the sample was relatively small for a quantitative study and relatively large for a qualitative study. The sample for the current study consisted of approximately 12 college-level students within an occupational therapy assistant program as the experimental group and 33 college-level students within an allied health program as the control group from a south Texas community college. Within the students selected, some students used yoga and some students did not use yoga. In this study, this researcher showed that by incorporating yoga into occupational therapy, practitioners/college students provided a more enhanced treatment environment not only for their clients but for themselves as well. Practitioners managed stress more effectively in their workplace and established a more cohesive working relationship with colleagues.

Atwal (2010) has studied the connection between mind, body, and the universe based on Indian psychology. The purpose of this study was to devise a mode of treatment that would be helpful when clinically working with the East Indian community. A theoretical orientation of Indian psychology was accounted for using the principles found in various Hindu scriptures. The scriptures show that an
unbalance and a disconnection from the true self causes psychological problems and as the individual comes in contact with the true self the psychological problems are eliminated. Different theories for understanding the human psyche are used to describe this process: the triguna theory, the kosha theory, Ayurveda, and Patanjali’s Yoga. These different theories work together to help distinguish the difference between healthy and unhealthy personalities and to show ways in which personality can be altered to health. This dissertation outlines a theory of mind, assessment, and interventions that can be used when working with an East Indian client that would be consistent with the Hindu worldview.

Charbonneau (2011) has made a study on the effects of the practice of Kundalini yoga on middle years students in an urban school. This study investigates the relationship between the practice of Kundalini yoga and the development of interpersonal and intrapersonal awareness in Middle Years students. Secondary aims were to provide reflection time for students in their school day and to find out whether the participants were better able to cope with stress. A qualitative method was applied. Two consent forms were sent to the participants’ parents. One granted permission to participate in the yoga sessions, the other requested permission to use the students' journals as data. There were 16 yoga sessions over three weeks. After each session, the participants and the instructor/researcher wrote reflective journal entries. Twenty-nine students participated in the yoga sessions, but only 15 student journals were used for data collection. Results concluded growth in interpersonal and intrapersonal awareness, growth in physical flexibility and awareness, and a desire to have relaxation during the regular school day.
Khemka et al. (2011) conducted a study on correlations. Certain psychological and health variables are commonly measured in India. This study evaluates the effects of integral yoga practices on these variables and also the consistency of correlations observed between them. The study was a pre-post intervention study. The variables were measured at the beginning and the end of a one-month yoga course. There was no control group. The study was carried out at Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA) University, in its rural campus south of Bangalore. Based on health criteria, 108 subjects were selected out of 198 volunteers to form the experimental yoga group. Ages ranged from 17 to 63 years. The yogasanas (postures), pranayama (breathing exercises), relaxation techniques, meditation, chanting and lectures were the components of yoga intervention. The variables measured were sustained attention, emotional intelligence - EQ, general health - GHQ, guna personality - sattva, rajas and tamas. Significant pre-post changes were found in all variables. Significant correlations were found between the following pairs: The two sustained attention variables; emotional intelligence and general health; GHQ and tamas; sattva and tamas; and rajas and tamas. The study shows that there were significant changes in all variables except in sattva. It also confirms that EQ and general health variables correlate significantly with each other and negatively with tamas. EQ and tamas form positive and negative predictors of health respectively. Sattva correlates positively with EQ suggesting that a sattvic personality indicates better self-control. This suggests that, by improving guna personality, long-term yoga practice may stabilize EQ.
Katzman et al. (2012) addressed the impact of yoga on adults (ages 18 to 65) diagnosed with Generalized Anxiety Disorder. The sample used for this study included 31 individuals who lacked success in previous outpatient treatments such as Cognitive Behavioral Therapy (CBT) and Mindfulness Based Stress Reduction (MBSR). After participating in 22 hours of Sudarshan Kriya Yoga classes over the span of five days, significant changes were documented as evidenced by a decrease in the anxiety levels of the participants. Measured with the Anxiety Sensitivity Index as well as the Beck Anxiety Inventory, psychological and physical symptoms of anxiety were both accounted for. The study also measured other symptoms such as depression, in which no significant changes were noted. The researchers argued that participants’ depression levels were already low when they began participation in the study, hence the lack of significant change. An overarching implication of this study relates to the benefit yoga can have on anxiety levels, specifically anxiety in individuals who showed a lack of progress in other clinical treatments for anxiety.

Khalsa et al. (2012) examined the effect of the mental health benefits of yoga in a secondary school. The goal of this study was to evaluate potential mental health benefits of yoga for adolescents in secondary school. Students were randomly assigned to either regular physical education classes or to 11 weeks of yoga sessions based upon the Yoga Education program over a single semester. Students completed baseline and end-program self-report measures of mood, anxiety, perceived stress, resilience, and other mental health variables. Independent evaluation of individual outcome measures revealed that yoga participants showed statistically significant differences over time relative to controls on measures of anger control and
fatigue/inertia. Most outcome measures exhibited a pattern of worsening in the control
group over time, whereas changes in the yoga group over time were either minimal or
showed slight improvements. These preliminary results suggest that implementation
of yoga is acceptable and feasible in a secondary school setting and has the potential
of playing a protective or preventive role in maintaining mental health.’

2.2.2 Studies Related to Yoga as a Therapy

Plantamia (1992) evaluated the immediate effects of yoga based relaxation
therapy (RT) in forty hospitalized children and adolescents with diagnoses of
adjustment disorder and depression. RT class consisted of yoga exercise, a brief
message and progressive muscle relation. The effects were assessed using a within
subjects pre-test post-test design and by comparison with control group of 20
depressed and adjustment disorder patients who watched a one hour relaxing video
tape. Decreases were noted in both self reported anxiety and in anxious behaviour and
fidgeting as well as in creases in positive affect in the RT but not the video group.

Nespor (1993) described his experience with the use of yoga in the prevention
and treatment of alcohol and drug related problems, in psychosomatics, neuroses,
geriatric psychiatry and in some other areas. He deals with problems of the use of
yoga in psychiatry like compliance system aspect competitiveness and respecting
specific indications in regard to health status and contra indications with personal
differences. The usefulness of yoga in the prevention of stress and burn out in health
care professions in emphasized.

Venkatesh et al. (1994) reported the personality differences between yoga
trainees (those undergoing yoga therapy for at least one year) and control group in a
comparative study of yoga practitioners and controls on certain psychological variables. Forty subjects (so males and so females) in each group were selected, matched on age, sex and important socio demographic variables. The results revealed that yoga trainees had, more positive attitude towards yoga than control males and females. Controls had higher neurotic trend, and yoga group showed significantly higher scores on social desirability. On state trait anxiety, control males showed more on state as well as trait anxiety than males who underwent yoga therapy.

Telles et al. (2000) examined the oxygen consumption and respiration following two yoga relaxation techniques. This study was conducted to evaluate a statement in ancient yoga texts that suggests that a combination of both "calming" and "stimulating" measures may be especially helpful in reaching a state of mental equilibrium. Two yoga practices, one combining "calming and stimulating" measures (cyclic meditation) and the other, a "calming" technique (shavasan), were compared. The oxygen consumption, breath rate, and breath volume of 40 male volunteers were assessed before and after sessions of cyclic meditation (CM) and before and after sessions of shavasan (SH). The 2 sessions (CM, SH) were 1 day apart. Cyclic meditation includes the practice of yoga postures interspersed with periods of supine relaxation. During SH the subject lies in a supine position throughout the practice. There was a significant decrease in the amount of oxygen consumed and in breath rate and an increase in breath volume after both types of sessions. However, the magnitude of change on all 3 measures was greater after CM. The results support the idea that a combination of yoga postures interspersed with relaxation reduces arousal more than relaxation alone does.
Kovalan (2006) has made a study on the effects of different strategies of web based instruction in the context of practising yoga online. The main objective of the study was to develop e-learning software packages for the selected yogasanas for selected diseases such as diabetes, heart diseases and asthma at international level. Quasi experimental method was applied for the study. The study concluded that there is no significant difference among the different web-based instructional strategies viz. training Mode (TM), Training and Feedback (TF), and Training Feedback and Guidance (TFG) in terms of their effectiveness in realising the instructional objectives in yoga education. The findings also shows that people with above 50 years of age are more benefited of the web–based yoga education due to higher incidents of suffering because of these diseases at their age level. People below 50 years of age are not much benefited of the yoga online. Sex, educational qualification and occupation have no influence on the learners of yoga online. This study also concludes that teaching with immediate feedback mechanism will be the most helpful in practising yoga online.

Cortez (2008) has made a study on Yoga as a therapeutic approach for children with autism. The purpose of this project was to design a program, identify potential funding sources, and write a grant to fund a recreational yoga program to address the needs of children with autism in Oxnard, California, and to produce a children's yoga video for use by autistic and other developmentally delayed children in community settings A grant was then written to support a recreational yoga program for children with autism in Oxnard, California. Yoga meets the child on his/her development level and uses the child's strengths to build new skills. The study
concluded that this recreational model is an example of how, using creativity, recreation can be adapted for use by children with developmental disabilities such as autism so that they may live fuller and more active lives.

Taylor (2009) made a study on the effect of yoga in diabetes self-management. The objective of the study was to explore the relation of diabetes self-management and yoga practice from the perspective of adults living with type 2 diabetes. The study aims were to: (a) describe the experience and perceived therapeutic effect of practicing yoga on diabetes self-management, (b) identify perceived facilitators and barriers to regular yoga practice in the context of diabetes self-management, and (c) explore yoga instructors' understanding of diabetes and beliefs about the therapeutic benefits of practicing yoga. The design of the study was qualitative descriptive and used ethnographic methods. Interviews were conducted using a semi-structured interview guide, then audio-taped and transcribed verbatim. Transcripts were analyzed using qualitative content analysis. Twenty-six adult yoga students with type 2 diabetes and ten yoga instructors were recruited and enrolled. Students perceived improvement in the following outcomes: physical fitness, physical and mental relaxation, stress tolerance, self-awareness, coping skills, social support, and sense of well-being. Factors that effected yoga practice were cost, convenience, time, responsibilities, health status, and instructor's attitude. Instructors integrated concepts from biomedicine and yoga philosophy to understand diabetes. Instructors believed that yoga promoted physical and mental balance, an attitude of non-judgmental self-awareness, increased self-efficacy and better health-related choices. These findings
support the perceived benefit of yoga as a complementary therapy in diabetes self-management.

Rich (2010) conducted a study of yoga therapy to increase attention in preschool children. This study was an attempt to determine the impact of yoga therapy on the development of behaviours that are related to the regulation of emotions in preschool students. The study involved 49 preschool students, aged 3-6 years, from two suburban integrated preschool settings. Participants took part in 20-minute yoga sessions led by a Yoga Teacher 2 days per week for a total of 4 weeks. A one-way analysis of variance (ANOVA) and a paired-samples t test were utilized to examine the results of Conners's Teacher Rating Scales--Revised: Short Version to determine the impact of yoga therapy on the attention span of preschool students. Data were examined for male versus female preschool students as well as for the total population of students. The findings of the study proved that overall, exposure to yoga did not have an impact on the attention of the preschool students. However, post-test scores for a subtest proved that girls demonstrated increased attention at the conclusion of the study. This study suggested that further research should be conducted on yoga for preschool students that would examine behaviours throughout the course of an academic year to gain more insight into the rate of development as it corresponds to all other variables that impact students in an integrated setting.

Trigg (2013) studied the experience of yoga as a complementary treatment for depression. The research question for this study was: what is the experience of individuals who utilize yoga as a complementary treatment for depression? Various aspects of yoga, including physical yoga postures, meditation and breath regulation,
served as the basis for much of the literature related to yoga's effect on mental and physical health. The grounded theory methodology described by Kathy Charmaz served as the primary guide for constructing the study and collecting and analyzing the data in order to present a cohesive theory related to individuals' experiences with yoga. The analysis resulted in a theory of physical, emotional, and interpersonal transformation. It was concluded that yoga provided a complementary tool with which individuals may manage depression. The popularity of yoga continues to grow and it is hoped that its utility in treating depression will continue to grow in understanding and application.

Davis (2013) has studied the feasibility of yoga in the treatment of antenatal depression and anxiety. This study explains that the antenatal period is a sensitive time for both mother and the developing fetus. Antenatal depression affects approximately 15% of women and anxiety affects approximately 30%. Yoga interventions may be particularly well suited for depressed and anxious pregnant women given benefits associated with meditation and physical activity. A randomized controlled clinical trial compared an eight-week yoga intervention to treatment as usual (TAU) among 46 pregnant women with symptoms of depression and/or anxiety recruited through health care providers and community advertisement. Participants were randomly assigned to the yoga or TAU condition and completed brief assessments weekly during the eight-week intervention and at post-intervention. Findings of the study states that participants in the intervention group found yoga to be an acceptable intervention for anxiety and depression and reported high levels of satisfaction with the intervention. Pregnant women's reports of negative affect
suggested significantly greater reductions among women who received yoga compared with TAU. Pregnant women receiving the yoga intervention also reported significantly lower anxiety and depression over time, but such changes were not significantly greater than those reported by women who received TAU. Analyses of secondary outcome measures of the study suggest that prenatal yoga may increase self-efficacy and factors associated with positive self-regulation skills. This study concluded that prenatal yoga was found to be a feasible and acceptable intervention for pregnant women with symptoms of anxiety and/or depression.

2.2.3 Studies Related to Yoga and Academic Achievement

Tubbs (2008) suggested integrating yoga as part of the curriculum in public schools. This action research project studied the implementation of yoga into schools as an aid to the curriculum and its effects on students. The study was comprised of 18 elementary teachers with classes consisting of 427 students, ranging in age from 3-to-9 years old in rural Southwest Minnesota. The study was conducted during the 2007-2008 school year for a period of three months. The teachers implemented yoga into the curriculum with materials provided by the researcher. Data compiled from the survey asked for the teachers' observations of the perceived effects of yoga on their students. The responses were calculated into means, standard deviations, frequencies, and percentages. The findings of this study concluded that yoga does enhance the learning environment, supporting both teacher and student in the classroom. This study offers evidence that yoga can be used as an aid to connect academic subjects resulting in cross-curricula teaching.
2.2.4 Studies Related to Yoga and Physiological Variables

Durgalakshmi (1989) conducted a study on “Effect of yogic exercises on selected physiological variables of high school boys. “The group consisted of 60 students. The result of the study showed that systolic pressure was increased and diastolic pressure remains unchanged after a six week training of yoga. The scores in breath holding time and vital capacity had also improved. It was statistically significant. She also recommended that athletics could adopt these exercises and thereby increase in the cardio respiratory function and further she adds, yoga could be included in the regular programme of physical education in schools and colleges.

Tiwari (1989) conducted a study on the importance of physical education as expressed in ancient Krishna literature. The main objective is to highlight the characteristics and find the nature of body, mind, intellect and soul, their relationship and their physical development. Another objective is to study the initiation of the process of personality development through yoga, recreation and sports for the achievement of health, strength and efficiency. The findings indicated that the ancient Indians participated in yoga recreation and sports because it helped them to achieve the skill in sports, general efficiency and also strength and good health. This further helped in their personality development. Yoga helped them in achieving physical and mental health, will power and skill in Karma, which were fortified by pleasure giving activities (Vihar) within limits.

Berger and Own (1992) examined the mood benefits of hata yoga and swimming in aerobic training benefits. College students (N=87) in two swimming classes, a yoga class, and a lecture-control class completed mood and personality
inventories before and after class on three occasions. A multivariate analysis of variance indicated that both yoga participants (N=22) and swimmers (N=37) reported greater decreases in scores on anger confusion, tension, and depression than did the control students (N=28). The consistent mood benefits of yoga supported that the exercise need not be aerobic to one associated with mood enhancement. Among the men the acute decrease in tension, fatigue and anger after yoga were significantly greater than those after swimming. The women also showed the same result. It seems the aerobic exercise may not be necessary to facilitate the mood benefits.

Schell et al. (1994) studied the physiological and psychological effects of yoga. They measured heart rate blood pressure, the hormones, cortisol, Prolactine and growth hormone and certain psychological parameters in a yoga parching group and a control group of young female volunteers reading in a comfortable position during the experimental period. There were no substantial differences between the group concerning endocrine parameters and blood pressure. The course of heart rate was significantly different; the yoga group had a decrease during the yoga practice. Significant differences between both groups were found in psychological parameters. In the personality inventory the yoga group showed markedly higher scores in life satisfaction and lower scores in excitability aggressiveness, openness, emotionality and somatic complaints. Significant differences could also be observed concerning coping with stress and the mood at the end of the experiment.

Krishnakanthan (1999) conducted a study on “Compression of the Training Effects of Pranayama and Running on Selected Physiological and Psychological Variables.” The objective to establish the credibility of pranayama as training
modality/physical fitness. The findings are that the pranayama group made significant
gains over the running group in pulse rate, positive breath holding time, anxiety level,
intensity of attention, memory power and concentration.

Mishra (2003) conducted a study on the effect of yogasanas on posture and
health related physical fitness of school children. The objective of the study was to
determine the effect of Asanas on posture and selected physical fitness variables of
school children. The study reveals that the flexibility was increased as a result of
participating in eight weeks of yogasana training programme. It also resulted in the
improvement of muscular strength and endurance. But 8 weeks practice is not enough
to improve posture.

Vinu Bhaskar (2002) conducted a study on the effect of selected yogic asanas
on some selected physiological and psychological variables. The study reveals that the
functional mobility of the elderly men was improved as a result of 6 months of yogic
asanas training programme. Flexibility and balance were improved, self esteem
improved and depression in elderly men reduced as a result of this practice.

Kanimozhi (2004) conducted a study on the Effect of Transcendental
Meditation on Concentration and Intelligence of physical education students. Findings
pointed out that there was a significant improvement in the concentration and
intelligence of students as a result of the transcendental meditation training.

Sakthignanavel (2006) conducted study in the effect of continuous running,
yogic pranayama and combination of continuous running and pranayama on mental
health. Sixty normal male volunteers underwent a 14 weeks training course of
continuous running, yogic pranayama, and combined continuous running and yogic
pranayama. Peter Becker’s Trier Personality Inventory (TPI) was used to measure the mental health before and after the training. The result shows that the mental health of the pranayama group had significantly increased when compared with that of the continuous running group and control group.

Moorthy (2007) conducted a study on the effect of yogic practices and physical exercises on stress induced patients. To facilitate the study, 90 stress, induced disease patients were selected from Karaikudi (TN). The total subjects were divided into three equal groups of which one group served as yogic practices group, the second group served as physical exercise group and the third group served as control group. The treatment was given for a period of 12 weeks. Analysis and covariance was used to find out the comparative effect of training, yogic practices and physical exercises significantly reduced the back pain. The yogic practices reduced the back pain better than the physical exercise.

Sathyaveni (2009) conducted a study to find out the effects of yogasanas and aerobics on the selected variables such as abdominal strength, flexibility and on selected physiological variables such as breath holding, resting heart rate, blood pressure and oxygen consumption and on selected cognitive variables, viz., concentration, memory and mental fatigue. To achieve this purpose, 45 men subjects were randomly selected and they are divided into two experiment groups and one control group, each consisting of 15 subjects. It is found that the effects of yogasanas training on cognitive variables were superior to the aerobic group. The experiment group of yogasans have achieved significant improvement on concentration, memory and mental fatigue as compared to control group.
Vanithamani (2010) conducted a study to investigate the effect of specific yogic exercises and autogenic training on selected physiological variables such as pulse rate, vital capacity, blood pressure, psychological variables such as anxiety and depression and biochemical variables such as high density lipoprotein, low density of lipoprotein fasting blood sugar, hemoglobin and blood urea. The experiment was conducted on sixty climatic women of teaching faculty from various colleges in Coimbatore district Tamil Nadu, India. This study concluded that specific yogic exercises group and combination of specific yogic exercises with autogenic training group have achieved significant improvement on physiological, psychological and biochemical variables when compared to control group.

Rogers (2011) conducted a study on the effect of yoga in the classroom as new approach to holistic physical education. This study supports yoga as a holistic and personally satisfying form of physical activity for elementary students. This study explained: student perceptions of yoga; are they the same as adults; and how students think yoga could be used in the classroom. The research was conducted through interviews, observations of children participated in bi-weekly yoga sessions, and analysed participants' written reflections in open-ended journals. This study demonstrated the linkages between the practical applications of yoga in the school and theories of holistic education. This study recommends practical applications of yoga and how it can be implemented in elementary classrooms across Ontario.

2.2.5 Studies Related to Emotional Intelligence and Academic Achievement

Although research assessing the link between social and emotional learning and academic achievement is in its beginning stages, early findings appear to indicate
that these variables may be positively related, providing further indication that enhancement of these skills may enhance student’s success in other areas. While no single study seems to have comprehensively examined all aspects of emotional intelligence and academic achievement, there is some indication of an interrelationship of at least some components of each construct.

Jaeger (2001) examined the effect of emotional intelligence on learning style, and academic performance of graduate students in professional schools of public administration. This exploratory study addressed the relationship of three key variables in the graduate student learning process: emotional intelligence, learning style preference, and academic performance. The study comprised a sample (N = 150) of graduate professional students enrolled in a core management class in a representative school of public administration. Students in a section of a course that included an emotional intelligence component gained more in emotional intelligence than students in traditionally-taught sections. Although findings revealed positive relationships between initial and ending levels of emotional intelligence and academic performance, improvement in emotional intelligence was not a predictor of student academic success. The evidence from this research was not sufficiently conclusive to confirm expected relationships between emotional intelligence and learning style preference. Pretest results revealed positive correlations between the Intrapersonal and General Mood composite scales of emotional intelligence and the learning style dimension of Active Experimentation. Pretest findings also revealed negative correlations between the Intrapersonal composite scale and the learning style dimension of Reflective Observation. Pretest results suggest that students who are
more aware of their feelings (Intrapersonal-Emotional Self-Awareness), are able to express their feelings (Intrapersonal-Assertiveness), and are self-satisfied (Intrapersonal-Self Regard and General Mood-Happiness) prefer to learn by doing (Active Experimentation) rather than observing (Reflective Observation). The results from this study showed that these emotional capacities can be enhanced in the traditional graduate classroom. Furthermore, findings revealed a strong relationship between emotional intelligence and academic performance. This finding suggests the need for educators in professional education to explore the role of emotional intelligence in the classroom.

Szuberla (2005) conducted a study on emotional intelligence and school success. This study shows the relationship between emotional intelligence and traditional school success metrics among young adults. This study closes a gap in the literature by examining that relationship in an elementary school setting. A statistical description of the extent to which such relationships exist was derived from bivariate and multivariate regression analyses of two particular metrics. Emotional intelligence was measured using the Emotional Intelligence Test: Youth Version. Terra Nova standardized test percentiles were used as measures of school success. The study sample comprised 61 intermediate elementary students from a single school in suburban Alaska. Significant relationships were found between (a) understanding emotions and reading, language, and mathematics composites from the Terra Nova standardized test, (b) managing emotions and reading composite score, and (c) total scores of both emotional intelligence and school success. No significant relationships were found between perceiving emotions and any of the Terra Nova composites.
These results raise the possibility that the emotional intelligence instrument may be assessing reading and language rather than emotional intelligence. In light of the nationwide movement toward improving student performance in an era of increasingly constrained budgets, the need for psychological studies to investigate how school success is related to the emotional state of students has become even more pronounced. Results of this study suggest that, on some levels, such a connection exists. At the elementary school level, early interventions can be designed to incorporate the emotional aspects of how children perceive, appraise, and, ultimately, analyse their own academic success.

Menzie (2005) has made a study on emotional intelligence and social and academic competence in middle school youth. The purpose of this study was to examine the relationship between measures of children's emotional intelligence and screening measures of psychological problems as well as to examine any relationship between academic and social competence and emotional intelligence. Students in 2 different school districts completed the Emotional Intelligence Inventory Youth version and the Achenbach Youth Self-Report. Grade point averages were taken from students' final report cards for comparison with the results of the assessment. Analysis of correlations between the two measures indicated that strong negative correlations exist between subscales of the E Q -I:YV and the clinical scales of the Youth self-report as well as positive correlations between the academic and social competence scales of the YSR and subscales of the E Q -I:YV. The study concluded that the adaptability and stress management scales of the E Q -I: YV may have significant value in predicting academic performance.
Anand (2005) made a study on the Academic Achievement in relation to Emotional Intelligence and Probabilistic Orientation among engineering undergraduate students. The results showed that emotional intelligence did not interact significantly with probabilistic orientation in its relationship with academic achievement. But the results showed that the following sub-dimensions of Emotional intelligence had significant positive correlation with Academic Achievement. They are Emotional self-awareness, Emotional self control, Trustworthiness, Empathy, Communication, Conflict management and Leadership.

Jacques (2009) conducted a study to examine the relationships between community college student's emotional intelligence and (a) academic performance and (b) selection of a college major. In addition, the impact of demographic and background variables (the covariates of age, gender, socio-economic status, ethnicity, and academic status) on emotional intelligence, academic achievement, and selection of a major was examined. This study was guided by the theory of emotional intelligence, which defines emotional intelligence "recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" A correlational research design was employed, and emotional intelligence was assessed with the General Emotional Intelligence Scale (Mehrabian, 1995). The population of interest consisted of community college students, and 221 students from a community college in New York participated in this study. The main findings showed that gender predicted EI but age, socio-economic status, ethnicity, and academic status did not; that EI predicted academic achievement when controlling for age, gender, socio-economic status, ethnicity, and academic
status, and that EI did not predict whether or not a student has selected a major when controlling for age, gender, socioeconomic status, ethnicity, and academic status. Thus students, educators, and guidance counselors will be able to use this information to understand why some students may be performing poorly academically. In such cases, an assessment of emotional intelligence may be warranted to determine if this is the cause of poor academic performance among college students. Furthermore, the relationships found between emotional intelligence and both academic status and gender can provide direction for further research.

Wendorf-Heldt (2009) examined the effect of emotional intelligence as a link to school leadership practices that increase student achievement. The purpose of the mixed methods, explanatory design study was to determine if a relationship exists between emotional intelligence and research-based school leadership practices. A random sample of 285 public school K-12 principals in the state of Wisconsin was surveyed using a valid, reliable, two-part instrument designed by the researcher. Part one of the survey measured principals' engagement in the 21 leadership practices. Part two of the survey measured principals' emotional intelligence. Correlation research was conducted using the two parts of the self-report survey and results were analyzed. Additionally, eleven principals from the survey sample, demonstrating high levels of emotional intelligence and high levels of engagement in research-based school leadership practices, were interviewed to gain further insight into their formation as leaders and their leadership practice. Results of the study indicate that there is a strong, positive correlation between emotional intelligence and research-based school leadership practices and that the development of emotional intelligence is influenced
Chapter II

Review of Related Literature

by identifiable and replicable factors. The study concluded that districts that make an intentional effort to create awareness of emotional intelligence, as well as to hire, develop, and retain emotionally intelligent school leaders may be more likely to reach their organizational goals related to increasing the academic achievement of all students.

Kohaut (2009) made a study on emotional intelligence as a predictor of academic achievement in middle school children. The purpose of this study was to examine the relationship between students' emotional intelligence and their academic achievement and to conduct an exploratory analysis of the data to examine differences in emotional intelligence between racial/ethnic groups. Students completed the Bar-On Emotional Quotient Inventory Youth Version. Students' final grades were taken from their final reports and standardized test scores. The number of discipline referrals was taken from school records. Analysis of the correlations between students' emotional intelligence and their academic achievement revealed positive correlations between the total emotional quotient on the Bar-On EQ-I: Youth Version and grades and total emotional quotient negatively correlated with number of discipline referrals. The stress management and adaptability scales of the Bar-On EQ-I: Youth Version correlated or approached significance in relation to students' standardized test scores. Lastly, no differences were found between students' racial/ethnic affiliation and their emotional intelligence.

Walsh-Portillo (2011) conducted a research on the role of emotional intelligence in college students' success. The purpose of this study was to determine if higher academic performance was positively correlated to higher emotional intelligence.
intelligence among traditional age male and female college students enrolled in an Introduction to Business course at a large multi-campus state college in Florida. The Bar-On 2004 Emotional Quotient Inventory was used to assess students' emotional intelligence. Within the scope of this ex-post facto study, a quasi-experimental design was included to further determine if emotional intelligence could be increased through the inclusion of a curricular component on emotional intelligence. Four groups of students (N =111) participated in the three-phase study over two semesters. The first phase (pre-intervention) was limited to students with an established GPA and an attempted-to-completed credit hour ratio within the institution (N =82). Results showed a slight positive correlation between the two factors and the students' emotional intelligence pretest assessment scores. The second phase of the study involved establishing a control and an experimental group in each of two semesters to compare the attainment of overall emotional intelligence scores as measured by the EQ-i. The third phase of the study examined four measures of academic success to determine if these factors were positively correlated with the students' posttest EQ-i scores. The study also included a research question to determine if significant differences in overall EQ-i scores existed between male and female students during the three phases. Findings from the study indicated that (a) there was a slight positive correlation in the pre-intervention stage between emotional intelligence and traditional measures of academic success; (b) curricular intervention made a significant difference in one semester but failed to meet that threshold in the following semester with the second pair of groups; (c) at the post-intervention phase, the four measures of traditional academic success yielded a low positive correlation
with the students' emotional intelligence assessment scores, and (d) female students showed significant gains in their overall EQ-i scores.

De Roberto and Thomas (2011) studied the relationship between principal emotional intelligence and the school as a learning organization. Studies on principal emotional intelligence have shown the impact on practice and operations. Studies within the business community have shown that a leader with higher emotional intelligence can stimulate greater productivity. Studies of companies that operate as learning organizations have shown that entities that establish mechanisms to acquire, transmit, and store knowledge are able to expand their capacity and experiment with alternative ways of operating. Goleman's construct of emotional intelligence served as the independent variable. Garvin, Edmonson, and Gino's construct of the learning organization served as the dependent variable. Fifteen schools participated in the study, fourteen of which were secured through a convenience sampling. Ninety teachers responded with usable data in the form of two surveys: the Emotional and Social Competency Inventory (3.0) and the Learning Organization Survey. Twelve research questions guided this study. Three step-wise multiple linear regressions were executed. The variance attributed to principal emotional intelligence in relation to the three dimensions of the school as a learning organization. The regressions revealed that two of the dimensions of EI, self-awareness and relationship management, contributed statistical significance in all three dimension of the learning organization. Self-management and social awareness also contributed variance in Supportive Learning Environment and Leadership that Reinforces Learning but not for Concrete Learning Processes and Practices. The emotional and social competencies that
comprise all four dimensions of emotional intelligence accounted for statistical significance in the degree to which a principal cultivated a learning organization. The study concluded that, this knowledge should be incorporated into future professional development opportunities for practicing administrators as well as pre-service programs for future administrators. As an example the study pointed out that, schools of education that train future leaders in a K-12 setting should incorporate material on emotional intelligence into coursework. This also concluded that, school districts should arrange for training opportunities that enable principals to assess their own emotional intelligence and learn strategies that enable problem-solving and strong interpersonal skills.

Akbar et al. (2011) conducted a study on the relationship between emotional intelligence and academic achievement among higher secondary school students. The main objective of this study was to examine the relationship between emotional intelligence and academic achievement among students of higher secondary schools. The secondary objective was to examine the role of various demographic variables of the students including gender socio economic status, parental education and geographical origin in emotional intelligence. The Bar-On Emotional Quotient Inventory was for data collection. Academic achievement of the participants was measured through their annual results. Pearson correlation and t-test was applied to test the hypotheses. Findings are in line with the hypotheses. Significant relationship found between the two constructs. The study also concluded that first born students scored high on emotional intelligence as compared to later born students. Students with literate parents scored high as compared to students with illiterate parents.
Students from urban areas scored high as compared to students from rural areas. Students from upper socio-economic students scored high on emotional intelligence as compared to students from lower socio-economic status. Female students scored high as compared to male students.

2.3 CONCLUSION

When reviewing these studies as a whole, several implications exist that support the use of yoga as an intervention with children and adolescents. First, it is important to note the applicability of yoga as an intervention for children and adolescents in regulation of emotions and reducing depression, heart disease and asthma (Rich, 2010; Trigg, 2013, Kovalan, 2006). Second, the studies reviewed implemented yoga as an intervention to address a variety of concerns, including stress and academic performance, deviant behaviours, attention, and overall well-being (Tubbs, 2008; Sathyaveni, 2009, Rogers, 2011). Due to the progress shown in these studies, yoga appears to demonstrate a great benefit in a variety of capacities. A large number of people are using yoga to treat health related problems, and research has strong associations between yoga and reductions of symptoms of a wide variety of physical and mental illnesses.

This speaks to the general applicability of yoga as a practice that can be used with both populations. The takeaway point from these studies is that they offer strong support for the implementation of yoga with children and adolescents and the potential benefits they can have on a variety of issues. Hence the investigator decided to move on with the present study.