University students are the sample of the present study whose focus is the boy, girl, science and arts students of the Iranian universities. The main characteristic of these students is that they have joined the university during the best stage of their lives to make endeavor in the field of academic achievement. From amongst the various factors that leave their impacts on the academic achievement of the students, there are three major variables that leave their impacts on the academic achievement of the students: their personality needs, mental maturity and the university environment. Since these have been taken up for the present study, they need conceptual clarification that has been taken up in the present chapter.

2.1. Concept of Academic Achievement

Academic achievement has been considered as a vital factor in life and is the most important goal of education. Research evidences indicate that success in academic achievement of a student is the most cherished concern of parents and teachers in our today’s world. In our rapidly changing society and world with the advancement of science and technology the people have become educational-minded. At every step in our life, academic record speaks for individual. At the time of admission, for entrance of a job, for scholarship and for future studies, good academic result is the only recommendation. So, used in the broad sense of educational growth, the term academic achievement refers to the acquisition of all the behavioral changes associated with cognitive, effective and psychomotor dimensions of the students. But in the context of university environment, it refers to the achievement made by the students in their subjects of study.
Academic achievement is a multi-faceted multidimensional phenomenon. Hence it is not possible to attribute the differences in academic achievement to a single factor.

In the words of C.V. Good (1945), academic achievement is the “knowledge attained or skills developed in the school subjects, usually designated by test scores or by marks assigned by the teachers or by both.”

Trow (1953) defines academic achievement as, “the attained ability or degree of competence in school tasks usually measured by standardized tests and expressed in percentage or grade units based on norms derived from a wide sampling of pupils’ performance.” In other words, achievement may be defined as the competence the students actually show in the school subjects in which they have received instruction. Achievement is the accomplishment or performance in a given skill or body of knowledge.

According to Crow and Crow (1962) “achievement means the extent to which learner is profiting from instructions in a given area of learning, i.e., 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 accomplishment or proficiency of performances in given skills on body of knowledge. It can also be visualized as “status on level of person’s learning and his ability to apply what he has learnt” (Pressy, Robinson and Horrocks, 1967). This definition conveys only a narrow meaning of the term achievement. There is, however, a much broader approach, which includes attitudes and interests and values as aspects of achievement. Achievement is considered to be a product of learning, attitudes and interests because they are learned, acquired, retained and forgotten just as knowledge and skills are. Thus achievement means a person’s level of skill or range and breadth of information and what he has accomplished in designated areas of learning or behavior.

Travers (1959) in his book, “How to Make Achievement Test” writes that the term achievement refers to any desirable learning that occurs. It implies value judgment, it is obvious that whether a particular learning is
referred to as an achievement or not, depends upon what somebody considers as desirable or not.

As Academic achievement is often referred to as the degree or level of success or proficiency attained in some academic work, a result of learning different subjects, the behavior pattern of the students changes. Learning affects three major areas of behavior: cognitive, affective, and psychomotor. It is known through experiment that academic achievement is affected by different variables. Trow (1960) defines academic achievement 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 or pupil’s performance.”

Webster’s Dictionary of Education (1963) states “Academic achievement is the performance by a student in a course based on formal study in an institution of learning.”

Theoretically, achievement has two aspects – absolute and relative. In absolute terms, the marks or grades obtained by a student or assigned to him by the teacher on the basis of his written or oral tests (performance) in a particular situation are taken as measures of his absolute achievement.

Academic achievement has been assessed in variety of ways such as Grade Point Average (GPA), performance on standardized tests as the Stanford Test (SAT), the Science Research Associate Test (SRA) and scores on essay type examination etc. In many studies, performance in various courses, such as mathematics, reading and other areas has been linked with yet another aspect of performance in the class-room, the verbal behavior of high achievers and low achieving children.

The definitions given in the preceding paragraphs indicate that there is substantial agreement among the authorities regarding the nature of academic achievement in as much as all of them place emphasis on knowledge attained or skills developed in the academic subjects. Biswas and Aggarwal (1971) and Good (1973) also emphasized on these aspects. The level of academic achievement of students is most commonly interpreted in terms of academic or educational test scores.
Academic achievement is a complex and multidimensional phenomenon. It is a product of the interaction between several factors operating in the student, such as abilities, motivation, interest, and attitudes and a complicated set of forces operating in functional set-up of the university. According to Kerlinger et. al. (1973), “It is an abstraction formed from the observation of certain behaviors of children. These behaviors are associated with the mastery of learning of school tasks – reading words, doing arithmetical problems, drawing pictures, and so on. The various observed behaviors are put together and expressed in a word – academic achievement.”

Dave (1986) reviewed 17 studies on factors affecting achievement in all the way from intelligence to physical health through socioeconomic status of family, sex, caste, distance of school from house, leisure time activities, etc.

Thus, achievement is synonymous with accomplishment, proficiency of performance, social acknowledgement of one’s skill, his proficiency in a given area of learning, and depth of his knowledge.

Keeping in view the context, the definition given by C.V. Good (1945) has been taken up for the present study. As mentioned above, to C.V. Good, academic achievement is the “knowledge attained or skills developed in the school subjects, usually designated by test scores or by marks assigned by the teachers or by both.”

Academic achievement has always been the center of educational research, as it is one of the most important goals of education. There are several grounds that justify the measurement of scholastic or academic achievement. Its measurement is justified due to the fact that 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 Maslow would say, self-improvement and some forms of competition. High achievement in university therefore builds self-esteem and self-confidence which lead to better adjustment in life.
2.2. Concepts of Personality and Personality Needs

The word “personality” has been traced back by etymologists to the Latin word *PER* and *SONARE*, which means “to sound through”. The word ‘personare’ derives from these two words and originally meant an actor’s mask, through which the sound of his voice was projected. Later *PERSONAR* was used to mean not the mask itself but the false appearance that the mask created. Still later, it came to mean the characters in the play (dramatic personnel).

Personality is taken as the external appearance of an individual. The term personality has been used in philosophy as well. In terms of philosophy, the meaning of personality has been interpreted in the sense of internal self. Psychologists explain it as the combination of both and something more than the combination of both. Personality is not a fixed state, but a dynamic totality which is continuously changing due to interaction with the environment.

The field of personality is one of the most popular, challenging, important and confused in contemporary psychology. To the layman, personality is frequently defined in terms of one’s reputation, such as “he is easy going, she is sweet and understanding”. In other words, the layman tends to define one’s personality in terms of what other people think of one. Those conceptions, however, include only the individual’s social value to other members of his group (that is more or less superficial attractiveness or reputation). They are inadequate for the definition of the concept of personality because they are concerned only with overt behavior, while they ignore the inner aspects of personality and motivation, perceptions, feelings, reactions, attitudes, values, and prejudices that are basis of one’s behavior.

What we are and what we hope or aspire to become is our personality. This term has been variously defined because personalities are complex and inclusive of all traits, hence, there is much room for differences in comprehensiveness of the definition.

Thorpe (1938) says that personality is synonymous with the idea of the organic functioning of an individual, including his all verbally separated
aspects, such as intellect, character, drive, emotionalized attitudes, interests, sociability and personal appearance, as well as his general social effectiveness.

According to Blos (1941), "Personality is an integrated system of the individual's habitual attitudes and behavior tendencies thus representing his characteristic adjustment to his environment".

Personality has been recognized as a very important determiner of human behavior both in the laboratory as well as in actual life. Ordinarily, personality is taken as the external appearance of the individual. It is generally a collection of traits developed to different extents in different persons, and is known by the conduct, behavior, activities, movements and everything else concerning the individual. It is the way of responding to the environment. Personality may also be described as the way an individual adjusts to the environment.

C.V. Good (1945) defines personality as “the characteristic patterns of behavior through which the individual adjusts himself to his environment, especially his social environment.”

Woodworth (1947) has stressed the fact that personality is revealed in the individuals habits of thoughts and expression has attitudes and interests, his manner of acting, and his personality philosophy of life.

Personality is a significant and meaningful psychological concept that determines thinking and behavior of an individual. It is a configuration that determines overall perspective with which a person views various things and situations and gets into an interaction with them.

To quote Cattell, (1950) “Personality is that which permits prediction of what a person will do in a given situation”. Viewed in this context, personality is a key concept in any consideration of the nature of motives, thoughts, attitudes and behavior in interpersonal relations of human beings. Hence the relevance of the study of this variable in the investigation of academic achievement as has already been made out in Chapter I.

According to Allport (1951), "Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to the environment".

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What we are and what we hope or aspire to become is our personality. This term has been variously defined because personalities are complex and inclusive of all traits, hence, there is much room for differences in comprehensiveness of the definition.

According to Murray (1953) a need is “a construct (a convenient fiction or hypothetical concept) which stands for a force (the psycho-chemical nature of which is unknown) in the brain region, a force which organizes perfection, intellecction, cognition and action in such a way as to transform in a certain direction an existing, unsatisfying situation. A need is sometimes provoked directly by internal processes of a certain kind (viscerogenic, endocrinogenic, thalamicogenic) arising in the course of vital sequences, but, more frequently (when in a state of readiness) by the occurrence of one of the few commonly effective press (or by anticipatory images of such press). Thus it manifests itself by leading the organism to search for or to avoid encountering or when encountered, to attend and respond to certain kinds of press... Each need is characteristically accompanied by a particular feeling or emotion ...”

Woodworth (1958) defined personality as “the quality of the individual’s total behavior.” Guilford (1959) regarded an individual’s personality as a unique structure of traits.

According to Eysenck (1960), “personality is more or less stable and enduring organization of a person’s character, temperament, intellect and physique which determine his unique adjustment to his environment.”

Stagner (1974) is more concerned with inner system of thought processes of an individual and defines personality as an inner system of beliefs, expectancies, desires and values.

Mischel (1976) maintains that “personality usually refers to the distinctive patterns of behavior (including thoughts and emotions) that characterize each individual’s adaptation to the situations of his or her life.”

Harre’ and Lamb (1983) have referred to personality as “an individual’s enduring, persistent response patterns across a variety of situations. It is comprised of relatively stable patterns of actions often referred to as traits, dispositional tendencies, motivations, attitudes and beliefs which are combined
into a more or less integrated self-structure. Personality includes the characteristics and attributes that distinguish one individual from others."

The most tangible aspect of personality is behavior, because behavior is observable and measurable. Murray (1953) has tried to develop working concepts for classifying and understanding behavior and its causes, both environmental and intrapsychic. He places a great deal of stress on personality as a real structure with active forces called needs.

According to Psycho Analytic theory propounded by Freud, Personality is made up of three major systems: ‘Id’, ‘Ego’, and ‘Super Ego’ and human behavior is the product of interaction among these elements.

(i) Id is immoral, illogical and unconscious. It is the sum total of natural and general tendencies that cannot be satisfied in the society.

(ii) Ego is social self. It is the sum total of consciousness, will power, intelligence and reasoning. It has relationship with id as well as with super ego.

(iii) Super ego is known as the moral self. It is the higher and ideal part of personality. Its function is to warn the ego about its defects and wrong actions.

Freud further says that if there is balance between id and super ego there will be balanced personality and if proper balance between is not maintained there will be maladjusted personality.

In brief, personality is the sum total of physical, mental, emotional, social and temperamental make up of the individual. It is the essence of one’s instincts, feelings, emotions, experience, habits, perception, memory, imagination and various ways of behavior.

2.2.1. Concept of Personality Needs

Personality is the apex of psychology. All knowledge of psychology and education is ultimately related to understanding or development of personality. To have a comprehensive understanding of personality, one needs to know the needs, which are essential for personality.
The terms personality traits and personality needs have been viewed and interpreted differently by different theory builders in psychology. Having a wide connotation, the term personality is variable in usage. But its varied definitions right from its external appearance aspect through bio-social to personalistic emphasize its one important aspect and that is unity, organization and it being an integrated behavior pattern. The nature and organization of this unity may be interpreted differently, though.

Regarding need, strictly speaking, a need is the immediate outcome of certain internal and external occurrences. It comes into being, endures for a moment and perishes. It is not a static entity. Needs impel a person to act and urge him earnestly, and if need be, compete with others for some standard of excellence. A person possesses a multiplicity of needs and these needs are of various degrees of importance to him. Needs are interrelated, exist in hierarchies, and differ both in the degree to which they compel satisfaction and in their manner of implementing one another. They are not directly observable, but must be inferred from behavior. They promote differential behavior.

A possessor of personality needs consciously or unconsciously perceives his or her own needs. A set of personality needs are acquired after the birth, particularly during the youthhood, as a result of socialized elaborations of the basic drives and organic tensions. The needs are elaborated and socialized as behavior is organized and given directionality by their existence. All during the adolescence and adulthood, personality needs continue to act as motivators.

A particular need itself may be based upon a need higher in the motivational hierarchy or even upon a series of such needs. An unattained need represents disequilibrium. When a need is not satisfied and its related goals are unattained, there is continuing effort to approximate to the goal level.

Now the question is what factors determine the establishment of a need as a ready reaction system of personality i.e. which are the needs, which are required for a balanced personality.

For conceptual clarification, a few definitions of personality may be taken up. Allport (1957) has expounded a definition of personality that emphasizes individuality, uniqueness and personal experience of the individual
as the most meaningful subject matter for its explanation. He says “Personality is the dynamic organization within the individual of those Psychophysical systems that determine his unique adjustment to his environment”. Since it recognizes the dynamic, integrated, comprehensive, functional person, it is the most accepted appropriate definition of the term personality. Keeping in view the context, this definition has been taken up for the present study.

Trait may be defined as “... a generalized and focalized neuropsychic system (peculiar to the individual) with the capacity to render many stimuli functionally equivalent and to initiate and guide consistent forms of adaptive and expressive behavior (Allport, 1957)

Murray (1938) describes need as the state of organism, which directs behavior to objects that can lead to a desired state. Although needs are related to internal states according to Murray they are also related to the presence of valued external stimuli which impel to action.

Different needs may occur in the individual at the same time in which case a conflict is engendered. Youthhood is on such period wherein a number of needs are experienced by the young people.

Murray (1938) suggests a comprehensive listing of needs as an aspect of his analysis of the bases of personality. He lays a great deal of emphasis on personality as a real structure with active forces called needs. He maintains: “A need is an inner force to action. It is also a hypothetical process the occurrence of which is imagined in order to account for certain objective and subjective facts.” He divides needs into primary (viscerogenic) and secondary (psychogenic) one.

Primary Needs: They deal with physical satisfaction and the maintenance of life. They refer to the physiological needs like food, water, sex, sleep, air to breathe, satisfactory temperature, urination, defection, harm-avoidance, non-avoidance, sentience and passivity.

Secondary Needs: According to Murray secondary needs have no “subjectively localizable bodily origins” and result mainly from tensions caused by various external conditions or by images that represent such conditions. They refer to the needs of the mind and spirit, rather than of
physical body. They are concerned with emotional satisfactions and are dependent upon and derived from primary needs. They develop a variety of motives in each person. Many of these needs are developed as one matures. Examples are: acquisition, order, retention, construction, superiority, achievement, recognition, exhibition, inviolacy, infavoidance, dependence, counteraction, dominance, deference, rejection, nurturance, succorance, aggression, abasement, blamavoidance, play, cognizance, exposition, rivalry, self esteem, sense of duty, self-assertion, belonging, giving and receiving affection. Many of the secondary needs develop as one matures.

In discussing his listing of needs, Murray divides them into those that involve approach behavior (positive) and those involving separation (negative). He further divides positive needs into adient needs, which involve approaching a liked object, and contradient needs, involving approach to a disliked object with the purpose of mastering or destroying it. Negative needs are also defined as abient needs. Murray also classifies needs as overt and covert, focal (fixated) or diffused (generalizable), and proactive (internally determined) or reactive.

One of the best proofs for existence of needs is the degree of readiness of the organism to respond to same stimulus situation at different times. Murray has distinguished three phases of need. According to him, the activities of the organism are usually divisible into three classes. There is usually: 1 – a beginning state (a disequilibrium of some sort); 2 – an activity directed at changing the situation; and 3 – an end state.

The Edwards Personal Preference Schedule provides scores for achievement, deference, order, exhibition, autonomy, affiliation, interception, succorance, dominance, abasement, nurturance, change, endurance, heterosexuality, and aggression.

Murphy (1947) hypothesized that the elements of personality consist of needs. Tension-reduction is an individual's first need, and an individual may be characterized by the manner in which he reduces his tensions.

According to Mouly (1960), "A need is a condition within the individual that energizes and disposes him toward certain kinds of behavior."
The condition of need has both the effects of energizing the organism and of disposing it to react in a way suggested by a tangible goal-object. Broadly defined, a condition of need in human organism is one in which there is something disturbing in the satisfaction of physiological and/or psychological state of affairs.

Stagner (1974) refers to trait as a consistent feature of personality which has some emotional or ideational context”.

Another definition has been given by Murphy (1947). According to him, “A personality is structured organism 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”.

The Psycho-physical systems or dispositions which are also called as traits constitute personality. In personality study, some traits may have to be delineated. That is because personality traits are numerous and their assessment and study has to be selective.

Personality development of every individual will be conditioned by the social influence that helps the individual attain status in his peer group. Throughout adolescence, the developing individual becomes increasingly cognizant of the impact upon himself and his expanding needs and urges of the custom and mores of his culture, its rules and regulations, and the accepted patterns of behavior that are peculiar to the group of which he is a member. His personality is undergoing vital changes during this period.

Although certain needs, wants, urges and interests are common to the majority of adolescents, the overt expression of these behavior motivators differ from one young person to another.

Needs are important aspects of personality. They impel a person for action and urge him to work earnestly and if need be, compete with others for some standard of excellence.

One of the best proofs for the existence of needs is the degree of readiness of the organism to respond to same stimulus situation at different times. Murray has distinguished three phases of a need. According to him, the
activities of the organism are usually divisible into three classes. There is usually (1) a beginning state (a disequilibrium of some sort), (2) an activity directed to changing the situation, and (3) an end state. Activities that are blocked may be replaced with different activities, but the same end state is sought. This latter point suggests the operation of a force within personality that continues to act until the end state is attained, no matter which mode of activity is used.

Murray’s psychogenic needs (1953), are not usually a factor in survival but are essential for personality growth and functioning. Some of these psychogenic needs are: need for achievement which means a need to accomplish something difficult; need for abasement i.e., to submit to external forces, need for affiliation i.e. to draw near and enjoyably co-operate or reciprocate with an allied other; need for aggression i.e. to overcome opposition forcefully; need for autonomy i.e. to get free, shake off restraint, break out of confinement; need for counteraction, i.e. to master or make up for a failure by re-striving; need for dominance i.e. to control one’s human environment; need for exhibition, i.e. to make an expression; and need for understanding, i.e. to ask or answer general questions.

Cattell (1956) defines it as that which is “concerned with all the behavior of the individual, both overt and under the skin”.

Allport (1957) has classified traits into types of personality and motivational units. He has classified these measurable personality units into ten groups thus: 1. Intellectual capacity 2. Syndromes of temperament 3. Unconscious motives 4. Social attitudes 5. Ideational schemata 6. Interest and values 7. Expressive traits 8. Stylistic traits 9. Pathologic trends 10. Factorial clusters which include those that are not easily classifiable in other categories.

Thorpe (1938) defines trait as “..... a legitimate structure of personality which can provide us with insight into the dynamics of individual behavior”. Further traits are “Independent modes of behavior manifested in the framework of what we call personality”. They have acquired motive force with which to set other modes of behavior in action.
Traits are the components of personality and they are “aspects of the individual which while we isolate for study and measurement are actually interwoven with other aspects of Personality”, according to Munn (1567). Some aspects of personality that are rather evident are called surface traits whereas those which are not so easily discernible, and need special techniques to probe them, may be termed as source or depth traits.

The question as to how many different traits or aspects personality has, has been answered differently by different psychologists based on their research studies and factor analytic approach.

The working definition of personality that may be accepted from out of the above discussion is that of Allport. His classification of traits into units is also largely accepted. For purposes of assessment of traits, selectivity has to be exercised keeping in view the context and also in view of the multiplicity of traits which the multiphasic personality inventories purport to measure.

The Dictionary of Behavioral Sciences (1973) has defined need as “the condition of lacking, wanting or requiring something which if present would benefit the organism by facilitating behavior or satisfying a tension.”

Keeping in view the context of the present study, the definition of personality needs given by Murray (1938) as mentioned above has been taken up. Hence, the term personality needs has been taken to mean important aspects of personality that impel a person for action and urge him to work earnestly and if need be, compete with others for some standard of excellence.

2.3. Concept of Mental Maturity

Mental maturity has been defined in the Dictionary of Bahavioural Sciences (1973) as: (i) “the attainment of an adult level of mental development”; and (ii) “an average adult level of intelligence.” Mental maturity is a certain level in the development of mental ability. To understand mental maturity, it is necessary to define mental ability. The Dictionary of Bahavioural Sciences (1973) defines mental ability as: (i) “the hypothetical, fundamental and basic units which constitute all, distinguishable mental abilities”; and (ii) “seven unit traits, derived through factor analysis, which are held to account for most variance in ability: verbal comprehension (V); word
fluency (W); number (N); space (5); associative memory (M); perceptual speed (P); and reasoning (R) or induction (I).” It is easily discernible from the above definition of intelligence and other definitions given below in this study that mental maturity is synonymous with intelligence.

Some workers in the field of intelligence testing, e.g., Thurstone (1938); and Guilford (1959) have attached primary importance to an array of group factors dealing with more limited aspects of cognitive functioning – factors of verbal ability, numerical ability, spatial visualizing, reasoning, etc. – and they have minimized and even undertaken to dispense with the notion of a (g) or general intellective factor.

Guilford (1956) provided a complete factorial picture of the intelligence. In his theoretical “structure of the intellect”, he suggests that the mind is composed of three dimensions, namely, contents (the terms in which we think), products (the ideas we come up with) and operations (the act of thinking). He argued that five factors in the operation domain (cognitive, memory, divergent thinking, convergent thinking and evaluation) operating on four factors in the content domain (figural, symbolic, semantic, and behavioral) resulting into six factors (units, classes, relations, systems, transformations, and multiplications) give rise to 120 mental factors that are responsible for someone being intelligent.

In general sense, intelligence means the mental ability to learn from experience and to deal with new situations and also the ability to deal effectively with the task involving expressions. Voluminous research in the filed of education and psychology has led us to the belief that intellectual superiority of an individual is the most important determinant in the field of academic performance. Intelligence paves the way for brilliance in academic endeavor. The concept of intelligence has been defined in various ways.

Psychologists have disagreed as to just what are the essential factors of behavior we label “intelligence”. Some have emphasized adaptability to new circumstances, some abstractness of complexity, some facility in the use of the symbols. To some intelligence seems to represent one central uniform trait,
while to others the sum or average of a great many separate and diverse mental abilities. Hence intelligence and mental ability are quite close to each other.

Operationally speaking, intelligence is the ability to succeed in school or college. The definition would be justified by the fact that the criterion used in various standardized intelligence tests has usually been the teacher's ratings of the university progress.

Binet (1916) holds that the essential characteristics of intelligence is the ability to judge well, to compare well and to reason well, viz, the adaptation or adjustment and the ability to carry on abstract thinking.

Terman (1916) defines intelligence as the ability to think in abstract terms. The importance of ability to think in abstract terms is paramount in Terman's view on intelligence.

The concepts of intelligence as stated by psychologists were so varied that the editor of the *Journal of Educational Psychology* (1921) invited seventeen psychologists to take part in a symposium as an attempt to reach an agreement concerning the conceptions of intelligence and meaning of their measurement. Out of these fourteen responded. Although there was some agreements, it was startling that fourteen clearly different concepts of intelligence emerged. Some of the participants in this symposium in "Intelligence and its Measurement" as recorded in the *Journal of Educational Psychology* (1921) stressed on it as the ability to learn others saw it as the ability to think abstractly. Some said that it was the ability to form concepts and to relate them in diverse ways and to grasp their significance.

Some other definitions that emerged as a result of the symposium are "intelligence involves two factors, the capacity to knowledge and knowledge possessed (Henmen); "an individual possesses intelligence in so far as he has learned, or can learn to adjust himself to his environment (Colvin); It is an acquiring capacity (Woodrow); and "Capacity to learn or to profit by experience (Dearborn). The common point among the contributors to the abovementioned symposium was a belief that intelligence is highly complex and the test of intelligence should be very mixed.
According to Encyclopedia Britannica (1926), intelligence is described as the general ability of the organism acting as a whole: to utilize understanding gained in past experience in dealing with a similar or new situation; to adjust or adapt quickly and readily to the environment; to learn without difficulty; or to form new behavior patterns to meet the new situation by the modification or readjustment of those already acquired.

Early research was interpreted by Charles Spearman (1927) as indicating that the common variance among tests involving a wide variety of cognitive performances could be accounted for by one single and underlying general factor (g) running through all the tests, supplemented by a different "specific factor (s) for each test. Intelligence was equated for the correlations among the several tests. The general factor was spoken of by Spearman at times as a kind of general "mental energy", the specific factors representing the different "engines" through which this energy expressed itself. Spearman also felt that the common theme represented by g, could be described as the ability to educe relationships.

Spearman (1927) developed a two-factor theory. He concluded that all intelligence operations were composed of a 'G' factor (general intellectual ability) and a large number of 'S' factors (specific intellectual ability).

Freeman (1942) gave three definitions of intelligence: 1 - Intelligence is the adaptation or adjustment of the individual to his environment; 2 - intelligence is the ability to learn; 3 - intelligence is the ability to carry on abstract thinking.

Intelligence has been defined in various ways. In the past, definitions were intuitive and asserted that intelligence is an ability and philosophical attempts were made to define the term. Hebb (1949) distinguished between what he termed intelligence 'A' which is innate potential and intelligence 'B' which is the functioning of a brain in which development has gone on. He argued that intelligence 'A' cannot be measured directly, its evidence comes through intelligence 'B'.

Stephen (1952) holds that "intelligence is whatever intelligence test measures."
Knight (1953) defined intelligence as “the capacity of rational, constructive thinking, directed to the attainment of some end.”

Webster's Dictionary (1958) maintains that intelligence is the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment.

Wechsler (1958) defined intelligence as the aggregate capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment.

Stoddard (1959) presented a comprehensive description of intelligence. He maintained that, intelligence is the ability to undertake activities that are characterized by difficulty, complexity, abstraction, economy, adaptiveness to a goal, social value and the emergence of originals and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces.

Piaget (1960) described intelligence as the ability to modify and expand cognitive structures through the process of accommodation and assimilation.

Freeman (1960) gave three definitions of intelligence as: (i) The adaptation or adjustment of the individual to his environment (ii) The ability to learn; and (iii) The ability to carry on abstract thinking.

According to Encyclopedic Dictionary of Psychology (1983) “intelligence was regarded as an innate capacity dependent on the genes inherited from the parents. But in the light of such work as Piaget’s on child development and Hebb’s neurological theories, it was realized that inborn brain power does not develop into effective intelligence without stimulation from the environment, also that an unstimulating or deprived environment can inhibit its growth. Thus, like other genetic attributes, intelligence is the product of interaction between the organism and its environment.”

Some researchers maintain that the degree of intelligence is determined by the degree of complexity of the situation (or problem) which is met and solved by the speed with which solution is completed and by the number of problems which can thus be treated. It is generally accepted that intelligence is both the product of heredity and environment.
Keeping in view the context, the term mental maturity has been taken to mean “an average adult level of intelligence,” as defined in the Dictionary of Behavioral Sciences (1973).

2.4. Concept of University Environment

Environmental psychology is relatively a new field of scientific inquiry which is concerned with interrelationships between man’s physical environment and human behavior and experiences. It crystallized as a field in the early 1960’s, stimulated in part by environmental problems of the period and in part by changing values in traditional psychology which had previously adhered to an analytical laboratory tradition of research and which had not studied human behaviors in relation to the large scale physical environment. The primary focus of environmental psychologists is now to study various issues in the “urban setting”, and the settings of home, the school, the university, the office, the neighborhood, the hospital, and the recreational area.

University environment is the prevailing atmosphere in the institutions of higher learning. In other words, it is the educational climate which may include a number of things that relate to and affect the teaching-learning or the educative process.

The mind of man like his body cannot live in vacuum. It develops only in reaction to its immediate environment and the intellectual and cultural content which it has built out of its environment. In all phases of social and cultural life the influences of environment are inevitable. The role of custom, tradition, mores and education in molding the personality and behavior of individual cannot be underscored.

According to C.V. Good (1945), environment is “a general term designating all the objects, forces, and conditions that affect the individual through such stimuli as he is able to receive.”

In view of the importance of education and academic achievement, it becomes necessary to identify factors that differentiate or affect the individual in the level of achievement. Achievement can be attained to definite levels in relation to the ability of the achievers to demonstrate the proficiency attained by them from the instructions imparted to them. The difference in the levels of
ability to display the talent of skills would depend on factors, which are inherent as well as those which influence individual interaction with the environment and system of education at the university. The factors can be psychological which include intelligence and personality traits, learning ability aptitude, study habits, and so on. They can also be environmental such as the university environment.

Anastasis’ view (1958) of environment is a complex one. She explains environmental influences of two types: organic and behavioral factors. Behavioral factors are those which directly influence the behavioral outcomes and organic factors are the ones producing influence on behavioral outcomes indirectly by contributing directly to the human organism. According to Boring, Longfield and Weed (1961), “The environment is everything that affects the individual except his genes”

Environment has become a matter of great interest and concern not only for the environmentalists and ecologists but also for the educationists who study the educational environment in relation to academic achievement of the students.

As given by Webster’s Dictionary (1966), Environment is, the surrounding conditions, influences or forces that influence or modify as the whole complex of climatic, edaphic and biotic factors that act upon as organism on an ecological community and ultimately determine its form and survival.”

The International Encyclopedia of Social Sciences (1968) maintains that, “education’s broadest function has been to act as caretaker and dispenser of certain cultural resources of society. The raising of the culturally unformed — the child and the immigrant — to the state of capable adult is the activity on which the formal institution of education was founded. Formal education is, therefore, an effort to do explicitly and systematically what family and community had long accomplished in an undifferentiated fashion before society became so complex that the task had to be performed by specialists.” Thus, educational environment is the environment of a special institution where the work of education is carried out.
According to the Dictionary of Behavioral Sciences (1973), environment is the “sum total of external conditions, including social and physical factors, which have the potential to influence an organism.”

The environmental factors, which also influence or affect the achievement level of students are socio-economic conditions, educational facilities, examination system, personality of teachers and also psychological environment at home and at the university.

Environment means all that is found around the individual. Environment stands for all those circumstances asserting their influence on the individual since conception to death. Our innate abilities are also modified by the circumstances consciously or unconsciously. Environment molds the behavior and the personality of the individual. It is within the university environment that the students with different personality needs have to endeavor for higher academic achievements.

Baum et al. (1982) have explained the different aspects of environment which give the different and unique explanation of the environment as in case of adaptation: physical qualities inter-personal interaction, information etc.

Opportunity structures: temporal and spatial structures of land uses, services, facilities.

Socio-cultural forces: socially/culturally defined settings and systems.

Historical: constraining/enabling residue of human interaction with other paradigms.

University environment is therefore a part of the environment the students live in. According to Colinvaur (1982), “The term environment includes the observable physical, biological, historical and social milieu in which man lives. Thus, environment is a set of relationship between man and nature.” Graphically it may be represented by three arms of a triangle labeled as physical, biological and sociological components interacting with each other and influencing the attributes of man such as ethics, aesthetics and techniques.”

The university environment can be defined as the environment in which interaction takes place between the teachers and the students and among the
students themselves. The teaching as well as the learning tempos reflect the environment of the university. It can be supportive or defensive. In supportive university environment, the teachers along with the students try to understand each other and show concern and willingness to share in a problem that the students hold in common. They try to learn from each other, respect each other and ultimately prepare the grounds for accomplishment of the main goal of the institution, that is, academic achievement. Hence, university environment is of great importance as far as academic achievement is concerned. The relationship between the teachers and students and students and students is of extreme significance. Besides the said factors, the physical facilities too are part of the university environment. The students need the facilities and comfort. The university environment includes factors like communication, inter-personal relations and group behavior.

University is considered to be one of the most important and effective formal agencies of education. Knowledge has grown so tremendously and cultural needs have ramified so much that it is almost impossible to provide proper education without the help of university. The process of learning in a university is planned, organized and scheduled. Here, education is imparted to the students under a set pattern of rules and regulations. Professionally trained and qualified teachers are employed in the universities so that they impart proper education to the student for his all round development. The term university environment, thus, refers to a conception of the campus climate in terms of its emphasis upon awareness, scholarship, practicability and its general functioning.