CHAPTER 2
CONCEPTUAL FRAMEWORK
Hall (1904) referred to adolescence as the age of storm and stress. He was the first psychologist who popularized adolescence as a psychological concept. Adolescence is defined as the stage of development that leads a person from childhood to adulthood (Seifert & Hoffnung, 1991).

Adolescence is considered as a stage associated with substantial change in self due to various biological, emotional, intellectual and social changes that accompany this stage (Tung & Sandhu, 2005). Adolescents go through a time of transition because of major changes that take place in all domains of development be it physical, cognitive or psychological.

The physical development begins with puberty and nearly all the organs and systems of the body are affected by these changes. Slavin (1994) believes that one of the most important challenges to adolescents is to accommodate to the changes in their bodies and the new body must be integrated into the existing self-image. It is also believed that youths who mature earlier experience more anxiety, conflict with parents and low self esteem at puberty and thus early maturers have a tough time at puberty (Peskin, 1967).

The cognitive development theory of Piaget considers adolescence as the stage of transition from the use of concrete operations to the application of formal operations in reasoning. The adolescents begin to be aware of the time limitations of their thinking (Salvin, 1994). Adolescents become capable of making decisions and this may not always be affected by
novel and stressful contents (Gilligan & Belenky, 1980). Slavin (1994) also reveal that adolescent’s experience with complex problems, the demands of formal instructions, exchange and contradiction of ideas with peers are also necessary for formal operational reasoning to develop. All adolescents do not reach this stage but those who do are believed to have attained an adult level of reasoning.

The psychosocial developments among adolescents appear primarily when they develop the tendency to think about what is going on in their own mind and study oneself. The adolescents begin to define themselves differently and realize the difference between what they think, feel and behave. They become more aware of their uniqueness and personality development (Slavin, 1994).

The prime task of adolescent years involve being autonomous and framing or achieving one’s identity (Tung & Sandhu, 2005). The adolescent’s psychosocial task involves creating a sense of ego identity and for this they pay great attention to how others view them; they search the past, experiment with roles and further act on feelings and express their beliefs and opinions (Slavin, 1994). Sandhu & Tung (2005) purport “Adolescence has been recognized as a stage associated with substantial change in self and a major life change for identity formation.”

The interpersonal development involves relation with peers who are the focus of adolescence. Adolescence involves friendship, popularity, and conflict with peers and dating. Wentzel (1991) believes that student’s social competence and responsibilities are important end in themselves and
evidence shows that they have positive effects on students’ academic performance as well. Slavin (1994) reveals Sullivan’s view that human behaviour is shaped by their attempts to maintain comfortable relationships with significant others, when an individual’s significant relationship and security is threatened one often acts to avoid anxiety. Adolescents who develop relationship with the opposite gender without major mishap are those who can separate their needs for intimacy and sexual gratification.

Adolescent years bring with them transitions, which by themselves make an individual vulnerable to anxiety and stress, accompanied with it are other related factors such as negative affectivity, low self esteem and low achievement motivation.

2.1 ANXIETY

"An unpleasant emotional state or condition, which is characterized by subjective feelings of tension, apprehension and worry and by activation or arousal of the autonomic system is termed anxiety" (Spielberger, 1972). The American psychiatric association (1975) defined “anxiety as an apprehension, tension or uneasiness, which stems from the anticipation of danger, the source of which is largely unknown or unrecognized.” It is difficult to understand anxiety in purely objective terms as a state of the organism. Different individuals use the concept in various different ways, and the same individual may use it differently on separate occasions.

Korchin (1998) explains that according to Freud “Anxiety (or dread) itself needs no description; everyone has personally experienced this
sensation or to speak more correctly this affective condition at some time or other.” According to Freud not enough consideration had been given to the question so as to why nervous person in particular suffer from anxiety more than others. He believed that “the problem of anxiety is a nodal point, linking up all kinds of questions, a riddle of which the solution must cast a flood of light upon our whole mental life.” Anxiety could be separated into realistic, moral and neurotic forms according to Freud’s tripartite model. Realistic anxiety is a direct response to real external threat and on its own cannot cause psychological difficulties. Moral anxiety is associated with shame and guilt resulting from conflict between ego and superego and neurotic anxiety composes of three elements, focused system such as phobic anxiety, free floating feelings of displeasure caused by many and varied stimuli and thirdly fully developed sensations of panic.

Anxiety can be viewed as an everyday word in a minor sense, to what is in reality a complex relationship occurring through time between the person and situation one faces. Hallman (1994) refers to anxiety as the behavioural and physiological responses directly induced by a situation, as an appraisal of the response and their effects, as a person’s intentions towards stimuli and as a person’s evaluation of the resources available for dealing with it.

(i) **Multicomponent construct of Anxiety**

Edelmann (1992) explains that it is better to regard anxiety as a hierarchical multicomponent construct, which can be conceptualized, to
recent information processing models of emotions rather than either a lump or simple multicomponent construct. Anxiety is an ongoing reaction and not a static one which can not only change over time, but can also change in the extent to which one system predominates over time. It is seen that different people react differently to the same phenomenon. Whether these differences are due to some variations in bodily sensitivity, appraisal processes or behavioural reactivity is still an issue of anxiety research.

There are very many ways of defining anxiety and involves many aspects such as emotions, physiological, psychological, cognitive, social, behavioural and environmental components. The definitions of anxiety reflect the extent to which different definitions emphasize different aspects of the same phenomenon such as a feeling, behaviour or an explanation for a behaviour.

(ii) Anxiety and Theories of Emotion

Explaining anxiety in terms of an emotion Gray (1982) put forth the fact that “whatever else anxiety is, it is undoubtedly an emotion; sometimes, reading the work of a psychologist, one is tempted to think that it is the only emotion.” After reviewing various studies by Ekman, Friesen & Ellsworth (1982), Edelmann (1992) concludes that one may infer that there are five basic emotions of which one is anxiety and the others are happiness, sadness, anger and disgust.
Emotions probably have as many diverse definitions as anxiety. Kleinginna and Kleinginna (1981) has given a summary definition of the various definitions of emotion and says “emotion is a complex set of interactions among subjective and objective factors, mediated by neural hormonal systems, which can (a) give rise to affective experiences such as feelings of arousal, pleasure or displeasure; (b) generate cognitive processes such as emotionally relevant perceptual effects, appraisals, labeling processes; (c) activate widespread physiological adjustments to the arousing conditions; and (d) lead to behaviour that is, often, but not always, expressive, goal directed and adaptive.”

Each theory of emotion also gives a clear implication for any consideration of anxiety. The James- Lang theory contends that emotional experiences are a result of one’s perception of shifts in bodily states, and one become fearful or develop anxiety because he notices such physiological reactions as increased heart rate and tears. Whereas Cannon- Bard theory of emotions suggests that various stimuli elicit both physiological reactions and subjective reactions such as emotions or anxiety. The Schachter’s two-factor theory of emotion suggests that in many situations an individual labels his emotional states according to what his inspection of the world around suggests that he should be experiencing, thus experiencing anxiety not because one actually does so in that situation, but because external cues suggests one to do so. This theory suggests that any form of arousal, whatever its source, initiates a search for the causes of these feelings (Baron & Byrne, 1998).
(iii) State and Trait Anxiety

The distinction between anxiety as a transient state and as a relatively stable personality disposition came from (Catell & Scheier, 1961; & Spielberger, 1966). Here whether anxiety is a personality or a situationally determined characteristic, Spielberger (1972) puts forth the fact that “an adequate theory of anxiety must distinguish conceptually and operationally between anxiety as a transitory state and as a relatively stable personality trait.”

DeCecco and Crawford (1977) explain that as a personality trait, anxiety is an acquired disposition for the individual to perceive a wide range of objectively non-dangerous conditions as threatening. It is the stimulus conditions, which cause defenses to be set up to the state, subjectively these states are feelings of apprehension and tension.

The anxiety trait and state are related to each other, such that mostly individuals with anxiety trait experience the reactions typical of the anxiety state. When one refers to anxiety as an arousal, one refers to anxiety as a state and when one distinguishes between students who tend to be anxious and those who are non-anxious, one is referring to anxiety as a trait. Trait anxiety has been defined as relatively stable individual differences in anxiety proneness whereas state anxiety is characterized by subjective, consciously perceived feelings of tension and apprehension and heightened autonomic nervous system activity (Spielberger, Gorsouch & Lushene, 1970). State anxiety is an emotional state identified in conceptions of
anxiety as a multicomponent process whereas trait anxiety merely reflects individual differences in anxiety proneness.

Important determinants of behaviour identified by Mischel (1973) include competencies, expectancies, subjective values and the categorization of events. One derivation from this, specific vulnerability factors include the tendency to selectively attend to threat stimuli. Those who believe that they have little control over events are particularly vulnerable. There are some elements of genetic transmission, perhaps through an underlying biological vulnerability, specific reactions will be influenced to a non-significant degree by environmental factors.

It is assumed that any conceptualization of anxiety must take into account individual differences in proneness, perhaps in the form of vulnerability to anxiety. These differences will clearly have an impact upon the individual’s appraisal of their bodily reactions and information processing activities and hence influence their interpretation of external environmental events (Edelmann, 1992).

(iv) Test Anxiety

Anxiety describes the individual’s level of emotionality. DeCecco & Crawford (1977) believe since anxiety is an inferred emotional state of the organism and cannot be directly observed, investigations of anxiety rely on having the individual report his own emotional states under various stress conditions. Educational psychologists have studied test anxiety, or the emotional states the students experience under the stressful conditions of
taking a test. According to Sarason (1972, 1978) test anxiety may be conceptualized as a proneness to emit self-centered interfering responses when confronted with an evaluative situation.

The students may fall in the anxious group for whom tests arise anxiety, who make test irrelevant responses such as worrying about failing, their inadequacies, anticipating punishment and blocking on question responses which lead to poor test performance and those individuals who are without such tendencies and therefore improve their performance (Sarson & Mandler, 1952).

Test anxiety is experienced when the characteristics of anxiety are associated with academic or evaluative situations. Spielberger, Anton and Bedell (1976) conceptualized anxiety as a situation specific anxiety trait. Test anxiety can be conceptualized as a state, trait, and a process, and a detailed analysis of test anxiety as a process is more productive as observed by (Becker, 1982).

Sarason (1972) states “what distinguishes the high test anxious individuals are (i) the manner in which he attends to the events of his environment and (ii) how he interprets and utilizes the information provided by these events. These characteristics may be viewed as habits or acquired attributes whose strength is influenced by specific types of person-environment encounters.” Test anxiety thus can be caused simply due to one’s own lack of preparation, one having scored less or receiving negative remarks as results. Anxiety may be caused prior to the test situation due to one’s pre assumption of it being out of course, one scoring less, feeling of
guilt and shame later on, competition and even the pressure of one wanting to score the same if one is always scoring high and attains the first position.

The test anxiety construct is embedded within the general distinct of states and traits (Cattell & Scheier, 1961). With regard to general anxiety, Spielberger (1972) described personality traits as “temporal cross sections in the stream-of-life of a person.” Although transitory in nature, states are assumed to “recur when evoked by appropriate stimuli.” Thus personality states are conceptualized as mainly determined by situational characteristics. Personality is in contrast viewed as relatively enduring inter individual differences in tendencies to react or to behave in a particular way. The assumed relationship between states and traits is that, the “stronger a particular personality trait, the more probable it is that an individual will experience the emotional state that corresponds to this trait.”

Within the state - trait distinction, test anxiety as a situation-specific trait is assigned a somewhat intermediate position. Test anxiety is conceptualized to capture inter individual differences in the general tendency to react with anxiety in selected situations (Hodapp, Glanzmann & Laux, 1995).

(v) Individual Personality and Anxiety

When one’s personality trait is mostly accompanied by disorganization, self-criticism, lack of inter personal skills, inability to cope up with situations anxiety is caused. Those individuals having Type A personality pattern who are always in a hurry, set deadlines for
accomplishing goals and are always on the move also tend to be anxiety prone.

There may be individuals who do not experience anxiety as their personality trait, but may experience anxiety in particular situations or in that particular state. The cause of anxiety may lie in external or internal sources of disorganization. The external sources include threats, which one feels helpless to control such as loss of a job, breakdown of a relationship or else phobic situations. Conflicts and uncertainty regarding important lifetime decisions, illness that may produce impairment and disability, excessive demands of work or family are other external causes of disorganization leading to anxiety. Disorganizations may be experienced in a number of ways including over arousal of the body, unpleasant bodily sensations or a simple sense of unreality.

Hallman (1994) describes the sources of disorganization of primarily internal origin causing anxiety. They include (a) 'Maladaptive conceptualization of difficulties': here an individual through his strong personal conviction believes that the problem originates in a physical disorder, in his attitudes to circumstances, past or present, which one does not wish to or cannot influence, or in his distorted personality. (b) 'Lack of problem solving skills': one may experience anxiety when he lacks an understanding of tackling situations constructively, such that further anxiety is experienced from one life crises situation to the other. (c) 'Lack of interpersonal skills': one's inability in appraising social situations or else lacking the skill in relating to other people may cause anxiety. (d) 'Dysfunctional assumption about self, others or world': anxiety arises when
one has held beliefs that make them judge situations as rigid in an absolute manner thus assuring self and other to be a failure to match up to them. Everyday life thus becomes a constant source of dissatisfaction and disappointment causing anxiety. (e) 'Unresolved trauma': the origin or anxiety causing or provoking intrusive thoughts, upsetting images or other distressing emotions may lie in unresolved memories of traumatic events such as death of a loved one or a childhood abuse.

(vi) Anxiety and Cognition

The proposition of cognitive schemas and automatic thoughts that are typical of anxiety states play an important role in the development and maintenance of anxiety disorders (Beck & Emery, 1979; Beck, Emery & Greenberg, 1985). Cognition based theories emphasize the fact that emotions such as anxiety arise directly from perceptions and evaluations of events. The cognitive feature of anxiety include cognitive propositions or content, cognitive operations, cognitive products and cognitive structures (Goldfried & Robins, 1983; Ingram & Kendall, 1986, 1987). Ingram & Kendall (1987) states, “cognitive propositions (content) refer to the information that is actually represented and considered. Cognitive structure (schemata) can be viewed as the organized manner in which information is internally arranged and represented in memory. Cognitive operations are the processes and procedures by which the cognitive system operates. Cognitive products are results of the interaction of content, by operations and within structures.”

The synonyms of cognition include perception, reasoning, awareness, intelligence and discernment. Anxiety is caused when one
perceives and attaches meaning to whatever situation one attends to by analyzing it as being a threat. One’s attitude, affect, social perception and influences, conformity or non-conformity, conflict, thought disorganization may be a cause of anxiety when difficult situation arises as thoughts are under conflict and the reasoning and behaviour may be distorted. Anxiety takes the form of cognitive dissonance that is described as an unpleasant state that occurs when individuals discover inconsistencies between two of their attitudes or between one’s attitudes and behaviour.

Anxiety serves some purpose in social interaction and is not just an academic exercise in naming a frame of mind. A failure to recognize anxiety may leave a person unprepared as a situation unfolds. Hallman (1994) assumes that the ability to name anxiety and communicate verbally is learned. Thus implying that a verbal cognitive process is operating to some extent independently of other processes that give rise to the experiences we interpret as anxiety. Family and society influence the verbal and cognitive abilities, which enable an individual to name one’s emotions and account for them socially, during their development. The extent to which one is willing or able to express concern over various threats may vary and this variation is probably related to emotional training one has received in childhood.

The cause of anxiety may lie in one’s memory. As one begins to make observations of one’s own behaviour and of others, one uses words and names to communicate certain situations, thus the words themselves influence the events we are observing. A word or a verbal description that links together the elements of a fearful event, is stored with the memory of that event and thus helps to re-evokes it when one recalls it later.
Hallman (1994) focuses on the fact that sometimes one becomes anxious or afraid when it is unwise to do so. One form of association may be made on the basis of physical similarity to the stimuli, which were elements in the original fear experience. This is called stimulus generalization and operates on the physical properties of stimuli. Another form of association is based on reasoning and logical inferences called symbolic generalization. In many cases an inference is borne out by experience and at other times it is not, such that our anticipatory anxiety proves to be unwarranted and unnecessary.

As time passes, it may take less of a stimulus to evoke memory. All the elements of the network are evoked together even when only one element is stimulated. Anxiety memory may lead to bodily arousal accompanied with rapid heartbeats, irregular breathing and sweating. Such stimulus elements may also be evoked by normal daily activities. Bodily arousal produced by exercise is similar to bodily arousal associated with anxiety, as a result anxiety memories tend to be evoked by exercise (Hallman, 1994). Once evoked, other elements of the anxiety memory are retrieved. Anxiety memories are conceptualized as a network of association between representation of a situation, of responses to it and semantic links between them. Features of these anxiety memories cause anxiety and predispose us to develop anxiety problems.

Another cause of anxiety could be when our own behaviour is out of control, is disjointed or halted for many reasons and such state of affairs
may be experienced as anxiety. The causal factors of anxiety may be a form of vicious cycle piled up due to threat faced in many situations.

(vii) **Social Anxiety**

Social encounters may be anxiety provoking for some individuals, extreme social fear or phobia has been included as a diagnostic entity within the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American Psychiatric Association, 1980). The DSM-III; APA (1980) defines social phobia as “persistent, irrational fear of and compelling desire to avoid a situation in which the individual may be exposed to possible scrutiny by others. There is also fear that the individual may behave in a manner that will be humiliating and embarrassing.” Bellack & Hersen (1979), Curran (1977) referred to the fact that anxiety in social situations is a result of an inability to handle the demands of a particular encounter. This may be due to the fact that the person has had no opportunity to learn or practice regularly used techniques of behaviour, or one is unable to put them to practice or one has learned the behaviours but has inappropriately put them into practice.

A distorted performance may be a product of particular patterns of self-perception or cognitive style, given that a particular behavioural style, rather than behavioural deficits by itself may be the main feature of social anxiety. The variation in individual vulnerability will influence perception and reaction to learning experiences in an interactive style. The way in which events are perceived will thus play a central role in influencing performance. Negative self evaluation, negative self statements, irrational
beliefs may thus effect one’s performance leading to anxiety related to self and social aspects.

Edelmann (1992) states, “Social anxiety is characterized by a particular pattern of thinking relating to fear of negative self evaluation.” According to him socially anxious individuals are more likely to generate negative cognitions in stressful encounters, underestimate their own level of social skill in social situations and are more likely to recall negative encounters. Thus social anxiety may be caused due to the norms laid by the society to which one may not adhere. His own beliefs may be in constant conflict with those of the society. Social pressures of status, class, excellence and competition may be a causal factor of anxiety. One’s low performance, no acceptance by the society and its people, undue interference by the society in whatever one does, and the humiliation faced may cause and lead to anxiety.

(viii) Anxiety Disorders

Anxiety on a more serious consideration may take the form of a psycho pathological disorder. This emotional state can occur in many psychopathologies and is a principle aspect of phobias, obsessive compulsive disorders, post traumatic or acute stress disorders. Anxiety plays an important role in the psychology of normal people, as very few of us go through even a week in our lives without experiencing the so-called emotion, anxiety.
Davison and Neale, (1996) states that the anxiety disorders are diagnosed when subjectively experienced feelings of anxiety are clearly present. The individual with generalized anxiety disorder is persistently anxious. This may be accompanied by somatic complaints of pounding heart, sweating, upset stomach, shortness of breath, high pulse and respiration rates. They may also report of skeletal musculature disturbances and as for the state of mind one may be generally apprehensive, often worrying about impending disasters accompanied by impatience, irritability, angry outbursts, insomnia and distractibility.

Generalized anxiety can be caused due to severe worry, which makes one persistently anxious. The true source of anxiety as Freud explained is the previously punished id impulses that are striving for expression and is always present and that anxiety is felt all the time. Those suffering from generalized anxiety may learn to be anxious towards certain circumstances or situations although the range of stimuli may vary and the cognitive behavioural causes of generalized anxiety focuses on control and helplessness of people when confronted with painful stimuli.

There are very many aspects related to the concept of anxiety starting from one’s self, his perceptions, evaluations, traits, cognition, heredity, environment and society making the causal factors also immense and varied, causes of anxiety may thus be related to emotions, personality or situational factors, cognition, ones’ own self and society related to which one belongs.
2.2 ADOLESCENCE AND ANXIETY

Anxiety among adolescents may be a result of their facing novel situations in all possible domains of development. Acute anxiety in adolescence is reported with reactions such as feeling sudden fearfulness or assuming something wrong may happen. An individual becomes agitated, restless and complains of headache, nausea or vomiting. This may further lead to limited attention span and insomnia (Chapman, 1974; Miller, 1975). Chronic anxiety often results when acute anxiety has not been resolved. The major difference among adolescent and adult anxiety reaction is in its immediate relevance to the causative and precipitating factors (Nemiah, 1974; Minuchin, 1974).

(i) Fears and Phobias

Adolescent anxiety comprises of fears and phobias. Many fears arising in adolescence are related to the changing demands of this period involving physical change and maturity, general growing up and social, family, institutional and environmental pressures. Fears are also associated to interaction with peers, teacher and other people, cognitions and perceptions. Fear related to sexuality and it being a taboo to be talked of or discussed especially in Indian society causes anxiety. Repeated rejections by family and friends, unrealistic fears involving one’s inability to understand his mood swings and low self-perception may lead to anxiety.

Phobias can be attributed to fear of a person, object or event that stays on and is experienced whenever one is confronted with it. According to
the American Psychiatric Association (1980) when a person is unable to escape phobic situation he may experience faintness, fatigue, palpitation, perspiration, nausea, tremor and panic.

(ii) Situational Anxiety

Anxiety among adolescents may be situational such as in case of test or examination or else may be exhibited during stage fear. Slavin (1994) believes that anxiety is a constant companion of education. In school every student feels some anxiety at some point of time, but for some students anxiety may inhibit learning or performance especially in tests (King & Ollendick, 1989).

The main source of anxiety in school is the fear of failure accompanied with loss of self-esteem (Hill & Wigfield, 1984). Anxious students may have difficulty in learning, transferring knowledge that they have and have difficulty demonstrating their knowledge on tests. Wine (1980) believes that anxious students may be highly self-conscious in performance settings, which distract the attention from the task at hand. Academic, parental and social pressure generates great deal of anxiety among students (Sanghvi, 1995).

Test anxious students often have inadequate study habits, negative non-productive attitude towards academic work (Culler & Holahan, 1980) and poor test taking skills (Topman & Jansen, 1984). Test anxiety may also develop as a result of parental criticism and punishment when one fails to perform satisfactorily (Thornburg, 1984). In most of the studies worry has
been associated with test anxiety (Sud, 2001, 2003; Sud & Sud, 1997) and has been found to be independently related to academic performance (Sud, Avasthi & Sud, 2001).

(iii) Trait Anxiety

Anxiety may also be a personality trait of an adolescent. Personality traits, which are encouraged and praised by parents and teachers is the result of a long history of situational motivations to learn (McComb, 1991).

Anxiety may be a cause of factors associated to self or others. Individual’s emotional traits, cognitions, perceptions, personality act as causal factors of anxiety. A person being extrovert or introvert, possessing Type A characteristics as traits depict his being an anxiety prone individual. One’s traits may be a product of his environment, society and physiology. Inability of an individual to deal with such issues may lead to stress and stress may further lead to psychosomatic illness.

2.3 STRESS

The complexities of modern living tend to overburden the humans. Living under such highly complicated and demanding conditions can ruin an individual’s biological and psychological well-being. Stress arises when unusual or excessive demands empower an individual and he is incapable of coping following threat to his integrity.
Selye (1980) defined stress as the “non specific (that is, common) result of any demand upon the body,” be it a mental or somatic demand for survival and the accomplishment of our aims. Different individuals conceptualize the meaning of stress differently. The defining concept of stress includes stimulus-response, cause-effect or may include both stimulus and response. Landy (1984) explained that the most common type of definitions include stimulus, response and interactional aspect. Stress is defined as an interplay of conditions acting upon the individual, state of the person and by his response towards the stimuli. Webster’s Ninth Collegiate Dictionary (1988) gives the meaning of the word stress as a bodily or mental tension resulting from factors that tend to alter an existent equilibrium. McGrath (1970) said, “stress occurs when there is substantial imbalance between the environmental demands and the response capability of the focal organism.”

Beck (1990) emphasizes that most psychologists define stress in terms of stimulus and response, an organism environment interaction as an interactive definition. The interactional definition by Landy (1984) explains that stress is neither to be found in stimuli, nor in response to those stimuli, but rather arises out of cognitive events, or what people tell themselves about a situation or how they perceive it.

(A) ETIOLOGY OF STRESS

The causes of stress may be physical, psychological, social or environmental. Stressors can be explained as an event that occasions stress
in an organism. A stress response is the compensatory reaction the body makes to the disturbances caused by the stressor.

(i) Physiological and Psychological Stressors

Lovallo (1997) refers to physical stressors as those events that have direct physical threat value to his well-being. Whereas psychological stressors are those events that challenges to an individual’s well being because of how one perceives them.

Physical stressors pertain to factors such as noise, cold, heat and infection. The psychological stressors include events such as loss of a loved one, failure in job or else breakdown of a relationship. The psychological situations inducing emotional stress could be associated with receiving an insult, experiencing guilt or embarrassment, agony, terror, grief or shame. Most of the stressors physical or psychological do have an emotion attached to it.

(ii) Environmental Stressors

Sorenson, Malm & Forehand (1971) explain that the environment may too be a cause of stress. Weather of a particular type for a prolonged period of time may cause frustration and anxiety.

Metaphorically the social environment, involving the workplace, the institute or else the family and neighbourhood environment if not perceived adequately may cause stress. Udupa (2000) believes that
psychological maladjustment due to rehabilitation, rapid culture change in a new environment may lead to stress.

(iii) Social Stressors

Selye (1980) defined Social stress as an unfavourable perception of the social environment and its dynamics. Social stressors may involve adequate social performance and giving in to the demands, norms and cultures of a society. Work overload, competition for status and power and social instability may serve as stressors.

Social stress is stressful only after cognitive processing. The difference in rural or urban habitation and the adaptations that are to be made to their social aspects can cause stress. Lack of social support, structure and process, social class conflicts are causal factors of stress.

(iv) Individual Stressors

Individual stressors causing stress may involve an individual’s personality type. Those with Type A personality patterns who have excessive achievement striving, intense competitive drive, exaggerated sense of urgency and do two or more things at a time are more prone to stress (Friedman & Rosenman, 1974). According to Davison & Neale (1996) Weinder & Collins (in Press) believe that these people are more vigilant and active when coping with stress, which may lead to physical and mental exhaustion.
Stress may be caused due to cognitive dissonance, which is an emotional state produced by inconsistencies between simultaneously held cognitions or between cognition and behaviour. Morgan (1990) termed cognition as the mental events involved in knowing about the world. Stress may be caused due to work overload, a state in which more information is directed towards an individual than he can process in thought at a particular time.

Individual differences in their coping abilities may differ due to their different body constitution and psyche. Their being an introvert or an extrovert may be a cause of stress. Udupa (2000) noted that introverts are more susceptible to stress disorders than extroverts. Causes of stress may also lie in the genetic factors, as a psychosomatic constitution of an individual can become a genetically transmitted trait.

(v) **Life Events and Daily Hassles**

Holmes and Rahe (1967) devised a scale to quantify the degree of stressfulness of many different life changes. Changes in family due to death of a family member, broken homes due to parental separations, unacceptable norms laid by the elders may cause stress. Lazarus (1981) believed that what most of us face often is stress of dealing with daily life hassles. Such as a mother dealing with sending children to school, husband to office, dealing with parties, servants, needs of the elders and other upcoming emergencies. These functions and hassles may occur in lives of men or women, children, adolescents or elders.
(vi) Conflict, Pressure and Frustration

Causal issues also pertain to various types of stress such as frustration, conflict and pressure. Frustration occurs when an individual’s strivings are blocked either by obstacles toward the attainment of a goal or absence of a desired appropriate goal. Frustrations may arise due to physical handicap, psychological barriers, ethical and moral restraints or lack of needed competencies and inadequate self-control.

Conflict arises when a person has to choose between two or more goals. The necessity of choosing one out of the two goals causes cognitive strain. Approach-approach, approach-avoidance and avoidance-avoidance are those conflict situations usually faced by an individual. Stress not only arises out of conflicts and frustrations but also from pressure to achieve goals. Pressure may arise from internal or external sources, pressure when excessive may affect our adjustment resources and cause breakdown of organized behaviour (Coleman, 1988).

(B) EFFECTS OF STRESS

Stress can affect an individual physically, psychologically and behaviourally. Lazarus & Folkman (1984) believe that when individuals are confronted with new or challenging environment primary appraisal occurs to determine the meaning of events, whether the events are positive, neutral or negative. At the same time secondary appraisal occurs where one assesses
his coping abilities and responses and whether they are sufficient to meet the challenge or threat of the event.

Lovallo (1997) on a psycho sociological explanation believes that there is a strong parallel relationship between primary appraisals and functions of the frontal lobe, which allow us to give meaning to events. During secondary appraisals one must be able to use alternative coping strategies with meaning and emotion to choose the best alternative.

(i) Physiological Effects of stress

Physiological response or effect leads to psychic and bodily changes in an individual affecting an individual’s health. Taylor (1999) explained that the stress response involves two inter related systems which are ‘sympathetic adrenomedullary system’ and ‘hypothalamic- pituitary-adreocortical axis’. The cerebral cortex perceives the events encountered as threatening leading to a chain of reactions mediated by the appraised events. Information from the cortex is transmitted to the hypothalamus leading to sympathetic nervous system arousal or the flight or fight responses. This sympathetic system stimulates the adrenal medulla glands, which secretes catecholamines, epinephrine and nor epinephrine. Sympathetic arousal leads to increased blood pressure, heart rate, sweating and constriction of peripheral blood vessels.

The hypothalamic- pituitary- adrenocortical is also activated in addition to the sympathetic nervous system. The basis of this was described in Selye’s general adaptation syndrome involving the non-specific
physiological reactions that occur as response to stress involving alarm, resistance and exhaustion.

The hypothalamus releases corticotrophin releasing factor, which influences the pituitary gland to secrete adrenocorticotropic hormone, which further has an effect on the adrenal cortex releasing corticosteroids. The cortisol conserves stores of carbohydrates, helps to reduce inflammation during injury and helps the body to return to its steady state after stress. The hypothalamic-pituitary-adrenocortical activation produces increased growth hormone and prolactin secreted by the pituitary gland. Elevations in the opioids beta-endorphin and enkephalin are found in the brain in response to stress and these substances may play a role in immune related disorders and psychiatric diseases (Cohen, Kessler & Gordon, 1995).

Udupa (2000) observed that three basic neurohumors acetylcholine, catecholamine and histamine help the brain to maintain correct homeostasis. Acetylcholine liberated by most of the cells of the central nervous system is the primary humoral agent. As an effect of stress an individual experiences the effect of sudden elevations in catecholamines and these fail to serve their purpose. The brain maintains correct homeostasis by liberating various neurohumors. The three basic neurohumors are acetylcholine, catecholamine and histamine and its related substances. Catecholamines affect various tissues and are believed to cause adjustment of the immune system (Taylor, 1999). The cerebral cortex regulates the functions of the entire body by sending its nerve impulses to organs and tissues, it also regulates the microcirculation to each organ through the liberation of neurohumors in appropriate quantity. These neurohumors help in the secretion of various
hormones in required quantity to meet the need of various organs and tissues. The healthy state of the cerebral cortex is the seat of all our psychic activities, balanced output of neurohumors and hormones, which ultimately lead to normal functioning of our tissues, glands and organs.

When there is excess of stress or environmental disturbances, which are conveyed to the brain through the sense organs, functional disturbances may occur in various sense organs and tissues through the mediation of disturbed neurohumors and hormones.

(ii) Psychological effects of Stress

Psychological effects of stress may be accompanied by anger, anxiety, depression, irritability, tension and nervousness. The effect of psychological reactions of individuals may involve change in one’s mood. There may be behavioural dysfunctions due to stress such as alcohol or drug use, increased smoking, insomnia, under or over eating.

Cox (1978), Cox & Mackay (1981) incorporated Lazarus’ seven modalities and presented a multimodal transactional model of stress. Here the psychological processes are of prime importance. The response to stress is more due to an individual’s perceptions and abilities to deal with the event. Palmer & Dryden (1996) explain the multimodal transactional model in five stages with modifications. ‘Stage one’ involves pressures that are perceived by individuals from external sources in the environment, physiological and psychological needs which one needs to fulfill. ‘Stage two’ reflects the individual’s perception of the pressure and one’s ability to
deal with it. When one perceives that he does not have the coping strategies to deal with the situation, he proceeds to the third stage. The ‘third stage’ involves psycho physiological changes, these comprise of the stress response accompanied by anxiety, anger and guilt emotions. These emotions may have behavioural, sensory, imaginable, cognitive, inter personal and physiological components. This may further lead to behavioural and cognitive attempts to change the environment or escape. ‘Stage four’ relates to the consequences of applications of coping strategies. Here, again perception of coping strategies is applied and if one believes that the intervention is still not helping he may perceive himself as a failure. Which in itself becomes an additional strain. ‘Stage five’ is the feedback system where interventions may or may have not altered the external or internal pressures. If events have altered one may return back to his neutral state or else if interventions are ineffective one experiences prolonged stress.

(iii) Psychosomatic Effects of stress

Effects of stress also include psychosomatic disorders such as hypertension, coronary heart disease, ulcers, asthma, diabetes mellitus, thyroid, arthritis, and migraine headaches (Davison & Neale, 1996; Udupa, 2000). Jenkins (1971,1976); Rahe & Lind (1971) mentioned that there is a relationship between coronary heart disease and stressors such as work overload and chronic conflict. Various stressful conditions determine their role in causing hypertension such as stressful interviews, natural disasters, anger and anxiety.
The immune system of the body is too affected due to stress. Ader (1995) referred to psychoneuro-immunology as the interactions among behavioural, neuroendocrine and immunological processes of adaptation. According to Taylor (1999) a number of studies suggest that many commonplace stressors can adversely affect the immune system. Psychological stress also suppresses cellular immune functions in some individuals.

2.4 ADOLESCENCE AND STRESS

Stress is an inevitable part of growing up. Adolescents become more self aware, conscious and their thinking becomes more critical and complexed. Stress results due to their lack in academic performance and motivation as primarily their attention is divided among a lot of spheres.

Stressors may be associated with an adolescent’s physiology, daily life events, the individual himself and his personality traits, emotions, cognitions and education. Inadequate interaction with the environment and people may also cause stress.

(i) Family

Family may be an important source of stress when it is non supportive, authoritative, insensitive and broken. Family is that support system which helps one to cope with stress. Individuals who perceive high family cohesion remain relatively healthy under stressful situations (Hollahan & Moss, 1982). Family environment is considered as a major
factor in adolescent’s psychological adjustment (Lofgrem & Łapsen, 1992). Santrock (1990) believes that lack of affection and emotional support, high control and a strong thrust for achievement by parents during childhood are related to depression. Habitual negative thoughts may also be problematic for depressed adolescents.

Gill and Sokhey (2001) report of studies conducted in the past, which reveal that children with divorced parents manifested diverse problems, which includes psychosomatic disturbances. Such problems have been found more among adolescents, as this is the age of turmoil. Adolescents at this age require attention and guidance from both parents to meet the challenges faced by them. Parental separation or divorce makes them go through more stress making them vulnerable to psychological and behavioural problems.

Morrison & Andrew (1995) found that parental divorce has less deleterious effects on girl’s general behavioural problems. The girls tend to internalize the problems while boys externalize their problems (Emery, 1982: Cherlin, 1992). Studies by Cox & Cox (1984); Wallerstein (1991) revealed that individuals who do not have a secure home base may suffer from serious and lasting distorted personalities. Family climate and relationship styles play a role in adolescent’s self evaluation and psychological health (Aydin & Oztutuncu, 2001).
(ii) Peers

Peer groups play a crucial role in the everyday lives of adolescents. Peers for the teenagers are a source of oneness. Peers serve as the basis for comparisons between an individual’s own actions, attitudes and feelings and those of others (Seifert & Hoffnung, 1991). Peer acceptance gives the adolescents a sense of social security, serves as a base for developing a sense of personal identity and helping one become more independent.

Conformity, social acceptance and popularity are associated with peer group relationship. For an adolescent not being accepted by his peer group may be a source of stress. Teenagers who are not admired, are rejected and neglected are prone to face stress. Those who are uncomfortable with others, lack self confidence are nervous and withdrawn or possessive are more vulnerable to stress. Those adolescents who handle their discomfort in an aggressive or demanding manner are likely to be disliked and rejected (Conger, 1977) and this may cause stress.

Peer pressure is a crucial factor during adolescence. Adolescents wish to be accepted and feel as a part of the crowd (Ghodse, 2004). Not knowing how to select a peer group, how to behave in that group and how to be influential may lead to stress.

(iii) Education

Education and educational institutions may too be a source of stress among adolescents. School plays a central role in the development of adolescents as they spend most of the day’s time in schools. Educational
institutes influence identity development through academic demands of formal study course. Identity is also developed through exposure to teachers who emphasize academic achievement, motivation to learn, skill mastery, self-improvement and attitudes towards responsibilities (Siefert & Hoffnung, 1991).

Adolescents who are incapable of dealing with long school hours, difficult syllabus and unable to meet the expectations of teachers have to deal with stress. School systems and activities such as huge amount of homework, long hours of study schedule, too many extra curricular activities cause stress among adolescents. Being occupied with work and finding no time for themselves, may result in losing interest in studies. Teachers concern, indifference and rejection also may be a causal issue of stress. Adolescent students problems are related to issues pertaining to studies, learning, scoring grades and marks, failing, insufficient or undesirable educational guidance at times and the teacher's attitude all work as stressors at one point of time or other in the lives of the adolescents.

(iv) Health

Health of adolescents highly depends on one's understanding of the relationship between their behaviour and health. Seifert & Hoffnung (1991) believe that in adolescence one is able to understand health in terms of multiple causes and cures. He realizes the inter relationship among thoughts, feeling and changes in physical health as significant.
Long hours of study and working in tensed situations may cause backaches, headaches and strain the eyes causing stress. Among girls menstrual period irregularities or pain may especially be a cause of stress as menstruation involves a certain degree of inconvenience and discomfort. Risk of Aids, pregnancy, drug and alcohol abuse and violence may hamper an adolescent’s health (Slavin. 1994).

(v) Behavioural and Personal Issues

Behavioural and personal issues causing stress among adolescents may involve their own shortcomings and incapabilities to face emotional conflict at times (Blos, 1979) as transactions are quite stressful for many students. O’Neil (1991) reveals that for most adolescents emotional distress is temporary if one handles it successfully. For others stress may lead to delinquency, drug abuse or suicidal attempts. Adolescent’s unexplainable behaviour, loss of belief in oneself, lowered rationality, feelings of hopelessness and helplessness act as stressors. Adolescents increasing tensions and worries interfere with his personal, social and academic performance. His incapability to cope with these issues leads to anxiety, negative personal evaluation.

Pressures thus from parents, schools, teachers, friends, family; conflicts arising due to avoidance- avoidance, approach- approach situations and frustrations due to personal inadequacies are stressors that affect the adolescent’s aptitude, reasoning and performance further leading to negative mood.
2.5 NEGATIVE MOOD

Our current feelings and mood are termed as affect. Sorenson, Malm and Forehand (1971) stated, “a mood is a prolonged, unfocused feeling or emotions. If feelings and emotions are the waves moods are the tides.” The emotions that one recognizes and names in everyday life are interpretation based on experience. These interpretations involve a dynamic relationship between an organism and his environment. Moods are lower in intensity, longer in duration and less disruptive then emotions. The moods involving resentment, anxiety and depression are all negative in nature. Moods may vary due to personal, social or physical conditions. Negative mood may impair performance or else a low performance may give rise to negative mood.

The negative mood may be angry, irritable, reckless, despairing, fretful, sullen, and sad whereas the positive mood may be happy, thrilled and excited. Our perceptions are affected by our moods, while experiencing the positive moods one copes up with set backs and discomforts, whereas when one is experiencing a negative moods he enlarges every thing that goes wrong and perceive everything as being unpleasant and stressful.

Negative moods and emotions may bring with itself tension, headaches, and insomnia, ultimately leading to stress. Negative emotions arousal or mood effects cognitive and behavioural activity. According to Beck (1990) bad mood may affect how one works, interacts with other people and how one thinks about problems.
(i) **Physiology and Emotions**

The autonomic nervous system is particularly important for emotions. It regulates internal body activities involved in maintaining and replenishing the body. It controls heart muscles, stomach and intestines and the release of hormones from the glands such as pituitary and adrenal. The somatic nervous system regulates interaction with the environment, sensory inputs and muscles movements (Beck 1990). The parasympathetic portion is concerned with digestive system and the sympathetic portion is concerned with the emergency functions such as fight or flight. The limbic system and brain stem are particularly important for emotion.

During negative or positive heightened activity adrenaline hormone is excreted and prepares the body for emergency activity also including release of blood sugar, rapid breathing, quicker circulation of oxygen and perspiration. Continued emotion arousal over a long period of time may produce stress diseases. Psychological changes associated with emotions or else the common measures are heart rate, blood pressure, galvanic skin response, respiration rate, blood volume change, muscle tension, and skin temperature (Beck, 1990).

The right hemisphere is relatively more concerned with holistic impression. Kalat (1988), Rinn (1984) give evidence that right hemisphere controls emotions recognition and expression better than the left. Yet another aspect suggests that both hemispheres contributed to emotions, but in different ways. There is right hemisphere dominance for negative emotions and left hemisphere for positive emotions. Thus, damaged left
hemisphere is associated with excessive worry, pessimism and crying (Trucker 1981).

(ii) **Leventhal’s Information Processing Model of Emotion**

The essence of cognitive approaches to emotions is that emotions depend on how we appraise or evaluate situations (Leventhal, 1979, 1980, 1984; Leventhal & Mosbach, 1983; Leventhal & Tomarken, 1986). The model consists of four integrated systems (i) an interpretation mechanism which responds to emotional reaction; (ii) an expressive system, feedback from which helps to define subjective emotional state; (iii) an action system maintained by (iv) bodily reaction. Leventhal proposes two phases of the model the perceptual, motor phase and an action phase. The ‘perceptual, motor phase’ involves and evaluative phase in which a decision is made regarding positive of negative nature of incoming stimuli which are subsequently categorical in emotion terms on the basis of feedback from facial expression and autonomic system.

Leventhal has emphasized three levels of processing involved in emotional experience involving an expressive motor mechanism involving in it innate set of expressive reactions, schematic or perceptual memory that codes previous emotional situations, experiences and reactions and a conceptual or abstract memory which contains rules about emotional experiences and behaviour.
(iii) Emotions and cognition

Lazarus (1966, 1968) and Lazarus, Kanner & Folkman (1980) proposed a series of cognitive appraisal which mediate responses to environmental events. Primary appraisal involves evaluation of events in terms of its relevance to well being positive or stressful. Lazarus gave three distinguished classes of stressful evaluation of as harm or loss, threat and challenge. Secondary appraisal involves an evaluation of the resources, both personal and environmental which are available to deal with situations. He emphasizes the fact that cognitive process is central to emotion. Lazarus (1984) argues that “cognitive activity is a necessary precondition of emotions because, to experience an emotion people must comprehend that their well being is implicated in a transaction for better or worse.”

Zajonc (1980, 1984) however has argued that affect and cognition can function independently and that affect can precede cognition. Beck (1990) with regard to cognitive appraisal theory puts forth the fact that most psychologists found it difficult to believe that, difference in level of activation alone could account for perceived difference in emotional experience.

The new approach came to the forefront with the attribution theory of social psychology. The attribution theory is concerned with how people seek and find causes for behaviour. People thus do seek causes to account for how they feel, and to interpret their feelings in terms of situations in which they are. Such as the feeling of arousal might be interpreted by different individuals in several ways. An individual on being insulted or
abused might interpret his arousal as anger or disgust, or else when one is being approached by a tragic event one might interpret one’s arousal by fear. Such interpretations are regarded as crucial to emotional experience. Cognitive evaluation may rest upon affective process, sensory process or both. But evaluated judgments are cognitive event and affected processes are basically not judgments.

(iv) Psychological, physiological and environmental causes of negative mood

The causes of negative mood lies with almost all aspects of life dealt with pessimism. Psychological causes of negative mood may include one’s own personality traits, habits and types. An individual’s own faulty perceptions about one’s feelings, attitudes, society and people around including family and friends may cause negative mood. One’s work environment, failure, short comings, low self-esteem and severe prolonged disease conditions do tend to serve as factors causing negative mood. A person’s negative cognitions or thoughts, memories, which are disruptive, and irrational, insufficient coping mechanisms, work over load and fatigue all may serve as causes of negative mood.

There may be many variations in mood or moods swing. Individuals vary in their subjection towards moods, some have more noticeable ups and downs. Sorenson, Malm, Forehand (1971) explains that physiological fluctuations of energy are some times responsible for mood. Events act like trigger that sets off moods. On physical basis an individual’s imperfect physique, his prolonged illness, his persona, way of carrying himself or being handicapped, may all lead to negative affect or mood. Causes, which
are obvious and negative in nature, can be a quarrel, a mishap, a loss, unfair rude treatment, or failure. Negative moods can spoil the good things and make the bad things worst.

The environment and social causes may include societies unacceptable norms, corruption, faulty administration, feeling of insecurity regarding one's self protection, power, status and monetary materialistic possession leading to negative mood.

(v) Mood Disorders

Negative moods can cause anxiety and stress when experienced for a long period of time thereby hampering one's cognition, perception and attitude in the process of living. This negative mood when not rationally analyzed begins to cause a lot of psycho physiological disturbances and may take the form of what is categorized as moods disorder.

Davison and Neale (1996) define moods disorder as, disorder in which there are disabling disturbance in emotions, one of which is depression. According to them “depression is an emotional state marked by great sadness and apprehension, feelings of worthlessness and guilt, with drawl from others, loss of sleep, appetite and sexual desires or loss of interest and pleasure in usual activities.” Beck and other have found that depression and certain kinds of thinking are correlated but a specific causal relationship cannot be determined from such data. Depression could cause negative thoughts or negative thoughts could cause depression.
2.6 ADOLESCENCE AND NEGATIVE MOOD

Negative affectivity is a general factor of subjective distress and dissatisfaction, it involves states of fear, disgust, loneliness, nervousness, guilt and anger (Watson & Kendall, 1989). Mood swings are very common among adolescents and this may cause instability in their behaviour pattern if it increases in intensity. Adolescents may find difficulty in regulating their negative moods and thoughts leading to anxiety, stress and low self-esteem. Watson & Clark (1984) defined negative affectivity as a pervasive negative mood marked by anxiety, depression and hostility.

(i) Causes of negative mood

Emotional development involves physical, behavioural, cognitive, personality, social and environmental factors and their interactions. Emotions, which are unpleasant or aversive, produce negative affect. Baron & Byrne (1998) reveals that cognitive theory of aggression suggests that aggression, which is a negative emotion, stems from a complex interplay between cognitive factors, affective states, current mood and experiences, thoughts and memories elicited by them and cognitive appraisals.

Adolescents when unable to regulate their negative mood may experience feeling of not being able to feel happy, may sulk most of the time and do not welcome any change in their daily lives such as going out with friends or watching a movie. Negative mood may be a result of family discord, fight with friends and being let down by others. Guilt, shame, insult, inability to perform well academically and not being able to effectively deal
with life's daily events all result in negative mood. Catenzaro and Mearns (1990) believes that a generalized expectancy for alleviating negative moods can be precisely defined as a response expectancy that generalizes across situations in which negative mood states may be experienced.

(ii) Effects of negative mood

Adolescents must be capable of regulating their negative mood, as not doing so may cause hindrance in all their cognitive, social, behavioural and interpersonal domains. Adolescents many a times find it difficult to rationally evaluate their emotions and find reasons for their occurrence. Negative mood may cause negative self-evaluation. Negative affect may cause an adolescent to stay aloof and evaluate events and other people negatively. Individuals who are chronically high in negative affect are more vulnerable to falling sick and may show distress, physical symptoms and illness behaviour even on not getting sick (Taylor, 1999).

Clark and Watson (1991) tripartite model of anxiety and depression share a similar dimension 'negative affect', which includes several aspects of general emotional distress such as sadness, anger and fear. Major depression is one of the most common psychiatric conditions to affect adolescents. Negative mood is often accompanied by unpleasant feelings related to failure, loss of friends, quarrel with parents, feelings of inferiority and lack of popularity leading to feelings of inadequacy and insecurity.
When one is unable to cope with his negative mood for a prolonged period of time one may make this as being a way of living. Persistent negative mood may leave individuals shattered and such individuals may protect themselves by becoming passive recipients of whatever life brings them (Coleman, 1988). An individual must be capable of regulating his mood, as emotional insulation is an important mean of defense against unnecessary disappointment and hurt.

Negative mood disorders such as depression may result in an adolescent getting involved in alcohol or drug abuse and suicide too. Beck (1987) reveals that in adolescence depressed individuals acquire negative schema through an unrelenting succession of tragedies, social rejection of peers, criticism of teachers or depressive attitude of parents. “The negative schemata together with cognitive biases or distortions, maintain what Beck called the negative triad: negative views of the self, the world and the future,” (Davison & Neale, 1996). Zung & Green (1974) reported that about three fourth of all individuals who commit suicide are depressed at the time of suicidal act. The individual is often hurt, discouraged and seems to retreat into himself in an attempt to comprehend what is happening and think through a course of action. Though it is seen that during periods of intense stress the individual’s ability to think rationally is impaired (Coleman, 1988).

Thus as understood the negative mood may hamper the growing adolescent. That which started as ‘feeling low’ expression of emotion for minor daily events, across one’s life may dwell deep into the human system when not regulated. This negative mood may take on as a serious illness or
disorder or may cause an individual to fall prey to suicidal acts, alcohol or drug consumption. Negative mood regulation is important to eliminate adverse effects that may affect an adolescent’s attitude, cognition, beliefs, work performance, personality and self-evaluation. So that a person is not only able to regulate negative mood but also cope up with the dynamic events related to the self and society. Relieving anxiety and stress may further enable one to achieve much more in life and further be motivated to do so.

2.7 ACHIEVEMENT MOTIVATION

Motivation includes three distinctive aspects involving a motivating state that impels an individual towards some goal, the behaviour displayed involves striving for the goal, and the achievement of the goal (Morgan, 1990). Motivation comes from the Latin word moverer meaning to move. Psychologists use the term drive more often in discussions of psychological urges such as hunger, thirst and sex. Need is more often applied to complex motives for achievement, social approval and status.

Beck (1990) explains that the regulatory theorists study the psychological aspects of motivation in laboratories, whereas purposive theorists deal with behavioural, social and personality related aspects of motivation. Motivation refers to a set of concepts, which are best defined as intervening variables. Motivations have many behavioural and psychological manifestations and often these are not correlated with one another.
Achievement motivation or need for achievement relates to accomplishment, mastering, manipulating and organizing the physical and social involvement. Achievement motivation involves overcoming obstacles, maintaining high standards of work, competing through and striving to excel one’s previous performance and involving rivaling and surpassing others (Lindgren, 1993).

(i) McClelland’s theory of Achievement Motivation

McClelland, Atkinson, Clark and Lowell (1953) offered a hedonic interpretation of the need to achieve. Cues that are associated with pleasurable positive events produce a rearousal of that affect. An individual is more likely to indulge in those achievement behaviours that have produced favourable results previously. Whereas one may adopt avoidance for those achievement behaviours that have had negative outcomes such as failure and punishment (Beck, 1990).

Achievement motivated people prefer working on a problem rather than leave the outcome to chance. These people take a moderate task involving moderate degree of risk as they feel that their efforts and abilities will probably influence the result. Achievement motivated individuals are more concerned with personal achievement and are in a continuous habit of doing things better and seek relevant feedback for the task they perform. These achievement motivated people are likely to be a part of those families in which parents hold different expectations for their children (Beck, 1990).
Hersey & Blanchard (1985) bring forth the fact that the need for achievement is a distinct human motive that can be distinguished from other needs and can be isolated and assessed in any group.

(ii) Atkinson’s theory of Achievement Motivation

Atkinson (1964) explained the theory in the framework of expectance-value theory and emphasized the role of conflict between need for achievement and fear of failure.

Beck (1990) explains that in Atkinson’s theory the tendency to engage in achievement motivated behaviours is a multiplicative function of the motivation for success which is similar to need for achievement, the probability for success and the incentive value of success. Those individuals having high need for achievement possess a strong desire to succeed and are unsatisfied if the task is too easy. Too difficult a task with high incentive value but little chance of success giving little sense of accomplishment is also not desirable to them.

(iii) Attribution theory of Achievement Motivation

Weiner (1985) gave a detailed attribution theory of achievement motivation. This theory deals with the perceived causes of success and failure, characteristics of causal thinking and subsequent emotional experience in relation to achievement behaviours. Causes of success or failure may be internal or external as one attributes success usually to himself and failure onto an outside factor. The aspect of stability or
instability involves attributing success to ability, which is relatively enduring characteristic or efforts, which may be unstable. Controlled and uncontrolled factors involve lack of trying that is internal, unstable and controllable cause of failure, but illness could be an uncontrollable source of failure.

Beck (1990) defines attribution as an inference about causes. An individual infers causes from events that he observes including his feelings and behaviour. Some individuals respond to failure by trying harder whereas others give up. Attribution involves causes that an individual finds for his own or others behaviour.

(iv) Competence and Power

Competence and power are two related factors for achievement motivation. Bandura (1977,1982) proposed the concept of self-efficacy, which is the expectancy that one can perform anything successfully, those with greater self-efficacy tend to achieve and perform better. Self-efficacy increases with personal accomplishment and may increase or decrease on seeing individuals similar to us failing or succeeding in a task. The persuasion that one is capable of performing a task, but seeks failure may beak down his notion and emotional arousals thus can affect our feelings of self-efficacy.

Beck (1990) proposed an assumption that “like achievement motivation, power is a motive that has to be engaged by circumstances. Power is a latent motive until aroused.” Power motivation may selectively tune an individual into power related cues in the environment.
Achievement motivation has a multidimensional nature. It involves aspects from an individual's characteristics to that of the society he is a part of. Achievement motivation is related to success and failure, involves competence, power and future orientations. Attainment of goals with great efficiency, competition, accurate performance, high aspiration and success are characteristics of high achievers. Stress and anxiety may be an inevitable concern for high achievers as they cannot take failure, loss of power and prestige, low self-esteem or efficacy. Those with low achievement motivation may also suffer as they may take failure as a way of life. Achievement motivation may differ among individuals across cultures, work fields in which they are involved and may acquire different meaning at different stages in an individual's life.

2.8 ADOLESCENCE AND ACHIEVEMENT MOTIVATION

In the field of educational psychology the most important type of motivation is the achievement motivation, which is the generalized tendency to strive for success and choose goal oriented, success-failure activities (Slavin, 1994).

The adolescent achievement motivated students wish and expect to succeed and on experiencing failure they make double efforts until they succeed (Weiner, 1989). Adolescent's achievement motivation is usually seen among students with regard to their performance and success in school tasks involving test and examination grades, achievement in sports and other curricular activities. A student experiences satisfaction in work itself when
the job is performed well and further experiences a sense of completion and satisfaction, which thereafter involves a sense of competitiveness and winning (Spence & Helmreich, 1983).

Stipek (1993) believes that students high in achievement motivation tend to succeed in school tasks. Achievement motivation may lead to success in school or else success in school may lead to high achievement motivation as one contribute to the other. The adolescent students who do not experience success in achievement settings may lose the motivation to succeed and may turn to other activities such as sports and dramatics or else, to negative activities such as drugs, alcohol or delinquency.

(i) Motivational Goal Orientation

Achievement motivation reflects achievement related attitudes and behaviours displayed by learners. There are certain students who are motivationally oriented towards learning or mastery goals and others oriented towards performance goals (Dweck, 1986a; Nichollas, 1984). Students with learning goals perceive the purpose of schooling as gaining competence in the skills being taught, whereas, those students believing in performance goals mainly seek to gain positive judgments of their competence and avoid negative judgments. Those adolescents striving towards learning goals tend to choose difficult courses and seek challenges. Those with performance goals avoid challenges, focus on getting good grades and take easy courses. Mastery oriented learners expect to make mistakes as they believe them to be a valuable source of feedback in their
learning process, those who are learned helpless learners fear making errors as they believe that mistakes are signs of inadequacies (Covington & Berry, 1976; Papert, 1980).

It has also been seen that mastery oriented learners welcome academic challenges whereas the learned helpless students are reluctant to take challenges where success is uncertain, tend to become easily distracted and are unable to concentrate when faced with challenging tasks (Diener & Dweck, 1978; Dweck & Elliott, 1981).

(ii) Learned Helplessness and Attribution

Learned helplessness can arise from inconsistent, unpredictable use of rewards and punishments by the teacher, such that adolescent students feel that there is little they can do to be successful thus affecting their achievement motivation. Dweck (1986b) has found that focusing on learning goals as opposed to performance goals among students may reduce helplessness. Learned helplessness is an extreme form of motive to avoid failure and it is a perception that one is doomed to fail no matter what he does or how he performs (Slavin, 1994).

(iii) Personality, Behaviour and Achievement Motivation

DeCecco and Crawford (1977) suggested that the problem not only lies in accommodating the present entering behaviour, but also to develop new entering behaviour which in turn and time will enable the adolescent student to accomplish advanced instructional objectives. The vigour with
which the student pursues instructional objectives is a product of expectancy and valence and there is expectancy of finding satisfaction in mastering difficult and challenging performances.

Those individuals who are high in agency have been shown to be more capable and able to succeed at new tasks, whereas, those who are high in communion are viewed as followers needing more guidance (Bem, 1974). Strag (1997) reported Baumrind (1991) finding which reveal that an appropriate mixture of agency and communion may enable adolescents to be ideally situated to approach the challenges faced by them daily. Baumrind (1991) had suggested an optimum level of competence and psychosocial maturity where an individual is capable of leadership and decision-making. Where the individual possesses well-developed, self-regulatory and monitoring abilities and is able to operate constructively in his everyday life.

Strag (1997) has also reported that Dweck and her colleagues have linked young learners view of intelligence to their motivational profile. Those with an incremental view of intelligence tend to adopt achievement related attitudes and behaviours consistent with mastery orientation. Whereas those with entity view of intelligence adopt attitudes and behaviours, which are more consistent with learned helplessness (Dweck, 1986b; Dweck, 1989; Dweck & Bempechat, 1983).

Models of achievement motivation suggests association among adolescent student’s beliefs about the nature of intelligence, perceptions about themselves and of elements within the learning context, their achievement related attitudes and behaviours that they adopt (Dweck, 1991).
Thus an individual’s own behaviour, intelligence, helplessness, attitude, self-worth and beliefs about success and failure contribute to his achievement motivation.

(iv) **Parents and Teachers role in Achievement motivation**

It is seen that parent attachment is positively associated with student’s motivation to succeed. Social and familial backgrounds of students contribute to the adolescent’s educational achievement and social competence thereby affecting achievement motivation. Attachment relationships contribute in providing a secure base from which the early adolescent can explore his environment (Armsden & Greenberg, 1987).

Aydin and Oztutuncu (2001) believe that relationships become relevant and contribute to young adolescent academic achievement and motivation. Parental attachment may allow adolescents to achieve a sense of academic competence, actual school achievement by giving them secure emotional foundation. Even though during adolescence attachment to peers becomes stronger yet adolescents seek support of parents and continue to consider them as important people in their lives (Paterson, Field & Pryor, 1994).

Teachers also play an important part in the lives of adolescent students. Negative feedback from teachers, peers and school experience hinders the achievement motivation of the adolescents. Teachers can help the students overcome and eliminate their weakness, boost student’s positive strengths and create new challenges such that one uses his own knowledge
and skills to solve problems (Slavin, 1994). Teachers can establish expectations from their students such that these expectations are self-fulfilling. Good (1987) believes that teacher’s expectations for their students do to some degree make the student live up to the expectations of the teachers. There may be factors associated with the teachers that may negatively reinforce his attempt to contribute to student’s social and psychological growth.

The educational institutes play a very crucial role in the development of adolescents (Johnston & Bachman, 1976) thereby further helping in adolescent’s achievement motivation. Anxiety is a regular companion of education and hinders a person’s achievement motivation. Naveh-Benjamin (1991) believes that anxiety can block school achievement in many ways.

Achievement motivation is an important concept of the growing and experiencing adolescent. It is through minor early achievements such as grades in academic tests and exams and excellence in other school activities that an individual gets to experience success and learn from his failures and reach new heights in life ahead. Achievement motivation involves an adolescent’s intelligence, success-failure ratio, mastery or performance goals and learned helplessness. Relation with parents, teachers and the educational institutes too play an important role in the adolescent’s achievement motivation. Achievement motivation during adolescence is the outcome of what success means to the youth, his expectancies and incentives attached to the goals.
2.9 SELF ESTEEM

The individual acts largely in a way consistent with the self. The self is not a static unchanging entity and may change as a result of several factors, the most important being maturation and learning (Hall & Lindzey, 1957). Self is conceived as that which develops as a result of interaction of the individual with his environment.

The self according to Keen (1970) is the experienced core of the personality. It consists of one’s “assumption about, judgments of, and feelings toward oneself as a person- a part of his subjective, experiential life.” The self as object has qualities like other objects and is defined by essence but the self as a subject is a pure existential experience. “The self is defined as a configuration of roles expressed in self- others expectations and observable in self- other interactions,” (Chu, 1985). According to Chu the self develops out of interactions with three broad entities of his environment (i) significant other (ii) objects and ideas and (iii) beliefs and values.

(i) Roger’s Self Theory

Self-concept is the central construct of Rogers’ theory. Rogers (1951) postulated certain propositions in his theory of personality revealing that an individual exists in a constantly changing world of his own experiences of which he is the center. The reality for the individual is his own perceptual field, knowledge of the stimulus alone is not enough to predict the response. The individual reacts as a whole to the phenomenal field. One has a basic tendency to actualize, maintain and enhance his self.
The differentiation of the self is the result of interaction between the individual and the environment, further the values attached to experiences and self-structure taken from others may be perceived in a distorted way. Conflict arises when the introjected values are in disagreement with the true values. When one is able to accept experiences without any distortion, one is able to lead a healthy and integrated life.

The individual’s perception of himself and the values attached to him, his perception of himself in relation to other persons and values attached to them and further the individual’s perception of the various aspects of the environment and the values attached to them. As the perception and values attached to other people and environment change from time to time, the self concept too is not fixed or static (Rao, 1999).

(ii) **Self Concept- Self-Esteem- Ideal Self**

Self esteem comprises of the evaluation an individual makes about the Self (Harter, Marold & Whitesell, 1992). Self esteem is shaped by the feedback received from the environment and other people and an individual’s own appraisals of the feedback (Sullivan, 1953).

Self-esteem is a comparison between self-concept and ideal self (Burns, 1982). ‘Self-concept’ involves the description an individual gives of himself. The self-concept is very basic in young children but becomes comprehensive as one grows and learns about his self. A person thus defines himself on aspects comprising of his relationship within and with others, abilities and talent at academic work, temperament, sport, religious ideas and
his ability to manage his life. The ‘ideal self’ is a person’s belief regarding how he should be, which comes from actual or implied critical judgements by significant people in our lives or social comparisons made of oneself with others and thus set ideals accordingly (Adler, Rosenfeld & Proctor, 2001). Self-esteem involves how much individuals value their characteristics and is a judgement about whether their abilities and qualities meet or fall short of the standards that one believes to be ideal (Pope, McHale & Carighead, 1988).

The self-esteem and self-concept never overlaps completely and if this happens one would have no ambitions or goals to strive for (Porter, 2002). The working self concept shapes and controls the ‘interpersonal’ behaviour involving the affect regulation, motivational processes and self relevant information processing and the ‘interpersonal’ processes including social perception, comparison and interaction (Markus & Cross, 1990).

(iii) Self-in-Relation Theory

The eastern concept of self emphasizes on attending to others and harmonious interdependence. The concept of self, others and their interdependence differ among cultures (Phan, 2005). Markus & Kitayama (1991) suggested that many Asian cultures insist on the fundamental relatedness of individuals with each other. The self in relation to specific others emphasize individuals as not separated from social context but as more connected and less differentiated from others.
Individual self is motivated to become a part of varied interpersonal relationships. The interdependent self seeks to know and understand his social surroundings and be sensitive about others and social situations in which these others exist. When individuals are in direct interaction with others and perceive themselves as interdependent parts of larger social wholes, they understand others better and ensure a harmonious social interaction. Thus these interdependent selves may develop a rich elaborative store of information about others and the self-in-relation (Phan, 2005). Such interdevelopment of the self in relation to others enhance one’s self esteem too.

2.10 ADOLESCENCE AND SELF ESTEEM

The need for self-esteem is regarded as the core concern of humans and is supposed to benefit people in many ways (Baumeister, 1998). Self esteem changes over childhood and adolescent years. The self-esteem gradually rises in adolescence especially for those who perform well in school and other activities. The grades given to the students give them a chance to compare themselves with others in work and play. Adults must provide experiences that let children succeed, feel good about themselves, thus maintaining their enthusiasm and creativity (Canfield, 1990).

Harter (1990) purports that the self-image and self-esteem are constructs of adolescent’s psychological development. Self-esteem has often been assessed among domains of physical attractiveness, peer acceptance or relationship, academic competence and behaviour. The self esteem overall
increases during the adolescent years (McCarthy & Hodge, 1982; O’Malley & Bachman, 1983).

(i) Development of Self Esteem

The development of self-esteem involves acceptance as a prime factor with regard to adolescent’s personal and social development. Family, peers and teachers play an important role in the development of a positive self-esteem. Slavin (1994) explains that if one maintains the notion that different students need help with different skills at different times one may seek change in performance. Adolescent’s self esteem is much placed on their acceptance among peer groups. Self-esteem among adolescents is much placed on the physical attractiveness and body image that an individual possess and compares himself continuously with his peer groups. Peer comparison is also done in relation to marks or grades, sports and other curricular activities that one performs.

Hamachek (1976) believed that an adolescent goes through a period of refinement where teachers and other professionals through the medium of a meaningful relationship can act as positive forces in helping youths define themselves in healthy self-actualizing ways. An individual lives in a social world and the self is a social product. Adolescent’s sense of self is the result of not only his ideal self but also how he views himself to others.

Self-esteem in adolescence is a result of the impact of parents, their child rearing practices, attachment, their authoritative or democratic practices used and their ability of enhancing their child’s creativity.
Adolescence is the time when the self expands and matures. The self is understood better when viewed within a larger framework of comparative interpersonal relationship (Hamachek, 1976).

**(ii) Positive and Negative Self Esteem**

Positive self-esteem is a result of how an individual values himself. This self-value depends on the achievements that the adolescent has made especially in academic and other tasks during this stage of youth. The adolescent’s cognition, personality, attitudes, social relations and performance contribute to his high self esteem. Achievements of an adolescent, which are rewarding and satisfying often lead to positive self-esteem. Baumeister, Tice & Hutton (1989) concluded that high self-esteem people are motivated to enhance their public image and self-image.

Lindgren (1993) observed that distortions in self-perception occur when people realize that others know them better than they do. The perception that they are wrong in their self-appraisal may lead to a degree of defensiveness among these individuals. In turn this threatens their feeling of security. An adolescent who believes that he has no talent cannot change the perception unless he changes a great deal of what he believes about himself and the world. Adolescence is a crucial period of identity formation. Here the adolescent not only decides of what he is but of what more potentialities he is capable of which may lead to indecision.

Positive self-esteem is linked to optimism and negative self esteem to pessimism. Coopersmith (1975) believes that positive feeling of oneself
increases involvement and successful performance. Self-esteem is a set of attitude that one brings with him on facing the world and it includes beliefs of whether one can expect success or failure. It also includes belief of how much effort one should put forth, whether failure at a task would be hurting or whether a person will become more capable and competent as a result of different experiences. Positive self-esteem involves factors such as acceptance, approval, confidence and positive emotions.

Lack of self-esteem, self-acceptance, positive identity and self-evaluation may lead to feelings of distress (Rao, 1999). Those having a negative self-view have high negative affect and the typically low self-esteem person scores low in negative affectivity (Watson & Clark, 1984). Low self-esteem people are primarily concerned about protecting their image and may be more self-protective than people with high self esteem (Wolfe, Lennox & Cutler, 1986). Adolescents may face difficulty in looking out for reality in terms of his feeling of self-identity. Self-attitude of an adolescent differs in content direction, importance, consistency, stability and clarity, an individual tends to judge himself on the basis of these self-attitudes.

Negative self-esteem or feelings of self-deprecation are feelings of misery, which leads to self and social discontent. Archibald (1978) mentioned that in order to develop and maintain a healthy self, Cooley suggested that a person must be able to feel that he can exert a reasonable degree of control over the immediate environment, which includes other people. "In psychological terms self esteem provides a mental set that prepares the person to respond according to expectations of success, acceptance and personal strength," (Coopersmith, 1975). Low self-esteem
may be a result of too much criticism, shame, failure, guilt and feelings of with drawl, tension, helplessness and hopelessness, conflict and inhibitions.

The congruity between an individual’s self and his experience may lead to problems in adjustment further leading to anxiety and stress. Adolescents assess themselves from various disciplines. Attitudes about his self range from serene self-acceptance to bitter self-rejection. The adolescent is somewhat aware of the difference of what he is and what he wishes to be. In the adolescents point of view the self is the core of existence. The need for self-regard may lead to selective perception and even to distortion of experiences, which are in accordance with an individual’s feeling of self worth (Rao, 1999).

(iii) *Enhancing Self Esteem*

Enhancing an individuals self esteem involves all states of body, mind, emotions and behaviour, neglecting any one of them influences his self esteem (Stewart, 2003). Adolescents self esteem can be enhanced by efforts made by the individual himself and also his inter relationship with his parents, teachers, peers and other socially acquainted people. Teachers and parents positive remarks, helpful attitude act as driving force to help adolescents perform better and develop positive self-esteem. Opportunities to enhance self-esteem can also serves as incentives. Those students who are resistant and have failed time and again respond well to the esteem enhancement programs (Escalante, 1990; Weisman, 1991).
The factors associated to the individual’s own self in enhancing his self-esteem includes his efforts in developing a positive mental attitude. The adolescent has to find reasons for his failure. On examining himself and the environment thoroughly, the adolescent achieves a grasp over the alternatives and takes action to build his self-esteem (Stewart, 2003). Positive self-talk and affirmations such as regarding oneself as a unique individual and being responsible for his own behaviour helps one to analyze himself better.

An individual’s attitude, success and failure, forgiving oneself for making mistakes further promising not to repeat them and taking responsibility of one’s own life helps a person to build up his self-esteem.

The adolescents may enhance their self-esteem by learning to think independently. Starting their day with positive thoughts and believing that all the energy they need lies within them may help the adolescent in increasing his self-esteem. Getting better sleep, controlling anger, setting goals, and encouraging one another act as buffers in dealing with an individual’s negative self esteem (Stewart, 2003).

There are various therapies and coping strategies to deal with anxiety, stress, negative mood, achievement motivation and self-esteem. Freud’s psychoanalytic therapy uncovers the repressed memories, motives and conflicts that stem from early psychosexual development thus helping the individual resolve these problems in the light of adult reality (Coleman, 1988). This therapy involves free association, dream interpretation, resistance and transference. The behaviour therapy by Wolpe
according to Avery (1999) aims at abolishing undesirable response to a normal life stimulus and replacing it with desirable behaviour is often effective for psychological difficulties where the overt behaviour is the main problem. The behaviour therapy includes simple extinction, systematic desensitization, implosive therapy, aversive therapy, positive reinforcement and assertive training.

The humanistic existential therapies are based on the assumption that an individual has the freedom to control his own problem, make choices and take positive action. Korchin (1999) explains that humanistic psychology sees man as having purpose, values, options and the capacity for self-determination. These therapies include Roger’s client centered therapy, existential therapy, Perls Gestalt therapy, Ellis rational emotive therapy and Frankl’s logotherapy.

Cognitive therapy of Beck suggests that thought and negative images contribute to a person’s emotional distress. Avery (1999) explains that the modern cognitive therapy involves a deliberate problem solving sequence, which involves understanding of an individual’s problem. This includes cognitive restructuring, self-instructional training program and self-inoculation by Meichenbaum and coping skill training by Goldfried.

Approaches to deal with the stress and strain of life cannot be restrained to repressed impulses or behaviour modifications or thought refinements independently. On considering an individual as a living entity comprising of varied aspects of his own self, and him in relation to a lot other varied aspects of the world around him a holistic approach is required
to deal with his anxiety and stress. A holistic yoga therapy, which promotes an individual’s well being, prevents him from getting entrapped in the stress imposed by the world and its problems and cures his ailments is what humans need today. Sinha (2002) thus suggests that yoga as a science is universally accepted as no other science matches its quality, content, methodology, process and its contributions.

2.11 YOGA THERAPY

The foremost exponent of yoga, Patanjali, defined it as ‘Chitta Vritti Nirodha’. ‘Chitta’ is the mind, which is always occupied with ides, thoughts, uncontrolled emotions, worries and sensations seeking his attention through eyes, ears, mouth, nose and skin. The mind stands between the man and his environment. All this further cause confusion and turmoil in the mind and causes a whirlpool ‘Vritti’ within it. ‘Nirodha’ signifies control or restraint. Thus the purpose of yoga is to control the mind and keep it in a state of peace and tranquility. Yoga is thus essentially a system of psychodynamics and aims at developing a healthy and vigorous personality in an individual (Varma, 1984).

Nigam (2001) on yoga, refers to the remarks of Sri Aurobindo that “Yoga is a methodized effort towards the potentialities latent in the being and the union of the human individual with the universal and transcendental existence which we see partially expressed in man and in the cosmos.” The word yoga is derived from the Sanskrit word ‘yuj’ which means to join, bind or attach, to direct and concentrate one’s attention on, to use or apply and also means union or communion (Iyengar, 2004).
The practice of yoga comes from the historical past. Yoga was conceived and described by Indian authors, and Buddha made much of the important contributions about 2500 years ago (Udupa, 2000). The references to yoga are available in the Upnishads and Puranas. The main credit for systematizing yoga goes to Patanjali, the author of Yoga Sutra. Patanjali had composed the treatise in brief code words called ‘sutras’ which helped yoga spread throughout the world.

(i) Eightfold disciplines of Patanjali

Patanjali some 2000 years ago described the eight fold yogic disciplines, which must be followed to derive full benefits of yoga. These eightfold disciplines of Patanjali as explained by (Udupa, 2000; Gupta, 2003 & Iyengar, 2004) are:

1) ‘Yama’ or restraints: this part of moral and ethic teaching to keep away our negative thoughts and deeds which cause unnecessary harm and is a process of inner purification. There are five Yamas (a) ‘Ahimsa’ or non-violence, including avoidance of mental and bodily injury. (b) ‘Satya’ or truthfulness, in all dealings of life. (c) ‘Asteya’ or non stealing of anything in life such as money or materials. (d) ‘Bhramcharya’ or celibacy, which is refraining oneself from sexual enjoyment and (e) ‘Aparigraha’ or non possession, keeping one’s requirements to the bare minimum.

2) ‘Niyama’ or observances, rules and disciplines: the Niyamas are given to attain purity, self-control, satisfaction and grow knowledge, thus keeping our body and mind pure. The five ‘Niyamas’ are (a) ‘Shaucha’ or cleanliness
of the body and mind, clean habits, avoidance of anger, greed and pride. (b) ‘Santosh’ or contentment, which should also be developed under adverse circumstances. (c) ‘Tapas’ or austerity with regard to food, exercise, rest and recreation leading to integrated personality. (d) ‘Svadhyaya’ or intensive self study, in order to make life healthy, happy and peaceful its essential to extensively study that which we wish to specialize. (e) ‘Ishavara Pranidhana’ in order to attain peace and a sense of humility one must dedicate the actions and fruitful results of our action to the Almighty.

3) ‘Asanas’ or physical postures: allow us to keep the physical elasticity of our body, correct figures and steadiness of our mind. Asanas bring health and lightness to our limbs. Steady and pleasant posture produces mental equilibrium and prevents fickleness of mind. By practicing asanas one develops agility, balance, endurance and great vitality. They exercise every muscle, gland and nerve of the body and reduce fatigue. There are immense number of asanas all having special effects to nourish and make the body supple.

4) ‘Pranayama’ or yogic breathing process: this involves active breath control, which gives us physical and mental sustenance to guide our life stream or Prana effectively. Prana means breath, life, respiration, energy and strength. It involves inhalation, retention and exhalation. Pranayama is the science of breath. The rhythmic pattern of breath strengthens the respiratory system, soothes the nervous system and helps in concentration. Those asanas and pranayama incorporated in this research are described in detail with their effective properties in Appendix (III).
5) 'Pratyahara' or withdraw of sense organs: this involves conscious withdraw of senses from external objects and freeing ourselves from slavery of thoughts in the mind. It is a discipline to retract from external senses and activities in order to get conceptions towards inner perceptions. It helps one to detach oneself from the imposed temptations from which we are affected in today's consume oriented and egocentric world.

6) 'Dharana' or contemplation: this conceived concentration is brought about by fully concentrating on a single point or task in which one is completely engrossed. The mind has to be stilled in order to achieve the state of complete absorption. Mind is believed to be a product of thoughts, which are difficult to restrain. It is an instrument that classifies, judges and co ordinates impressions from outside world and those within himself. Dharana needs concentration without which one can master nothing.

7) 'Dhyana' or meditation: this is an inner process to bring one's senses in a state where conceived thoughts are totally absorbed in the inner concentration. In absorbed meditation a person transcends his temptations and negative emotions. Recitation of mantras awakens the inner spiritual senses, calming down the breath rate, mind and body. The vibrations of the mantra influence directly on the charkas, the astral nerve centers or energy centers of the body. It is difficult to master meditation and there are various kinds of meditations. Mantra recitation may be a preliminary preparation, which can be later refined into repetitions done lightly in the mind, dwelling the concentration of the breath itself thereafter. It helps to develop confidence in ourselves and helps an individual to perceive himself and the
world better. Meditation helps one to concentrate in a more natural and automatic way.

8) ‘Samadhi’ or attainment of super consciousness: here one reaches the peak of mediation and passes into the state of samadhi where his body and mind are at rest, as if he is asleep but his faculties of mind and reason are alert, yet one goes beyond consciousness.

According to Udupa (2000) though Patanjali has described the eightfold disciplines in great detail some modification is necessary to suit the modern society. Thus a combined practice of physical postures, breathing exercises and meditation could be the best compromise to meet the present day need. Results of these practices however can be enhanced if one follows restraints and observances in his everyday life.

(ii) **Classifications of Yoga**

Yoga involves ‘Hatha Yoga’, which is a science of bodily excellence. It is a discipline, which aims to ensure perfect health by physical and mental purification through the control of body and mind. Hatha yoga is the union of positive and negative energy. ‘Karma yoga’ is a science of action and work. It is the path to eliminate one’s negative egos through selfless deeds and service for humanity. ‘Jnana yoga’ is the science of acquiring proper knowledge. It is a path to uncover our inborn ignorance for high knowledge of the true self. ‘Bakti Yoga’ is a path for divine union through transcending our loving emotions in deep devotion and spiritual realization through supreme devotion. ‘Raja Yoga’ is a science of gaining
the power of concentration and meditation. It is the path of observing the internal state of mind and thus mastering our mind capacity to find the ultimate truth of life (Ananda, 2003; Gupta, 2003; Sinha, 2002).

(iii) *Breath, Concentration and Consciousness in Yoga*

Some basic components, which help to enhance the yoga process and is of great importance involves:

(a) **Breath:** “Breath is the vehicle that links all facets of life; breathing, posture, and thinking are interrelated, and they influence one another,” (Ajaya, 1985). Breathing has been one of the most neglected aspects of modern therapy. In yoga therapy the breath is a tool for regulating an individual’s emotional and mental states and his behaviour too.

As one grows he experiences traumas, stress and anxiety and develops incorrect breathing habits. These lead to chronic distortions in the breathing pattern affecting the equilibrium of other functions. Those breathing incorrectly tense up certain muscles hindering their natural breathing process and this alters and affects an individual’s physical health and personality. Emotions affect the breathing process and so does breathing pattern affect emotionality. Scientists have verified that the slightest change in respiration induces changes in the rest of the autonomic nervous system and that physiological reaction is an essential component in emotionality (Ajaya, 1985).

(b) **Concentration and Consciousness:** one must practice yoga with a calm state of mind. If yoga is practiced mechanically the results will not show
worthwhile outcomes. One must practice with full concentration and awareness while experiencing every sensation Yogeswar (2004). Concentration is related to the mental faculty of the individual. Sinha (2002) says, “the power of concentration not only affects the performance, but also the health, peace of mind, pleasure in life and the prosperity of the individual.”

An individual’s consciousness has become absorbed in the world of names and forms. Yoga science explains and studies the means of liberating an individual from these captivities. Yoga is an ecological science and attempts to comprehend in all of its aspects, the environment in which an individual is involved and then to free him from his entrapments (Ajaya, 1985).

Yoga considers consciousness to be the essence of a person and all else to be the environment in which consciousness is embedded. Yoga therapists lead a person from the experience of disequilibrium and stress to the consciousness of tranquility and homeostasis. The yoga therapy is a consequence of two principles of monistic model (i) ‘self realization’ which is a process of purification. One has to remove the impurities that obstruct the pure consciousness such that he is free from distress and suffering. Yoga therapy consists of the removal of various pollutants that obscure pure consciousness, which is an individual’s true essence. (ii) ‘holism’ the ecological situation in which consciousness finds itself includes an individual’s living environment, body and all its functions including the air he breathes, the food he eats and his relationships. It also includes his emotional and ego states, habits, desires and thoughts (Ajaya, 1985). Yoga
therapy thus takes into account the entire ecological situations. This includes the interconnections between the various aspects of the environment, so that an individual can free his consciousness from the holds of his internal and external environment.

(iv) Mind and Body Interactions

Sinha (2002) believes that yoga is a science of the individual's well being. The investigations and applications of yoga are based on rational, logical considerations. The world health organization (1948) defined health as "a complete state of physical, mental, and social well being and not merely the absence of disease or infirmity." Well being is determined by good health habits and all these are under an individual’s personal control.

Individuals mistakenly associate yoga with either bodywork or else as means of reaching a state of consciousness that transcends awareness of the body. Whereas, Ajaya (1985) believes that yoga seeks to optimize functioning at physical level in order to free one from identification with the physical being and to bring the physical into harmony with more subtle levels of existence. The yoga therapy helps an individual to transform his physical being and behaviour through means of postural and behaviour techniques and proper diet. Yoga uses physical and behavioural methods in away that is integrated with and respectful of more subtle levels of functioning. The postures practiced in yoga bring about a particular mental emotional state in a person who maintains that posture.
The mind and body are two faculties that a man possesses and unless both are given due attention the desired goodness cannot be achieved. The mind and body are not isolated entities and are interdependent. According to Sinha (2002) a system that coordinates and harmonizes the body and mind is what yoga purports. It encompasses a distinct system of physical and mental well being.

(v) Yoga as a Holistic Approach

The holistic perspective has established a foothold in modern medicine and psychotherapy. In the yogic model, medical, psychological and spiritual needs are dealt with as a whole. Yoga therapists relate to human beings as a whole and seek to understand how the varied aspects of an individual functions together. Yoga involves the mind-body- spiritual integration.

It involves the physical and mental functioning of a person and his relation to ultimate values and purposes reflecting one another. The mental, emotional or physical disturbances may turn out to be more disturbing to an organism than the original symptoms of a problem or disease. The hatha yoga for instance not only makes an individual sensitive to physical tension and discomfort in the body but also makes him learn the process of self-regulation to reduce or eliminate those symptoms. Further making him aware of how his breathing and thinking pattern, habits and ways of relating to others contribute to the physical tension or relaxation he experiences and how his physical state affects other aspects of his experience (Ajaya, 1985).
Yoga can be described as a science, which has preventive and curative psychosomatic properties to enhance an individual's well-being. Anxiety, stress, negative mood, self-esteem and achievement motivation are variables that have a stimulus-response, cause and effect principle having a psychosomatic dimension. The effects of anxiety and stress causing psychosomatic disturbances, negative perceptions, personality impairments, self-destruction or severe psychosomatic disorders are effectively treated with yoga.

Studies are presented considering the associated relationships among the variables, with respect to adolescence, anxiety, stress, negative mood, achievement motivation and self-esteem. Further studies are also reported, presenting the effects of relaxation and yoga on anxiety, stress and its other related components in the forthcoming chapter 'Review of Literature'.