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Adolescence is a period which is full of pressure, stress, strain, storm and strife. Students at this stage are under a lot of stress. There are multiple causes of stress viz. biological, psychological and demographic in nature. Stress has negative impact on both cognitive and non-cognitive abilities of the students. It has an adverse effect on the personality of the students. It is very essential to identify the students under stress and also to see the effect of stress on psychological and sociological makeup of the students. So academic, social and emotional stress have been taken as the main variables to be focused upon to see their relationship with academic achievement and personality traits of adolescents.

1.1 ACADEMIC ACHIEVEMENT

The primary concern and the most important goal of education is the academic achievement of pupils despite many varied statements about the aims of education. Academic achievement plays an important role in the life of a child. High academic achievement in school builds self esteem and self confidence which leads to better adjustment with the group. The greatness of a school depends on the quality and quantity of scholars and intellectual robots it produces. Its brilliant academic records are deemed to be the most widely used index of its worth and success. So academic achievement is also considered to be one of the main areas of educational research by the researchers. The term ‘academic’ means institutional system of formal education within school, college or university. ‘Achievement’ means successful accomplishment or performance in a particular area or areas.
In the words of Crow & Crow (1956), “Achievement means that extent to which a learner is profiting from instruction in a given area of learning”. In other words, achievement is reflected by the extent to which skill or knowledge has been acquired by a person from the training imparted to him; it is the outcome of general and specific learning experience. Therefore, the special acknowledgement of a person’s skill, the range and depth of his knowledge or his proficiency in designated area of learning or behaviour is indicative of the extent of his achievement.

Pressey, Robinson and Horracks (1959) define achievement as “the status or level of person’s learning and his ability to apply what he has learned” According to them achievement would not only include acquisition of knowledge and skills but also attitudes and values as aspects of achievement. Achievement as manifested by the application of acquired skills and knowledge is a product of learning attitudes and interests since these factors would implicitly influence the extent of achievement.

Trow (1960) defines academic achievement in “Psychology in teaching and learning” as, “the attitude, ability or degree of competence in school tasks, usually as measured by standardized tests and expressed in age or grade units based on norms derived from a wide sampling of pupil’s performance.”

Stephens (1960) states, “Not that other aspects of educational objectives are to be ignored but the fact remains that academic achievement is the unique responsibility of all educational institutions established by the society to promote a wholesome scholastic development of the pupils”.

According to Webster's Dictionary of Education (1963), “Academic achievement is the performance by a student in a course based on formal study in an institution of learning.”
Academic Achievement refers to the level of proficiency – the knowledge attained and the skills developed – in the school or college subject. It is the level of the person’s learning and his ability to apply what he has taught.

According to Travers and Robert (1964), the term refers to any desirable learning that occurs. It is obvious that whether a particular learning is referred to as an achievement or not, depends upon whether some body considers it desirable or not. Hence, any behaviour that is learned may come within a definition of achievement.

In the view of Good (1973), there seems to be considerable similarities in as much as all of them place emphasis on knowledge attained or skills developed in the academic subjects usually designated by test scores. In other words, academic achievement refers to the degree or level of success or proficiency attained in some specific area concerning school or academic work.

Academic Achievement according to the Dictionary of Education by Good (1973) is defined as “knowledge attained or skills developed in the school subjects, usually designated by the test scores or by marks assigned by the teachers or both.”

Academic Achievement is a complex and multidimensional phenomenon. It is a product of the interaction between several factors operating in the pupil, such as abilities, motivation, interest and attitudes and a complicated set-up of the school. According to Kerlinger et al. (1973), “It is an abstraction formed from the observation of certain behaviors of the children. These behaviors are associated with the mastery or learning of school tasks – reading of words, doing arithmetical problems, drawing pictures, and so on. The various observed behaviors are put together and expressed in a word – achievement.”

According to Tarry and Thomas (1977), Hawes and Hawes (1982) the competence needs to be shown in standardized series of educational tests. The term is used more generally to describe successful
accomplishment or performance in the subject of the curriculum usually by reasons of skills, hard-work and interest, typically summarized in various types of grades, marks, scores or descriptive commentary.

Hurlocks (1980) defines academic achievement as scores obtained in the annual examinations. It is measured and assessed through the status or level of person's skill, the range and depth of his knowledge or his proficiency in a designed area of learning or behaviours. It is measured and assessed by achievement tests and compared to the set norms to evaluate an individual's performance. These tests may be created or standardized.

Achievement encompasses student ability and performance, it is multi dimensional; it is intricately related to human growth and physical development; it reflects the whole child; it is not related to a single instance, but occurs across time and levels, through a student's life in school and into post secondary year and working life.

According to Random House Webster's College Thesaurus (1997), academic achievement means those qualities or attributes or characteristics or traits of an individual which contribute to or have a direct bearing or effect or influence on the accomplishment or proficiency of performance pertaining to any activity scholastic in nature or any scholarly activity.

In the literal sense of the term, academic achievement is the combination of two words academic and achievement that implies "scholarly accomplishment." According to Oxford Advanced Learner's Dictionary (2000), "academic achievement refers to the degree or level of success or that of proficiency attained in some specific areas concerning scholastic or academic work".

Kumari (2001) defined academic achievement as the sum total of information gained after completing a course of instruction (partially or fully) in a particular grade that he has obtained on an achievement test.
Thus, there are various aspects of the concept of academic achievement which has a great bearing on the personality of a student. From an early age, a sense of achievement is a source of good feeling and self-esteem and failure is a source of anger and self-reproach. Academic achievement may be defined as a measure of knowledge, understanding of skills in a specified subject or group of subjects. The academic achievement refers to achievement in a separate subject or total scores of several subjects combined. Hence, academic achievement is concerned with the quantity and quality of learning attained in a subject or group of subjects, after a period of instructions.

Academic Achievement is not uniformly or evenly, distributed in the general population. Traditionally, we refer to a student as being a high, low or average achiever, on the basis of his performance in the achievement test or the grades that student receives from his teacher. Besides the wide variance in the recorded performance between students' subjectivity and preference for different subjects also gets reflected in the performance of the same student in the different subjects. Even when equal opportunities are provided there is no equality in performance and achievement. Achievement refers to accomplishment. It signifies successfully carried out performance by an individual or a group as assessed after the completion of a task whether it be academic, manual, personal, social or extra-curricular.

The fundamental assumptions of psychology made it necessary to measure academic achievement. Firstly, there are differences within the individual from time to time known as behaviour oscillation i.e. academic achievement of the same individual differs from time to time, from one class to another and from one educational level to another. Secondly, there are individual differences. Individuals of the same age group, of same grade, usually differ in their potential abilities, academic proficiency whether these are measured by standardized measures of
achievement by teacher’s grading or by marks obtained in tests and examinations. (Dewan 2003).

1.1.1 IMPORTANCE OF ACADEMIC ACHIEVEMENT

A prominent feature of contemporary education thinking has been a growing concern about the effectiveness and efficiency of teaching learning outcome of a system of education, which can be assessed in terms of students’ achievement. Academic achievement is one part of the wider term of educational growth. It refers to what a student has achieved in different subjects of studies, during the course of academic year.

Apart from this, a continuous appraisal of academic achievement is now being increasingly pleaded since all education has become achievement oriented. High achievement is considered as one of the primary goals of education since it has come to be recognized as a strong basis for ambition and progress. Achievement encompasses enhancement, “self-actualization” and as Maslow would say, self-improvement and some forms of competitions. High-achievement in school, therefore builds self-esteem and self-confidence which lead to better adjustment in life.

Research evidence indicates that success in academic achievement acts as an emotional tonic and any harm done to a child in the home or neighbourhood may be practically repaired by the success in the school or college which builds self-esteem and self-confidence and leads to better adjustment with other groups.

Though the content of education may vary significantly between nations and regions, within a nation, the process of schooling is more or less similar everywhere. Much of the content in schools is intended to be systematic in that the learning that takes place in one term or year is regarded as a base for the learning to be provided in subsequent terms or years. At each stage in the schools some measure of achievement is
used as a determiner of the students’ status and as a basis for decisions about the future opportunities for learning to be provided in subsequent stages. In the present context of education, achievement in academic subjects is the main concern of the teachers, students and parents. The scholastic attainment is the basis of selection and differentiation among students for different openings and avenues of advancement in various fields. Academic Achievement is important as it helps the students to understand the hierarchy based on academic achievement i.e. higher the achievement more are the openings for the students and they can go for better lines and better jobs in all fields like science and technology, medicine, management, literature, education, etc. Higher scholastic achievement is of a paramount importance for progress and promotion in any field. As students with higher level of achievement can have a better chance to get higher level of jobs and the type of work that is given to them, it provides still better chance of their growth in the professional field.

Another important role that academic achievement plays is the elevation of the socio-economic status of the individual as well as the family because of the higher and better occupational opportunities. Academic achievement also is an indicator of the level of intelligence and the effectiveness of the teachers and the overall effectiveness of any institution. The world is becoming more and more competitive and the quality of performance has become the key factor for personal progress. Parents desire that their children climb the ladder of performance as high as possible. This desire for a high and staid level of achievement shapes their attitude towards the educational system.

In fact, it appears as if the whole system of education revolves around the academic achievement of students though various other outcomes are also expected from the system. Thus a lot of time and effort of the schools are used for helping students to achieve better in their scholastic endeavors.
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Academic achievement of the students is the most cherished concern of parents and teachers, in our society. Seeing the importance of academic achievement, it becomes necessary to identify factors which differentiate or effect the individual in the level of achievement. The level of achievement can be attained to different levels of respectivity between individual and their ability to demonstrate the proficiency attained by them from the instructions imparted to them. The difference in the respectivity on ability to display the talent of skills would depend on factors which are inherent and also which influence the individual's interaction to the system of education at school/college.

1.1.2 FACTORS AFFECTING ACADEMIC ACHIEVEMENT

The importance of scholastic or academic achievement has raised several important questions for educational researches. What factors promote achievement in students? How far the different factors have been hypothesized and researched upon? Researchers have come out with varied results at times, complementing each other, but at times contradicting each other. Research has come to our aid by looking into what variables – (personal, home; school, teacher etc.) promote achievement and what are deterrents to it. It has been thus indicated that a good number of variables – scholastic and personality characteristics of learners, the socio-economic status from which he hails, the organizational climate of the school, curriculum, planning, etc. influence achievement in different degrees. These variables are generally referred to as correlates of achievement. Heads of institutions in the tasks of helping students to achieve better would like to have the knowledge of the extent of influence these correlates exert on achievement.

Academic Achievement is a multi-dimensional, multifaceted phenomenon. Hence it is not possible to attribute the differences in academic achievement to a single factor. This is especially true in a
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developing country like India. Academic Achievement is considered as the unique responsibility of educational institutions. Knowledge of significant and non-significant correlation between the different factors and academic achievement is therefore necessary for a teacher in ascertaining the causes of high and low achievement and consequently help in promoting achievement of students which is of great concern to the parents, teachers, the institutions and the society. In fact the future of any institution depends on the academic achievement of its students. However, the different factors affecting the academic achievement can be generalized and studied under two broad categories, i.e. personal and social factors.

1. **Personological Factors:** These are related to the self of the individuals. They are further categorized into cognitive, non-cognitive and factors related to learning outcomes, as mentioned below:
   - Cognitive: Intelligence, creativity, aptitude.
   - Non-Cognitive: Personality, self-concept, locus of control, physical, mental and emotional health.
   - Factors related to learning outcomes: Attention, motivation, anxiety, level of aspiration, learning styles, reading, writing, mathematical calculations.

2. **Sociological factors:** It includes:
   - **(a) Home environment:** Family, Socio-economic status, parental involvement, parental attitude, child rearing practices.
   - **(b) School environment:** Classroom, teacher attitude, peer relationships, educational facilities and examination system.

Thus, academic achievement indicates the relative position of an individual in a group regarding the accomplishment or proficiency in a given skill or a body of knowledge, assessed by the institutional
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authorities with the help of achievement tests that may be either standardized or teacher made. Academic achievement is the core of a wider term educational growth and perhaps none would deny the importance of academic achievement in a child’s life.

1.2 PERSONALITY

The word ‘personality’ is derived from the Latin word “Persona” which means the mask or dress which the actors used to wear in Greek drama. But it is a narrow concept of ‘personality’ because ‘persona’ is something external in nature and it does not include the inner traits. Human personality is a complex phenomenon and it can be interpreted differently by different psychologists and authors.

Personality is a person’s unique behavioral and cognitive pattern or a person’s unique and consistent pattern of thinking, feeling, and acting e.g. some people tend to be shy and introspective while others tend to be outgoing and extrovert.

There have been many attempts to set down in a brief statement what is personality. Some of the definitions of personality are given below:

In the eyes of Odgen (1926) “Personality is the expression of a man’s inner life, character is the expression of what he does or achieves.”

In the words of Gordon (1928) “Personality is the most comprehensive term and it includes character which is a special aspect of a developed personality.”

Prince (1931) claimed that character was the emphasized element in the whole reservoir of elements which combining together constituted personality.

Warren (1934) defines personality as “the integrative organization of all the cognitive, affective, conative and physical characteristics of an individual as it manifests itself in focal distinction from others.”
Blos (1941) has said that “personality is an integrated system of the individual’s, habitual attitudes and behavior tendencies, thus representing his characteristic adjustment to his environment.”

Woodworth and Marquis (1947) defined personality as the “quality of the individual's total behavior” as revealed in the individual's habits of thought and expression, his attitudes and interests, his manner of acting and his personal philosophy of life.”

Personality is structured organism within environment field, each aspect of which stands in dynamic relation to each other aspect. There is organization within the organism and organization within the environment, but it is the cross organization of the two that is investigated in personality research.

Stagner (1948) is more concerned about the person's inner system and defined personality as an inner system of beliefs, experiences, desires and values.

According to Hillgard (1949), “The term personality is used to mean the configuration of an individual’s characteristics and ways of behaving which determine his unique adjustment to environment. Hence, personality includes any characteristics that are important in the individual's personal adjustment in the maintenance of self respect.”

Cattell (1956) equates personality with the individual aspects of behaviour. He directs his attention to the behaviour of the individual and maintains that it should have predictive power. He defines personality “.... is that which permits a prediction of what a person will do in a given situation. Personality is concerned with all the behaviour of the individual both over and under the skin”. Eysenck accepted this definition in his work, “The structure of human personality” (1960). Eysenck's own definition of personality is an analysis of behaviour as he believes in the continuity of behaviour.

Guilford (1959) considered ‘personality’ of an individual as a unique structure of traits.
Eysenck (1960) defines personality "as more or less stable and enduring organization of a person's character, temperament, intellect and physique which determines his unique adjustment to the environment." He distinguished four sectors of personality:

1. Cognitive Sector (Intelligence).
2. Conative Sector (Character)
3. An Affective Sector (Temperament)
4. Somatic Sector (Constitution)

Personality's social stimulus value has also received a great deal of attention. In this view, the essence of personality is found in the interplay of persons and their social environment. Mc Curdy (1961) states it in this way: "A human is that psychological compound which is capable of establishing emotional relations with objects, sensed, imagined and conceived. Personality is the actual existence of these relations."

According to Hall and Lindzey (1964), "Personality consists concretely of a set of values or descriptive terms which are used to describe the individual being studied according to the variables or dimensions which occupy a central position within the particular theory described."

In the words of Thorpe and Schmullar (1965), "An adequate definition of personality needs to emphasize the point that the individual is a human being enmeshed in a social order and symbolic culture which influences his every action."

According to Allport (1966), "Personality is a dynamic organization within the individual of those psycho-physical systems that determine his unique characteristic behaviour and thought." "Dynamic organization" emphasizes the fact that personality is constantly developing and changing; although at the same time there is an organization or system that binds together and relates the various
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components of personality. The term “Psycho-physical” reminds that personality is neither exclusively mental nor exclusively physical. The ‘organization’ entails the operation of both body and mind, inextricable fused into a personal unity. The word ‘determine’ makes clear that personality is made up of determining tendencies that play an active role in individuals behaviour. “Personality is something and does something. It is what lies behind specific acts and within the individual.” This definition reflects that man’s personality is organized which is constantly evolving and changing. Man is both brain and body with the help of which he does something which makes him different from others. Therefore, every human being is unique in time, place, person, adjustment and quality.

Peterson (1968) sees personality as the reaction of the individual. In this view personality is the way in which person behaves.

Fredenburg (1971) has said," personality is a stable system of complete characteristics by which the life pattern of the individual may be identified.”

Sherman (1979) has defined personality as “the characteristic pattern of behavior, cognitions and emotions which may be experienced by the individual and / or manifest to others.”

Rogers (1982) defined personality as the total pattern of an individual’s characteristic traits, constituting his distinctive ways of adapting to his environment.

Eysenck (1947, 1960 & 1967) on the basis of research and factor analysis put forth a dimensional system of personality which posits three major independent dimensions viz.Extroversion/Introversion (E/I), Neuroticism/Stability (N) and Psychoticism (P). He also proposed a psychobiological model to parallel these three dimensions (Eysenck 1967, 1981; Eysenck and Eysenck 1985; Mohan 1997, 1998, 1999a, 1999b). The model is a hierarchical one which conceptualizes that each of the
three broad dimensions are subdivided at a lower level into narrower and more specific traits.

Eysenck and Eysenck (1985) reported that each of these personality dimensions include certain subtraits. The sub-traits of three dimensions are:  
Extraversion: The sub traits of Extraversion are – sociable, lively, active, assertive, sensation seeking, carefree, dominant, surget and venturesome.  
Neuroticism: The sub-traits of Neuroticism are anxious, depressed, guilty, low self-esteem, tense, irrational, shy, moody and emotional.  
Psychoticism: The sub-traits of psychoticism are aggressive, cold, eccentric, impersonal, impulsive, anti-social, unemphatic, creative, and tough minded.

In addition, the Revised Eysenck Personality Questionnaire (EPQ-R) also contains a Lie (Social Desirability) Scale which was first incorporated in Eysenck Personality Inventory (EPI) to measure a tendency on the part of subjects to fake 'good' responses. Now it measures an independent stable factor that possibly denotes some degree of social neivete (Eysenck and Eysenck, 1980).

A series of factorial and experimental studies have been carried out to investigate the nature of this scale in some detail (Eysenck, 1971). This scale possesses a considerable degree of factorial unity.

It is being considered as a tendency to respond in a socially desirable way; it is variously described as a desire to conform to social norms (Edwards, 1954); nice personality (Skinner et al 1970); ideal self and ideal responses (Choudhary, 1972).

Verma (1977) on the basis of exhaustive review of literature on the Lie (social desirability) Scale was of the opinion that this is a powerful independent factor of personality, which needs to be studied in its own light.
Using both the child and adult versions of the EPQ, Eysenck and Eysenck (1975) have shown that super-traits of Extraversion, Neuroticism and Psychoticism are replicable across cultures. (Eysenck and Eysenck, 1982; Eysenck and Eysenck, 1983; Barrett and Eysenck, 1984; Eysenck and Long, 1986; Mohan, 2000).

According to Bee (1985), “The term Personality is one of the slipperiest in all of psychology, may be even worse than the term intelligence. In fact, the two terms have a good deal in common. Both the concepts are designed to help, describe or explain enduring differences in intellectual ability of competence. Personality describes a broader range of individual characteristics mostly having to do with the typical ways each of us interacts with the people and the world around us. Whether we are gregarious or shy, whether we plunge into new things or hold back, whether we are independent or dependent, confident or uncertain all of these (and many more) are usually thought of as elements of personality.”

According to Chauhan (1987), though there is diversity of views with regard to the concept of ‘personality’ all the psychologists agree on certain common basic characteristics. One basic fact is that personality is unique. No two individuals, even the identical twins have alike personality. The second basic fact regarding personality is that it is the product of its own functioning. What we do today depends on our accumulated experience of the past. The experiences are accumulated day after day and shape our personality by continuous interaction with external environment. The third common characteristic of most of the definitions is that they stress the need to understand the meaning of individual differences. Personality is what makes individuals unique. It is only through the study of personality that the relevant differences among individuals can be made clear.

Personality is often defined in terms of traits. The behavioral characteristics that are typical of an individual and are unique to them
are traits of personality. Traits are consistencies in the characteristic modes of behaviour exhibited by an individual in diverse settings. An individual's personality may be described as an organization of traits.

Personality refers to characteristics that are pervasive and enduring and form a central part of the person's identity (Costa and McCrae 1995).

'Personality' refers to a general style of interacting with the world, especially with other people – whether one is withdrawn or outgoing, excitable or placid, conscientious or careless, kind or stern. A basic assumption of the personality concept is that people do differ from one another in their style of behaviour, in ways that are at least relatively consistent across time and place (Ferguson, 2000).

So we consider personality to be specific behavioural patterns of an individual which reflects his thoughts, attitudes and emotions as he adapts to his life situations.

1.2.1 PERSONALITY TYPES AND TYPOLOGY

Many so called personality types have been classified by various investigators. It is presumed that people of a particular type tend to react in certain patterned ways to particular stressors. Although personality types are described as having certain characteristic ways of functioning, there is considerable overlap between the types. And some theorists dismiss the whole concept of personality, stating that instead of having unique personalities people have certain characteristic traits or methods of functioning (Michel, 1976). Nevertheless, let us consider some of the classic personality types and describe how each might react to stressors.

The Humors:- The first recorded attempt at categorizing individuals into personality types was by the ancient Greek Physician Hippocrates (Circa 400 B.C.). He assigned people to one of the four temperaments that are attributable to the predominance of the four bodily humors. Thus,
“choleric” individual’s were irritable and presumably had an excess of yellow bile. “Melancholic” individuals were depressed and presumably had too much black bile. “Sanguine” individuals were optimistic which supposedly reflected a predominance of blood. Finally “phlegmatic” individuals were calm and listless and presumably had an over abundance of phlegm. At the present time, this concept is not scientifically supported, but we may hypothesize how people with these supported characteristics might react to stress. Thus, the choleric person should react with anger which is usually a self defeating response. The melancholic individual would tend to give up when faced with stressful situations. A sanguine person should react well, as his mental outlook would be positive. Finally, the phlegmatic individual would have an ineffectual response or might try to avoid or evade the situation.

**Introverts And Extroverts:** The first modern attempt at personality typing was by Carl Jung, another early psychoanalyst who broke away from Freud (Jung, 1923). Jung categorized people as either “introverts” or “extroverts”. Introverts tend to react to stressors by withdrawing into themselves and “seething” internally. At the other extreme, extroverts tend to loose themselves among others and “blow off steam” as a stress release mechanism. At the present time, most psychologists do not go along with this strict categorization, but believe that people have varying degree of introversion and extroversion (i.e. are ambiverts).

**Body Type:** Sheldon (1954) tried to correlate physique type with temperament. In his classification, the “endomorphic” individual is over weight, tends to be relaxed and sociable and should react well to stressors (i.e. he tends to let things “roll off”). It is as if his excess layer of fat acts as a cushion to protect him from the outside world. The “mesomorphic” person is strong and muscular. He is inclined to be energetic, assertive and courageous. The mesomorphic has a tendency to
"grab the bull by the horns" and as a result should react relatively well to stressors. The "ectomorphic" individual has a long thin body and is supposed to have a large brain and a sensitive nervous system. He is considered to be restrained, fearful and introvertive. As such he would tend to manage stressors poorly.

"Internals" And "Externals":- Rotter (1966) categorized people as either "internals" or "externals". Internals believe that they have control over their environment and what happens to them. Their self-confidence tends to ensure that they react well to most stressors. At the other extreme, externals believe that whatever happens to them is the result of luck, fate or "superior beings." Thus, they would tend to react poorly to stressors. This is an example of another "black-or-white" classification where most people fall somewhere between the extremes.

Stress Seekers:- There are people who actively seek certain stressors which are not immediately pleasurable in order to experience the exhilaration following the relief of the stress. Let us consider some example. According to Solomon and Brus (1956) many parachutists engage in that dangerous activity for the "rush" experienced upon landing safely. The jump is life-threatening and the relief is in averting death. Similarly, many soldiers seek the stress of battle not for the pleasure of fighting, but because of the stress release that follows from the realization that they survived the engagement. Then there is the person who beats himself or allows himself to get beaten. (i.e. a form of masochism). He may tolerate it for the same stress-release reason (Oh! It feels so good when you stop!)

Some people take pills, alcohol or tobacco in increasing amounts (i.e. adjusting to body tolerance) for the subsequent "high", even though they know that they are causing damage and that it is a slow form of
suicide (i.e. psychologically speaking: cognitive dissonance). These individuals may initially detest the taste of the drug (e.g. scotch), but persists for the subsequent pleasure. There are even some patients who go to the dentist expecting to be hurt and feel pain. Again, it may be the pleasure of the relief that they seek. Loren Borland observed dental patients who reported enjoying painful treatment. “One of these was a woman who insisted upon having her teeth removed without anesthesia, and gave every indication of a kind of detached ecstasy in the face of what must have been excruciating pain” (Borland, 1962).

“Uppers and Downers” and “Inners and Outers”:- Uppers-and-downers are described as having mood swings, that go from excitement or elation to flatness, sadness or despondency. During, the “up” phase, stressful situations tend to be fairly well managed. During the “down” phase, stress tends to be poorly handled. In its pathologic form uppers – and – downers may be classified as manic – depressive (i.e. a psychiatric classification). Finally inners-and outers may be regarded as a popularized version of introverts and extroverts.

Depression Prone Personality:- The depression prone personality has been described in such a way as although outwardly happy, hard-working and conscientious, inwardly these people are tormented individuals (Sword, 1977).

Type A and Type B Personalities:- Friedman and Rosenman (1974) categorized people into Type A and Type B personalities. The type B personality is described as passive, restrained, not overly ambitious and not prone to develop stress-related disease such as coronary artery disease. On the other hand, the Type A individual is seen as a competitive achiever who is constantly striving. He has feelings of time urgency, hostility and aggressiveness. The Type A person is a
compulsive, hard-driving individual who often sets deadlines and quotas. He is impatient with delay; he suppresses fatigue and tries to control his environment. When he is unsuccessful, he tends to become helpless. The Type A individual is prone to develop high blood pressure and coronary artery disease.

**Accident-Prone Personality:** Dunbar (1943) has described an accident prone personality. The individuals are described as aggressive, angry and hostile, harboring self-punishment impulses.

**Migraine Headache Personality:** A final disease personality type we shall mention is the one associated with migraine headaches. (Cohen, Rickles & Mc Arthur 1978). These individuals tend to be hypertensive to stressors, possessing obsessional perfectionist traits, repressed hostility and a great amount of bottled up resentment.

**Ulcer Personality:** The “Ulcer Personality” is considered to be an oral individual. Some of his characteristics are the desire to be fed; continually leaning on others; seeking close body contact with people; tendency to repress anger; and being prim, tidy, mid-mannered, conscientious, inhibited and punctual. (Wolf, Wolf & Goodell 1968).

**Cancer Personality:** Beyond the classification of Type A & Type B personalities according to heart attack potentiality, people have also been classified according to whether or not they are prone to develop certain other stress related diseases. For instance, there is a “cancer” personality (Shan, 1966). These individuals are generally "low-geared", have few outbursts of emotions and have a history of feelings of isolation from their parents that began in childhood. They are described as being depressed prior to the onset of their disease.
Rheumatoid Arthritis Personality:- Another stress disease related type is the "rheumatoid arthritis personality" (Moos and Solomon 1965). Most cases of rheumatoid arthritis occur in women who are described as being unhappy in the traditional female sex role. These individuals are considered to be perfectionists who are easily frustrated, self-sacrificing, punctual, tidy and orderly.

Ulcerative Colitis Personality:- Still another stress disease related type is the "ulcerative colitis personality" These individuals supposedly have problems both at home and at work. They are considered to be mild, restrained, well-mannered, prim, conscientious and dependent upon others. (Grace, Wolf & Wolf 1951).

Various Typologies. Various investigators have proposed a variety of other personality types (e.g. Kraepelin, 1907). Although we do not support these conceptions, it is of interest to consider how people with these presumed characteristics might react under stress. Hence, let us now consider them in turn.

The "aggressive" or "explosive" individual is a common personality typing. The so-called aggressive person tends to lose control when he is confronted with minor stressors. He often becomes frustrated when he fails to achieve his goals.

The "obsessive – compulsive" person tends to be a perfectionist who pays strict attention to minor details. The obsessive – compulsive tries to avoid conflicts by adhering rigidly to all rules and regulations. Any change or deviation from the accustomed routine tends to be upsetting and distressful. In brief, it seems that the obsessive – compulsive has a lack of tolerance for stressors.

The "hysterical" personality tends to seek out physical stressors that cause pain and suffering. The individual may have an unconscious need to be hurt (i.e. psychiatrically speaking: masochism).
The "negativistic" or "passive-aggressive" individuals do not express open aggression. They try to avoid or ignore stressors whenever possible.

The "passive-dependent" person is sad, shy and submissive. Such an individual usually offers no opinion, is afraid to offend, rarely exercises independent judgement, and holds in his emotions. As a result, the passive-dependent person copes poorly with stressors and suffers from many physical and psychosomatic ailments.

The "socio-pathic" or "antisocial" personality gratifies egocentric desires and impulses. These people tend to lie, blame others and are inclined to use defense mechanism such as denial and rationalization. They easily become frustrated and often harm others as stress-release mechanism (i.e., psychiatrically speaking: sadism).

The "asthenic" or "detached - passive - asocial" individual has a low energy level. He is easily fatigued by physical stressors and lacks a zest for living.

The "dependents - passive," "submissive" or "inadequate" personality does not appear to do anything correctly. He is inept, gives poor responses to stressors and is continually frustrated.

The "narcissistic" individual is the perpetual "spoiled-child". He tends to be egocentric, boastful, and disdainful of others and acts self-assured. The narcissistic person expects others to subordinate their desires for his comfort so that he is always "No. 1". When left to himself, he handles stressors poorly.

The "non-competitive" individual continually avoids competition or other potentially stressful encounters when forced into a stress-inducing situation, he tends to manage adequately.

A summary of personalities and associated stress responses is presented in the table 1.1:

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### Table 1.1: Personality and Associated Stress Responses

<table>
<thead>
<tr>
<th>Theorist</th>
<th>Personality</th>
<th>Characteristics</th>
<th>Stress Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hippocrates</td>
<td>Choleric</td>
<td>Irritable</td>
<td>Reacts with anger</td>
</tr>
<tr>
<td></td>
<td>Melancholic</td>
<td>Depressed</td>
<td>“Gives up”</td>
</tr>
<tr>
<td></td>
<td>Sanguine</td>
<td>Optimistic</td>
<td>Reacts Positively</td>
</tr>
<tr>
<td></td>
<td>Phlegmatic</td>
<td>Calm and listless</td>
<td>Reacts Ineffectively</td>
</tr>
<tr>
<td>Jung</td>
<td>Introvert</td>
<td>Withdrawn</td>
<td>Internalizes</td>
</tr>
<tr>
<td></td>
<td>Extrovert</td>
<td>Outgoing</td>
<td>“Blows off steam”</td>
</tr>
<tr>
<td>Sheldon</td>
<td>Endomorph</td>
<td>Over weight</td>
<td>Let things “roll off”</td>
</tr>
<tr>
<td></td>
<td>Mesomorph</td>
<td>Muscular</td>
<td>“Grabs the bull by the horns”</td>
</tr>
<tr>
<td></td>
<td>Ectomorph</td>
<td>Underweight</td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Rotter</td>
<td>Internals</td>
<td>Control their own lives</td>
<td>Reacts well</td>
</tr>
<tr>
<td></td>
<td>Externals</td>
<td>“Others” control their lives</td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Solomon</td>
<td>Stress-Seekers</td>
<td>Masochistic</td>
<td>Tolerate stress so that they can enjoy relief</td>
</tr>
<tr>
<td>Simple labels</td>
<td>“Uppers and Downers”</td>
<td>Mood Swings from elation to depression</td>
<td>Reacts well when “up”, poorly when “down”.</td>
</tr>
<tr>
<td></td>
<td>“Inner and Outers”</td>
<td>Mood swings from withdrawn to outgoing</td>
<td>Goes from Internalizing to Externalizing</td>
</tr>
<tr>
<td>Sword</td>
<td>Depression Prone</td>
<td>Hardworking, inwardly tormented, consentious</td>
<td>Reacts poorly, prone to depression</td>
</tr>
<tr>
<td>Friedman and Rosenman</td>
<td>Type A</td>
<td>Competitive, Compulsive, Achiever,</td>
<td>Reacts poorly</td>
</tr>
<tr>
<td></td>
<td>Type B</td>
<td>Passive, Restraigned</td>
<td>Reacts well</td>
</tr>
<tr>
<td>Dunbar</td>
<td>Accident-Prone</td>
<td>Aggressive, Self-punishing, angry and hostile.</td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
<td>Description</td>
<td>Reaction</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Cohen, Rickles and McArthur</td>
<td>Migraine Type</td>
<td>Obsessional perfectionist, repressed hostility</td>
<td>Over reacts to stressors</td>
</tr>
<tr>
<td>Wolf, Wolf and Goodell</td>
<td>Ulcer Type</td>
<td>Prim, Tidy, Mild Mannered</td>
<td>Reacts poorly, suppresses anger</td>
</tr>
<tr>
<td>Shan</td>
<td>&quot;Cancer Type</td>
<td>Low -geared, Depressed</td>
<td>Reacts poorly, suppresses anger</td>
</tr>
<tr>
<td>Moos and Solomon</td>
<td>Rheumatoid Arthritis</td>
<td>Punctual, Tidy, Perfectionist</td>
<td>Reacts poorly, easily frustrated.</td>
</tr>
<tr>
<td>Grace, Wolf and Wolf</td>
<td>Ulcerative colitis</td>
<td>Mild, Well mannered, over dependent</td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Kraeplin</td>
<td>Aggressive</td>
<td>Explosive</td>
<td>Loses control</td>
</tr>
<tr>
<td>Obsessive - Compulsive</td>
<td>Attends to details</td>
<td></td>
<td>Reacts poorly, avoids stressors</td>
</tr>
<tr>
<td>Hysterical</td>
<td>Masochistic</td>
<td></td>
<td>Reacts with pain and suffering</td>
</tr>
<tr>
<td>Negativistic</td>
<td>Non- aggressive</td>
<td></td>
<td>Internalizes, avoids stressors</td>
</tr>
<tr>
<td>Passive - dependent</td>
<td>Sad, shy and submissive</td>
<td></td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Socio pathic</td>
<td>Saditic</td>
<td></td>
<td>Reacts with frustration</td>
</tr>
<tr>
<td>Astenic</td>
<td>Low energy level</td>
<td></td>
<td>Reacts with fatigue</td>
</tr>
<tr>
<td>Dependent passive</td>
<td>Inept</td>
<td></td>
<td>Reacts with frustration</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>Ego Centric</td>
<td></td>
<td>Reacts poorly</td>
</tr>
<tr>
<td>Non-competitive</td>
<td>Avoids choices</td>
<td></td>
<td>Reacts inadequately</td>
</tr>
</tbody>
</table>
1.3 STRESS

Stress was first studied in 1896 by Walter B. Cannon (1871-1945). Cannon used an X-ray instrument called fluoroscope to study the digestive system of dogs. He noticed that the digestive process stopped when the dogs were under stress. Stress triggers adrenal hormones in the body and the hormones become unbalanced. Based on these findings, Cannon continued his experimentation and came up with the term homeostasis, a state of equilibrium in the body.

Hans Selye, a Canadian Scientist (1907-1982) studied stress and noticed that people who suffered from chronic illness or disease showed some of the same symptoms as under stress. Selye related this to stress and he began to test his hypothesis. He exposed rats to different physical stress factors such as heat, sound, poison and shock. The rats showed enlarged glands, shrunken thymus glands, lymph nodes and gastric ulcers. Selye then developed the Three Stage Model of Stress Response. This model consisted of alarm, resistance, and exhaustion. He also showed that stress is mediated by cortisol, a hormone that is released.

There have been many scientific publications related to stress. Yet the meaning of stress is still elusive. Consider this version, “stress is a mental or emotional disruptive or disquieting influence, distress.” This definition and most people’s concept is that stress is a negative or disruptive outcome. Yet, as Selye has pointed out, there are positive as well as negative aspects to stress. Because of the over abundance of stress in our modern lives we usually think of stress as a negative experience. But from a biological point of view, stress can be neutral, negative or positive. One Physics definition of tension is, “a force tending to produce elongation or extension”. To give an example of twisted logic, when ‘tension’ was incorporated as a biological term, it reverted to the Selye “stress” meaning. Consider this definition of biologic tension: “a mental, emotional or nervous strain”. In the other words, in
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Physics tension is the external force, but in Biology it is the reaction of the body. There are three types of biological tensions:-

Mental Tension:- First of all, there is “mental”, “nervous” or “emotional tension” A person in this state is “Keyed-up” and has feelings of uneasiness and anxiety.

Muscle Tension:- The second type of tension is “Muscle tension”. The “tense” individual is also described as being “tensed-up” or “up-tight”. The body’s muscles are presumed to be in an extreme state of contraction and are “coiled or bracing for action,” but not action takes place to relieve the stress. This partial contraction is important for body stability and posture, under stressful conditions, the entire body’s muscles are not over contracted, but certain muscle groups can show partial contraction. This often occurs along with strong emotions such as anger, frustration, hate, worry, fear and anxiety.

Visceral Tension:- The third kind of tension is ‘Visceral tension”. Although its meaning is not clear, this term apparently relates to the reaction of viscera (e.g. the heart, the lungs, the blood vessels, the kidneys) to stressful stimuli. The result of “visceral tension” tends to be marked increase in blood pressure, heart and breathing rates.

For Selye (1956), it is the body’s reaction and can be positive as well as negative; for most others, it is the physical and mental factors that cause the body to react and it is generally considered to be negative. He uses the term “stressor for the causative factors and “stress” or the “stress response” for the body’s reaction.

Pressure :- The mental negative factors.

Tension :- The body’s negative reactions emotional for nervous tension, muscular for muscle tension and physiological for visceral tension.

Pressure and tension are incorrectly used as biological terms; therefore, we shall not consider these terms. Although it would be more correct to use the terms stress and strain as they are used in physics. “Strain” has other meanings also and its use here would only complicate
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the matters. Hence, we will use the term "stressor as Selye does - for the causative factors and "stress" or the "stress response" for the body's reactions.

Now let us look at the stress concept as it is known in the following equation:

Stressors + Individual "Make up" = Stress

1.3.1 STRESSORS, INDIVIDUAL "MAKE UP" AND THE STRESS RESPONSE:-

Stressors are the sources of stress. They can be events, people or thoughts which lead a person to perceive that some threatening demands are being made on him or her (Riley and Zaccaro, 1987). Generally, stressors can be divided into different categories: (inter) personal, task and physical stressors (Leung, 2004; Leung et al. 2005b). Personal stressors may be related to the person’s genetic make-up, family background, personality traits, cultivated habits and environmental influence (Khanna, 1998). The person’s working relationships and the social support available from colleagues, bosses and subordinates are related to interpersonal stressors. A poor working environment is a physical stressor (Driskell and Eduardo, 1991; Quick et al 1997). Task characteristics can be associated with stress and treated as stressors if the work demands exceed the resources available (Kahn and Byosiere, 1990) or involve tediously repetitive tasks (Cooper and Marshall, 1978).

There are three kinds of stressors: physical, social and psychological. The “make up” of the individual is determined by hereditary and environmental factors. Recent research indicated that some vulnerability to stress is genetic. Scientists at the University of Wisconsin and King’s College, London discovered that people who inherited a short or stress-sensitive version of the serotonin transporter gene were almost three times as likely to experience depression following a stressful event as
people with the long version of the gene. Stress (or the "stress response") results from the interaction between the stressor and the individual modified by the person's state at the time. Therefore, to expect that stress takes only one form is unreasonable. We consider that there are three types of stress (theories) according to the stress response.

- **Stimulus Oriented Theories:** If the stress response is necessary for the day-to-day adaptability of man to his environment and results in the maintenance of an internal steady state (homeostasis), it is designated neustress (prefix neu = neutral) e.g. one produces neustress in order to breathe, walk and perform the bodily functions.

- **Response Oriented Theories:** If the stress response is unfavourable and potentially disease producing, it is labeled distress (prefix dis = bad or negative) e.g. constant worry in a susceptible individual can lead to ulcers.

- **Interactional Theories:** If the stress response is favourable and results in improvement in physical and/or mental functioning, it is called eustress. (prefix eu = good or healthy, as in the word eugenics) e.g. vigorous exercise can improve the functioning of the heart and lungs and could result in a decreased chance of getting a heart attack. (Selye, 1974, 1976, coined the term "eustress", but he only used it for positive mental responses).

The term stress can be defined in various ways. According to Webster's New World Dictionary (1973), "Stress is the mental or physical tension caused by some urgency or pressure."

The most commonly accepted definition of stress (mainly attributed to Richard S. Lazarus 1984) is that stress is a condition or feeling
experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize.

Stress is the process of adjusting to or dealing with the circumstances that disrupt, or threaten to disrupt a person’s physical or psychological functioning. (Lazarus and Folkman 1984, Selye 1976).

According to Baum et al. (1985), stress by itself does not lead to an illness unless an individual has difficulties in dealing with the situation due to his/her personality characteristics. As during stress the person feels a danger to his well-being and virtually all systems (e.g. the heart and blood vessels, the immune system, the lungs, the digestive system, the sensory organs and brain) are activated to meet the perceived danger. Under most circumstances, once the threat has passed, the response becomes inactivated and levels of stress hormones return to normal, a condition called the relaxation response.

Stress may be an internal state which can be caused by physical demands on the body such as disease, exercise, extremes of temperature, professional hazards and so on or by environmental and social situations which are evaluated as potentially harmful, uncontrollable, or exceeding our resources for coping (Matthews et al. 1986).

Stress involves a relationship between people and their environment, more specifically between stressors and stress reactions. Stressors are events and situations to which people must react. Stress reactions are the physical, psychological and behavioural responses such as nausea, nervousness and fatigued display in the face of stressors. Mediating factors, such as the circumstances in which stressors occur and each person’s characteristics, make people more or less sensitive to stressors and to stress responses. Thus stress is not a specific event, a person’ reactions to those events and interactions between the person and the situation are all important components of stress (Rowlison and Felner 1988).
Hobfall (1989) defined stress as a reaction to the environment in which there is (a) the threat of net loss of resources (b) the net loss of resources, (c) a lack of resource gain following the investment of resources. He defined resources as those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions or energies and cites examples mastery, self esteem, learned resourcefulness, socio-economic status and employment.

Stress has been defined as "the inability to cope with a perceived or real (or imagined) spiritual well being which results in a series of physiological responses and adaptations (Seaward 1997).

Ellis (1999) defined stress as a feeling of tension that is both emotional/physical. It can occur in specific situations. Different people perceive different situations as stressful. Stress management refers to the effort to control and reduce the tension that occurs with a situation that is considered difficult or unmanageable.

Oxford Dictionary of Psychology (2001) described stress as psychological or physical strain or tension generated by physical, emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage or endure.

Hirsch and Joseph (2002) defined stress as a physical factor such as an injury or mental state, anxiety that disturbs the body's normal state of functioning.

According to Cambridge Dictionary of American English (2003) stress is the worry caused by a difficult situation or something that causes this condition.

Thus, stress is an individual's physical and mental reaction to environmental demands or pressure. Stress in humans results from interactions between persons and their environment that are perceived as straining or exceeding their adaptive capacities and threatening well being. The element of perception indicates that human stress responses
reflect differences in personality, as well as differences in physical strength or general health.

A person's ability to remain healthy in stressful situations is sometimes referred to as stress hardiness. Stress hardy people have a cluster of personality traits that strengthen their ability to cope. These traits include believing in the importance of what they are doing, believing that they have some power to influence their situation, and viewing life changes as positive opportunities rather than as stress.

Complete prevention of stress is neither possible nor desirable, because stress is an important stimulus of human growth and creativity, as well as an inevitable part of life. In addition specific strategies for the prevention vary widely from person to person, depending on the nature and number of the stressors in an individual's life and the amount of control he or she has over these factor. In general, however, a continuation of attitudinal and behavioral changes works well for most people.

1.3.2 STRESSORS AMONG ADOLESCENTS

The adolescence is a period which is full of pressure, stress, strain, storm and strife because it is a diversifying stage. Adolescence is a period of transformation from childhood to adulthood. The terms youth, teenager or adolescent have been variously used and defined but broadly to mean a large chunk of humanity which is marching towards the roles full of responsibility. This march is full of dreams, ideas, ambitions, achievement and promise on one side and problems, disillusionments, frustrations, break-downs and stress on the other side.

As a transitional period, adolescence is generally characterized by significant physiological, cognitive and emotional changes due to pubertal development, social role definition, cognitive development, school transitions, emergence of sexuality and psychological – developmental tasks such as separation – individuation
from parents, the search for identity, and the search for intimate
relationships (Eccles et al. 1993). Factors that may interrupt this
process may lead to the emergence of various forms of loneliness in
adolescence (Williams, 1983). Viewing adolescence as a “dynamic social
construction”, the volume by Borman & Schneider (1998) explores the
state of adolescence in the context of rapid social change. The articles in
the volume reveal a recurrent theme: no matter how adolescence is
declared, the establishment of identity and the search for autonomy
remain central developmental tasks of the adolescence years; changes in
the various social contexts in which teenagers live—family, school,
community, peer groups—can significantly affect the progress teens
make in these critical tasks. Also there are different expectations and
roles which this change will bring, such as the transition from being a
student to taking steps to one’s future career and the transition from
adolescence to early adulthood. Thus, adolescents who are going
through this transition comprise a major risk group.

The school going students of today are an army of boys and girls
having undergone a dramatically speeded up physical metamorphosis
from childhood to adulthood. Students of tenth class are in early
adolescents’ period. They are often fatigued, anxious and under
emotional stress.

Modern age is called the age of anxiety. Adults themselves feel lost,
confused and lack of direction. So, adolescents who are also driven by
the thrust of puberty are likely to repudiate adult values. They may show
meaningless and destructive behavior as they are surrounded by various
stresses. The stresses start pouring in as a result of the misunderstood
physical growth, failure to understand their significance and specific
motivational alterations. Along with this there is change in social roles
during the adolescence. So adolescents are exposed to social stress. And
equally serious appear to be the stress posed by examination and a mis-
informed vocational and educational choice resulting into deep
frustrating experiences. These stressors are responsible for low self-esteem among adolescent students, increase in anti social behavior, rise in anxiety, drug abuse and even to the extent of suicide.

The first and foremost stress in students is created by parental or family pressure to perform and to stand out among other children. When they cannot rise up to that expectation, or during the process of meeting it, children may suffer from frustration, physical stress, aggression, undesirable complexes, and depression. Students who are under-performers, develop negative traits such as shyness, unfriendliness, jealousy, and may retreat into their own world to become loners.

Over scheduling a student’s life can also put them under stress. A child’s in school and after school activities should be carefully arranged to give them some breathing space. So many things are crammed into their schedule, unmindful (often) of the children’s choices and capabilities, that puts a lot of mental pressure on them in an effort to fulfill their parent’s wishes.

School systems cram students with a tremendous amount of homework, which they usually have to complete spending their evenings, weekends and most of the vacations. Unable to find enough time of their own, students often lose interest in studies and under perform. They often feel stress by being asked to do too much in too little a time. Teenage depression or growing up tensions adds to the academic pressures. If unable to adapt to the transaction and change, students often carry enormous amount of anxiety, negative personal traits and suffer from massive attention problems. When ‘effortless’ learning does not take place, these students lose confidence, motivation and interest, and they create more stress.

Difficult classes, poor time management, work load, poor study skills, commuting to school, examinations and revision, difficulties with family members, dissatisfaction with course, poor relationship with tutors, significant people’s expectations, fear of failure, financial
difficulties, feelings of inadequacy, fear of unknown assessments, unsatisfactory accommodation, friends, roommates, poor communication skills, body image, diet and nutrition, lack of exercise, serious illness, death or tragedy in family etc. also significantly cause stress in students.

Because the scope of the present study is limited to three types of stresses only, the following section discusses the three types of stresses in detail:

(i) **Academic stress**- Education is the complete development of the individuality of the child. It is a dynamic process through which an individual is helped to unfold his potentialities and change for better knowledge, enlightenment and self realization. From the time of admission to school to the time of leaving, the child is viewed as an achiever. Thus the process of education itself creates in the student educational stress.

From an early age a sense of achievement is a source of good motivation and self esteem and failure is a source of anger and frustration. When the learner faces failure, he not only feels frustrated but is ridiculed by others and is more prone to stress. It is widely acknowledged that a students' academic achievement and academic ability depends on both internal and external factors such as proper study habits, intelligence, educational aspirations of self and parents, medium of instruction, socio-economic status of the family and so on. If these situations are not conducive for learning it may lead to academic stress.

Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure, anticipation of such failure, or even an awareness of the possibility of such failure (Gupta and Khan, 1987). In the context of school, academic stress means a pervasive sense of urgency to learn all things, which are related to or prescribed by the school (Shah, 1988).
Academic stress has become a source of immediate concern, it also contributes to major health hazards, problems both physical and mental, stress related diseases. Academic stress makes a significant contribution to the prediction of subsequent school performance and acts as a negative predictor of academic performance in school children (Endler et al., 1994; Chona 1995).

Life of present day students is quite stressful. According to Bector (1995) a student is caught in a dynamic technological whirlpool and seems to be precariously poised on the brink of disaster. In school situation the pressure may be accountable for individual's success or failure.

The factors like writing term papers, test-anxiety, poor study skills, excessive academic load, professions and classroom environments were reported to be the cause of academic and achievement stress in adolescent students (Edmands 1984; Kagan and Squires, 1984; Archer and Laminin, 1985).

According to Chrousos and Gold (1992) academic stress is the state of disharmony or threatened homeostasis. Academic stress is anything that imposes an extra demand on child's ability to cope after something that is new and different (Furman, 1995). Hence this kind of stress i.e. academic stress is an important factor accounting for variation in academic achievement.

The academic stress faced by students these days is perhaps higher than ever before. They are faced with the new situation when they reach school or college and must then struggle to keep up with their new environment. Many students begin to feel worthless. They measure themselves only by academic success. This can distort their perception of reality and cause them to blow things out of proportion. The change in attitude may not even be noticeable to close friends because students who begin to feel overwhelmed and hopeless tend to hide their feelings by immersing themselves in work, because they do not want to seem weak.
Introduction

This feeling of hopelessness can become a big problem in situations where students are expected to perform at a very high caliber for a long period of time (Corey 2004).

Rao (2005) pointed out that especially at the adolescent age, if the demand of the academic stress on the body, physically or mentally, exceeds the persons' ability to cope and if the individuals are not well oriented about coping with stress holistically, they run into risk of mental and physical health problems.

We live in a test conscious age in which lives of many people are influenced by their test performance. Examination stress in humans seemed to produce the same biochemical changes as observed in flight reactions of animals. The degree of success attained in the educational system is measured largely by examination and tests. It has been shown by many studies that students are under stress during exams. A number of factors may be responsible for stress of students like negative consequences of failure, future life and self responsibility of failure. Highly anxious students apparently respond to examination stress with intense emotional reactions and negative self-centered thoughts that impair their performance, while low test anxiety students react with increased motivation, and concentration. Lot of stress loaded somatic complaints like headache, insomnia, lack of concentration, blurred vision, poor memory have been observed in students during examination. The secondary school pre-requisites both major changes in academic and social domains. The learning environment in the secondary school becomes more demanding and complex. Expectations for academic achievement also increase (Wenz-Gross et al.1997).

School related stress and educational expectations are two variables that have received considerable attention in the research literature in terms of their relationship to students' academic progress. That the school environment during adolescence may be the source for significantly stressful self-devaluing experiences has been supported by a
number of research studies. (Coddington 1972, Phelan, Yu & Davidson, 1994, Simmons & Blyth, 1987). Such studies have consistently found that these self-threatening academic stresses and strains and feelings of alienation at school have negative consequences for the adolescents academic performance (Goodenow, 1993, Harter, 1993, Spencer, Dupree, Swanson & Cunningham, 1998, Wentzel, Weinberger, Ford & Feldman, 1990) academic motivation (Eccles & Midgley, 1989) and goal-oriented behavior (Klinger, 1975), as well as for engagement with schools and learning (Goodenow, 1993, Phelan, Yu & Davidson 1994, Wetzel, 1994). The atmosphere of the school and the degree to which the students feel a sense of belonging in the school environment may be the most relevant and important factors affecting the student's academic performance.

(ii) Emotional stress: In the bio-psychological holistic perspective, emotions are of substantial importance to health and well-being. The fears and frustrations, the joys and hopes, the resentments and hates, the affections and loves, the disillusionments and despair, and the jealousies and curiosity – the emotions of life – signifies meaningful events, developments and shifts in well being in the lives of individuals.

Emotional well being has been subject of a fivefold increase in research over the past decade (Myers & Diener, 1995). Summarizing several decades of research, Lazarus (1991) documented abundant evidence that supports the theory that too much emotional stress impairs individual and group functioning. Alternatively, increasing positive emotions – beyond the absence of emotional distress – enhances performance and productivity (Lazarus, 1991; Peters & Waterman, 1982).

Unlike the better studied emotional states and traits of anxiety, hostility and depression, emotional life (the broad patterns and complex of emotions experienced by individuals) has not been sufficiently researched regarding prevailing and shifting patterns, explanations, or
improvement. Basic and applied research on the broad spectrum and dynamics of emotional life has not advanced because the concept and measurement of emotional life has not been operationalized.

Emotions and stress are inextricably entangled: being stressed has bodily as well as emotional implications for human beings. Stress is to be conceived of as bodily phenomenon while incorporating the emotional qualities of human beings. As an outcome of a set of ambiguities, stress is produced in a social setting, but it has immediate bodily effects (Alexander et al. 2002).

Emotional stress is a chemical or emotional event that causes bodily or mental tension. Emotions exist for the purpose of compelling us to meet our needs. If those particular needs are not fulfilled, a negative emotion is felt leading to emotional stress. At times it so happens in life that one becomes ill in the process of recovering from an emotionally taxing experience. This is basically the body's way of responding to emotional stress. Emotional factors are highly personal. Not all people experience stress in the same way. A type of events or situations may be stressful for one individual, while passing by another individual virtually unnoticed. Prolonged fear, anxiety, anger and tension may all stimulate hormonal responses which when released, alter the metabolic reaction of the body. This increases the nutritional needs of the body for vitamins and minerals.

Studies have indicated that during periods of moderate to extreme stress, more zinc, magnesium, and calcium are lost in the urine. Levels of vitamins A and C, as well as zinc and iron are altered by stress. Under stress, the body also requires more water-soluble vitamins: thiamine (B1), riboflavin (B2), niacin, pyridoxine (B6), and pantothenic acid.

Emotional stress can be of two types:

1) Positive emotional stress: Positive emotional stress can help an individual tap his highest of potentials and achieve success and maturity.
in life. It adds punch to life and brings that momentum required to increase our competence.

2) Negative emotional stress: Negative emotional stress can intensify existing medical conditions. It harms the body, physically as well as mentally, rather than doing any good. Pessimism breeds negative emotional stress and here the attitude of an individual comes into play. Many events such as family problems, relationship break-ups and also the inability to cope up with the daily demands can cause emotional stress among adolescents.

Emotional stress is generally passed on from one generation to another. Children of stressed parents have a higher risk of being stressed out and tensed at encountering difficult and challenging situations. But it is also possible that such children learn to take challenges, face them boldly and emerge as winners. Thus it is not what happens to a person but how he perceives the situation that makes all the difference. Passivity or optimism not only makes a person less vulnerable to emotional stress but it also benefits health of a person as a whole. Emotional stability is a key element in the management of stressors. A positive outlook can change negative into positive stress. All of these factors can promote psychological health: being calm in the face of adversity, smiling instead of frowning; giving praise instead of criticism; and thinking before acting.

Physiologically, prolonged and severe emotional distress has been shown to contribute to impairments to the cardiovascular, respiratory and immune systems (Hall, 1993, Moyers, 1993, Sarafino, 1990). Socially, our emotions can have profound interpersonal and intergroup significance, which can range from the emotional love and bonding between infant and parent, which builds trust and social responsibility, to the eruptions of anger, distrust, hate, fear, and violence between groups caught by conflict and polarized intergroup relations.
(iii) Social stress- Stress research includes attention to events or conditions that may cause harm and to the responses aroused by those stressful events or conditions. These outcomes include felt distress, disrupted interaction and poorer health. The overall stress process includes both stressful agents and stress outcomes. This process also includes two other major sets of variables: social factors that influence exposure to stressful conditions, and individual and group resources that shape efforts to cope with stressors.

Although early stress research focused on unpleasant physical stressors (Selye, 1976) social scientists studying families have been particularly interested in social stressors – events or conditions that are linked to individuals and families’ social characteristics, positions and roles.

The concept of social stress calls attention to both environmental/social demands and individual/family capacities or resources; stress occurs when there is a discrepancy between these capacities and demands. Such stressors can come from external demands on families and family members, or they can arise within family roles themselves. Theoretically a discrepancy can be in either direction: demand could be greater than a person’s capacities, or demands could be far below, individual capacities. Thus, restricted opportunities can be at least as stressful as high demands. Researchers call attention to stressors that occur when aspects of the social environment obstruct an individual’s ability to attain sought after ends.

Social stress is something we all know something about - it is impossible to look at a newspaper or watch television for any one evening without confronting it. The pace of change in the world today makes everything we have seen before, seem sluggish by comparison and social values are so contested that it would be difficult to define any one of them as standards. Social stress is so demanding that even the society seems to be creaking at the seams at the time of stress. Society's'
needs, identity, myths and values are constantly evolving and changing
and cover the full gamut of human experience and aspiration (Ewins
1998).

Socio-cultural factors have been recognized to be extremely
important in causing psychological stress. The change from agricultural
to industrial to services society has changed the patterns of social
relationships in the society. Basic social cohesion and resilient family
system has undergone a change leading to social disintegration which
results in broken marriages, neglect of children and a weak network of
relationships. Psychological stresses occur through dysfunctional
interpersonal relationships. The social change caused by migration,
urbanization and industrialization have caused a conflict between
traditional roles and the demands of present day life. This role conflict
causes stress across all age groups, specially the adolescents. Social
networks in adolescence become more fluctuating and significant for the
definition of the self (Eccles et al.1993).

Many social stressors are unavoidable and traumatic. They include
occurrences such as forced relocation of one’s home, loss of a job,
retirement, divorce and financial reversal. Apparently pleasant events
such as engagement announcements, marriage ceremonies and financial
windfalls can also be social stressors. The unforeseen social stressors are
the most difficult to cope with. Even the most stable individual will react
with distress to social stressors (Chakraborty 1990).

Forming and maintaining positive peer relationships are important
social tasks for all individuals, but especially for adolescents
(Inderbitzen, 1994). Young people’s success in dealing with these tasks
may be assumed to be reflected in satisfaction in the social domain of
life, where as failure may lead to loneliness (Nurmi & Salmela-Aro, 1997).

Peer relationships play an increasingly important role in
socialization during adolescence. Fuligni and Eccless (1993) and Sletta,
Valas, Einar and Sobstad (1996) suggested that peers and peer-oriented
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activities become more important to the individual during this period. Peer relationships, especially the poor ones, have been the focus of several studies over the years. Poor peer relationships were found to be associated with unsatisfactory developmental outcomes such as feelings of loneliness, social anxiety, distress, and low academic achievement (Asher & Wheeleer, 1985; Crick & Ladd, 1993; Parkhurst & Asher, 1992; Wentzel, 1991). Poor peer relationships are also considered a risk factor for children's subsequent personal adjustment in several domains, such as dropping out of school, juvenile delinquency, adult criminality and adult psychopathology (Kupersmidt, Cole & Dodge, 1990; Parker & Asher, 1987).

Much of the research conducted in this area has been concerned with the behavioral, social and cognitive and self-perception correlates of acceptance or rejection by the peer group (Asher & Cole, 1990).

1.4 NEED OF THE STUDY

One of the most challenging problems faced by psychologists, counselors, educational administrators and teachers of today seem to be that of accurate prediction of psychological traits of student. This problem has aroused the attention of many psychologists and is assuming greater importance day by day as the rate of change in our society has increased drastically. Technologically also the pattern of education and the system of society is growing more and more complex. In view of these factors, it is of vital importance for an educator to understand the dynamics and potentialities of personality traits of present day students, specially the students who are stress-prone, because this can harm the child physically, socially, intellectually and emotionally. It can hamper all types of progress of the student.

In the existing era of complex society no person is free from stress and strain and there is no age bar. Even the school going student from pre-primary onwards are under the influence of stress and strain. There
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are multiple causes of stress viz. biological, psychological and demographic in nature. Stress has negative impact on both cognitive and non-cognitive abilities of the child. It has an adverse effect on the personality of the child due to which he fails to become the useful member of the society.

Healthy parents and healthy teachers are always a boon to the society. The task of a teacher in a classroom is always challenging and baffling. It is very much true that some students are under active stress and some are normal, some are adjusted, and some are maladjusted, some are emotionally stable and others are unstable, some are intelligent and some are average or below average. Likewise there can be many variations in physical, sociological and psychological nature of the student. So it is very important to understand each and every student. If such students are not understood properly, they may lose equilibrium of the self with the environment. Simultaneously, their remedial measures along with the stress management processes must be suggested, otherwise they may be victims of more ailments of drastic nature. Hence, it is very essential to identify the student possessing stress and also to see the effect of stress on psychological and sociological make up of the student.

It is imperative that the knowledge of personality traits of different types of students is very much helpful in guiding students in a better way. Besides providing basic material for personal counseling and educational and vocational guidance to the student, a knowledge of group difference may be useful in providing proper milieu at home in the learning situations to a particular group in order to improve their healthy personality traits in the area in which they are found deficient. The knowledge of the personality traits of different dichotomies is always helpful to teachers, educational administrators in their sympathetic understanding of the fact that unruly behaviour of the students of certain categories is mainly rooted in their unhealthy personality traits.
and it needs proper psychological treatment rather than punitive measures.

The preceding discussion gives us clear picture that the students whose personality traits are not understood at proper time become deviants. And hence they defeat the real purpose of education. Educational society cannot afford that the students remain under stress which has dire consequences in development of the individual personalities and academic achievement. Therefore stress in relation to academic achievement and personality traits must be studied at all levels so that some concrete remedial measures can be initiated to safeguard the interests of such students. So this field needs to be explored future.

It is expected that the present study will highlight how the stress prone behaviour affects academic achievement and personality traits of the students and what suitable measures can be taken by parents, guidance workers, counselors, teachers, principals, curriculum framers and government for the benefit of the students. It is hoped that the findings of the present study will certainly add to the already existing quantum of knowledge in the field of educational psychology. It would enrich the subject matter for stress management. Results will also assist in properly planning, organizing, guiding teaching learning process and making it more rewarding.

1.5 STATEMENT OF THE PROBLEM

ACADEMIC ACHIEVEMENT AND PERSONALITY OF ADOLESCENTS IN RELATION TO ACADEMIC, EMOTIONAL AND SOCIAL STRESS

1.6 DELIMITATIONS OF THE STUDY

Delimitations are the boundaries of a study. A research worker has to delimit the study with regard to different aspects as variables, area, size of sample, etc. due to limitation of time, energy and resources.
Keeping in view all these things the investigator delimited the work as given ahead:

(i) The study was restricted to the Xth Class students only.
(ii) The study was delimited to Government Model Schools located in Chandigarh only.
(iii) The study was delimited to both boys and girls of adolescent age.
(iv) Only three kinds of stresses i.e. academic, emotional and social stress were studied.

1.7 OBJECTIVES OF THE STUDY

The objectives of the present study were:-

1. To study the relationship between academic stress and academic achievement of adolescents.
2. To study the relationship between academic stress and personality of adolescents.
3. To study the relationship between emotional stress and academic achievement of adolescents.
4. To study the relationship between emotional stress and personality of adolescents.
5. To study the relationship between social stress and academic achievement of adolescents.
6. To study the relationship between social stress and personality of adolescents.

1.8 HYPOTHESES OF THE STUDY

As per the objectives of the study, the present study was undertaken on the basis of the following hypotheses:-

H_1O There is no relationship between academic stress and academic achievement of adolescents.

H_2O There is no relationship between academic stress and personality of adolescents.
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H₃O There is no relationship between emotional stress and academic achievement of adolescents.

H₄O There is no relationship between emotional stress and personality of adolescents.

H₅O There is no relationship between social stress and academic achievement of adolescents.

H₆O There is no relationship between social stress and personality of adolescents.

1.9 ORGANIZATION OF THE RESEARCH REPORT

The complete report of the present research has been presented in five chapters. An outline of the contents of these chapters is as follows:—

The first chapter has been devoted to theoretical aspects so that the concept of the terms used in the study can be clarified. It also gives a glimpse of the entire study i.e. its problem, objectives, importance, delimitations and plan for investigation, etc.

Second chapter gives a glimpse of the related literature. Researches done in India as well as abroad related to various variables have been quoted. Hypotheses based on the previous researches have been enlisted in this chapter.

Third chapter contains the details about the sample of the study, method, tools and techniques and statistical techniques used by the investigator for the collection and analysis of the data related to the present study.

Fourth chapter contains the analysis and interpretation of the data collected for the present study.

Fifth chapter deals with summary, findings and educational implications of the present research. In this chapter, the suggestions for further research have also been given.

The bibliography and appendices have been given at the end of the research report.