CHAPTER-1
INTRODUCTION

1.1 INTRODUCTION

One of the most important roles of educators is to develop in student’s knowledge and skills that would make them function effectively in the society. Thus, students’ academic performance is a major variable that interest both teachers and educational psychologists. Education has become highly competitive and commercial in most of the countries. It is on the basis of high academic performance that students get selected to good secondary schools, better courses of study and eventually better jobs. According to Mayuri & Devi (2003), “Academic achievement has become a yardstick of self-worth and success. The outcome of education determines the quality of life, progress and status of people living anywhere in the world”. While Gupta (1993) stated that “academic performance is a complex behavior. Research has consistently shown that academic achievement is not an outcome of any single factor; rather it is the result of the interplay of a large number of factors”. Many reasons have been advanced as the cause of high rates of failure, including bad study habits, low IQ, faulty teaching methods, erroneous examination systems, social and economic disparities etc.

1.2 ACADEMIC ACHIEVEMENT

Academic achievement is the core of the entire educational growth. It is regarded as an important goal of education. Academic achievement is the outcome of the instruction provided to the children in schools which is determined by the grades, or marks secured by the students in the examination. It generally indicates the learning outcomes of pupil which requires a series of planned and organized experiences.

Academic achievement plays a very significant role in the attainment of the harmonious development of the child. The prediction of academic achievement has assumed enormous importance to its practical view. In our community, academic achievement is considered as a key criterion to judge one’s total
capacities and potentialities. It forms the main basis of admission and promotion in a class. It is also important for obtaining a degree/diploma or getting a job.

Today, good academic achievement is becoming more and more pressing for the individual to have. Individual differences in abilities of achievements are reflected in the academic progress of the students even though all students are exposed to a similar educational facilities, environment, aspiration and even intelligence in the school environment. Each student may vary in respect of their academic achievements by showing different levels of competence. Such variations may be attributed to a host of factors innate as well as environmental. Further, an individual may also vary in achievement with passage of time. That is why we sometimes find students who do not maintain consistency in their academic achievement as they progress. Many a times we often find students who pass the examination, yet they fail to achieve as much as they can in terms of their abilities. This has drawn the attention of the researchers who have attempted to unravel the complex determinants of academic achievement. They have indicated that students’ academic achievement depends to a large extent on their adjustment. These adjustment patterns determine the quality and efficiency of academic striving. Thus, the study of academic achievement of students has assumed a lot of significance in this modern educational system as the efficiency and deficiency of a student is chiefly determined by the quality of his academic achievement.

The role of academic achievement in the educational system in particular and in the development of the nations in general is assuming greater proportion. So, there are innumerable numbers of studies that have been done in the field of academic achievement which either focused completely on academic achievement or focused on academic achievement in relation to other cognitive, personal and social factors. Most of these studies/researches have sought to determine factors that enhance students’ academic achievement. Therefore, promotion of academic achievement is one of the important aims of an educational system. In this rapidly changing world, with the growing advancement in science and technology academic achievement has become so vital that every parent today sets high goals to educate the child. Hence, the entire effort of education is towards improving the
academic performance of the pupils. The problem of predicting high school success has probably received more public attention than any other single problem in education.

1.2.1 Concept and Importance of Academic Achievement:

Achievement refers to the scholastic achievement of the pupils at the end of an educational programme or the competence they actually show in the school subjects in which they have received instruction. Achievement is the accomplishment or acquired proficiency in the performance of an individual with respect to a given knowledge or skill. Thus, achievement is the sparkling crown which reveals a sense of candidness, sincerity and perseverance on the part of the achievers. The term has been defined by different persons in various ways.

Stagner (1962) defined achievement “as a degree of proficiency or progress made by pupils in the mastery of school subjects”. According to Crow and Crow (1969) “achievements refers to the extent to which a learner gets profit from instructions in a given area of learning i.e. achievement is reflected by the extent to which knowledge or skill has been acquired by a person from the training imparted to him”. Saxena and Dwivedi (1979) considered that “the term scholastic achievement refers to the attainment or accomplishment in the field where a subject receives some instruction or training”. According to Clifford et al. (1986) “achievement is the task oriented behaviour that allows the individual’s performance to be evaluated according to some internally and externally imposed criterion”. According to Rao (1980) “achievement is concerned to a great extent with the development of knowledge, understanding and acquisition of skills”. In the words of Verma and Upadhyay (1981) “achievement is the attainment or accomplishment of an individual in some or particular branch of knowledge after a certain period of training”.

The achievement score of a student indicates towards the future success of the individual. Analyzing the definitions mentioned above, it was conclude that academic achievement refers to the level of proficiency attained in academic work or as formally acquired knowledge in school subjects which is determined by the grades, or marks secured by the students in the examination. It reveals the level of educational accomplishment in various subjects taught in educational institution. It
also reveals the quantity and quality of learning attained in a subject of study after a period of instruction. Besides being the criterion of promotion to the next class, academic achievement is also an index of future success and determines the pattern of one’s living. In view of this, the factors which play an important role in determining an individual’s academic achievement need to be studied.

As Singh (1976) pointed out that “academic achievement is a very complex variable, a resultant of diverse factors of different kinds intellectual and non-intellectual, acting and interacting in a variety of ways. Intelligence, personality factors and socio-economic background are some of the factors which are considered to be having an influence on academic achievement”.

In view of this it is important to undertake a systematic search into these three factors in relation to academic achievement. Academic pursuits seem to emerge as the important and relevant aspect of life where people try to do their best over the others. Quality of performance has become the key factor for personal progress. Parents desire that their children climb the ladder of performance to as high a level as possible that they even set up measures of academic achievement for their children without due consideration of their capacities and essential physical fitness.

The effectiveness of any educational institution is measured by the extent the pupils involved in the system achieve in cognitive, affective and psycho-motor domains. Therefore, academic achievement predictors generally consist of cognitive measures, pertaining intelligence or mental ability and non-cognitive measures, especially personality traits which continue to support that both cognitive ability factors and certain personality traits consistently predict academic achievement. So, academic achievement can be measured with the help of tests, verbal or written of different kinds. Since academic achievement is the criterion for selection, promotion or recognition in various walks of life, the importance of academic achievement cannot be ignored. To maximize the achievement of students within a given set-up is the goal of every school. Research has come to our aid by looking into what variables like personal, home, college, teacher, etc. promote achievement or deter it. A large number of variables such as intelligence, personality characteristics of the learner, the socio-economic status from which he
hails, the organizational climate of the school etc. influence achievement in different degrees.

The importance of academic achievement has raised many significant questions for researchers such as “What factors promote achievement in students?” “How far the different factors contribute towards academic achievement?” Many 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. A complete and comprehensive picture of academic achievement still seems to elude the researchers. The search therefore continues. Educational researchers all over the world are still seeking a breakthrough in clarifying the phenomenon. It is specially so in countries like India, where the population growth has over shot the process of tapping in the natural resources and has out-stripped the expansion of facilities, consequently, heightening the competition for admission and promotion of the students to the next class. As a natural consequence, the intensity of increasing educational needs have not met with the needed facilities. This lag between educational requirement and the means to accomplish them has resulted in sharp decline in academic standards. The problems of deteriorating standards has forced the educationist to thoroughly probe the factors that effects the pupils’ academic achievement in schools at all levels and on that basis to suggest measures for improvement to the educational authorities. It is this particular aspect of these studies that compelled the present investigators to study some of the psycho-socio-variables namely personality, intelligence and socio-economic background in relation to academic achievement of high, average and low achievers so that the causes of poor academic performance may be treated out and be controlled suitably.
1.2.2 Factors Associated with Academic Achievement

In a study considering the factors of school achievement, great emphasis is placed on achievement right from the beginning of formal education. But one possibly ignores those aspects in which individuals differ from one another. The starting points may come from academic achievement itself where wide ranging variations occur from the point of non-performance to the point of outstanding achievement. If we consider a group of students, a few students are found to be high achievers on the one hand, and a few are low achievers on the other, while a sizable number of students always appear as average achievers. The question arises as to why such a difference in academic achievement appears when the schools provide more or less uniform instructional and environmental facilities? Is this difference due to certain psychological factors? Does this difference depend upon inherent qualities? Or is there any single factor or host of factors which account for all differences in academic achievement? These questions often appear in the minds of the educators, educationists and the psychologists, but with hardly satisfactory answers.

Various investigations have explored numerous factors which are found responsible for academic achievement of an individual like his personality, intellectual ability, environment etc. Such factor seems to come under two general heads:

(i) Intellectual Factor, and
(ii) Non-intellectual Factors.

(i) Intellectual Factor

Intelligence has been regarded as an essential factor in the academic achievement of the students. It has been recognized as an inherent quality with unified and stable characteristics, distributed normally among individuals.

Intelligence may be explained as the capacity for knowledge and understanding, especially as applied to the handling of novel situations and successfully adjusting to the total situation. Intelligence can be defined as an ability to learn a wide variety of intellectual skills and use this learning in its way. Intelligence also provides insight and direction to the human potential for achieving the goal. Intelligence is considered the most important factor for higher
chances of success out of a large number of factors affecting academic achievement. Studies revealed that intelligence relates more strongly to students achievement than any other characteristic. Intelligence of the students is directly related to the mental mechanism of the person. The process of mental mechanism is the best way to increase the academic achievement of the person. Thus, the importance of intelligence to achievement has been regarded as an essential factor influencing the academic achievement of the student. Its importance is prominently related with academic in all professional domains which is well-established for the achievement of the students.

The performance of the students is largely influenced by intelligence. Hence, the correlation between intelligence and academic achievement of students cannot be ignored. In case of school students, intelligence is the ability to learn and succeed in school education. A teacher should therefore teach his lesson in consonance with intellectual abilities of all kind of children in the classroom. With the recognition of intelligence as an inherent, unified and a stable characteristic distributed equally among individuals, it was supposed that the differences in the academic achievement of pupils could be easily accounted for. Therefore, there is reason to believe that more intelligent pupils could learn more quickly, retain for longer period of time, perform better in all academic affairs and so could obtain high positions in their classes compared to the less intelligent pupils.

Test of general mental ability have widely been used as the predictor of academic achievement of students. Jordan (1923), Chauncey (1929), Edds and McCall (1933), Durflinger (1943) and Harper (1967) has reported significant correlation ranging from .315 to .600 between intelligence and scholastic success. Showing the relationship between the scores of intelligence tests and high school marks, Pinter arrived with the correlation of 0.28 and 0.60, with few below 0.409. For evaluating the predictive value of cumulative test Aaron summarized the results of 24 studies where correlation ranged from 0.25 to 0.65 with a median of 0.4810. While, Binet-Simon and Terman (1916) in their findings revealed that co-efficient of correlation commonly fall in the range of 0.40 and 0.50.
Laidra et al. (2007) studied “the predictors of academic achievement in a large sample of 3618 students (1746 boys and 1872 girls) in Estonia. Intelligence as measured by the Raven’s Standard Progressive Matrices was found to be the best predictor of students’ grade point average (GPA) in all grades”. Deary, Strand, Smith & Fernandes (2007) reported “a strong correlation between intelligence and academic achievement. They examined psychometric intelligence at the age of 11 years old and education achievement in 25 academic subjects at the age of 16. The correlation between a latent intelligence trait and a latent trait of educational achievement was 0.81. They discovered that general intelligence contributed to success in all 25 academic subjects”. Watkins et al. (2007) stated that “there had been considerable debate regarding the causal precedence of intelligence and academic achievement. Some researchers viewed intelligence and achievement as identical. Others believed that the relationship between intelligence and achievement was reciprocal. Still others asserted that intelligence was causally related to achievement”.

Continuous efforts have been made in recent years also to correlates students intelligence with their achievement. The studies made by Carter (1960), Deshpande and Lodhi (1981), Shah and Kishan (1982), Malabika (1986), Garg and Chaturvedi (1992), Vaidharani and Chamundeswari (2006), Gurubasappa (2009) have reported that students’ academic achievement is positively correlated with intelligence. It is also seen that the results of the group mental test which were first used for correlating intelligence with academic achievement of students are almost similar to the present intelligence test results. Thus it can be maintained that the intellectual abilities of the students appear to have positive relationship with academic achievement. But an elaborate study needs to be undertaken further.

(ii) **Non-intellectual Factors:**

It has been found that in the lack of intellectual abilities, high scholastic achievement is not possible. At the same time, mere presence of superior intelligence does not ensure much scholastic achievement. Many studies based on scientific investigation have shown that even students of greater intelligence are under-achievers, while some pupils with average intelligence achieve more than not expected from them. Some researchers who have tried to show the relationship
between mental ability and academic achievement have found only a moderate correlation. Hence, the importance of non-intellectual factors is undeniable. For a satisfactory performance, a certain amount of intelligence necessary for academic achievement must be possessed by the students along with some favourable non-intellectual variables. The more non-intellectual factors are the higher would be the academic achievement. There are many investigators who have used different methods, at different levels of education to explore diverse non-intellectual factors associated with academic achievement. Here, therefore an attempt has been made to discuss some of the following non-intellectual factors, which are likely to affect academic achievement.

A. **Personality Factor.**

B. **Socio-Economic Background Factor.**

(A) **Personality Factor:**

According to Rawat, Chaudhary and Negi (2012), “Personality is a collection of emotional, thought and behavioural patterns that are unique to each person and relatively stable over time. How and why people differ from each other is a question that has been asked for centuries with various theories, hypotheses, and answers. Personality has intrigued scholars, researchers, and the general population alike. It has been studied in many contexts, many cultures and many different disciplines for years. An abundance of academic journals, books, college courses, programs, and tests have been created in order to assess and describe personality”.

Personality factors have its own impact on the outcome of a person’s educational level and academic success. An individual with a healthy and well-balanced personality are proved to be successful in their academic career and other areas of life as well. It is a fact that education is a very important factor in the development of any individual’s personality. Personality factors themselves have a role to play in the determination of success, failure and efficacy of educational achievement. Various studies have been made, using psychological tests, to correlate personality factor with the academic achievement of pupils. Reviewing the literature on the relationship of personality to academic achievement, Stranger pointed out to the fact that personality factors influence achievement by affecting
the degree to which the use of individual’s potentialities is made. Dhaliwal (1971) found that personality factors like emotional stability, obedience and sobriety are linked with pupil’s achievement. Warburton (1961) has also found that personality factors are related to academic achievement. Verma and Sheikh (1998) found that personality has significant association with academic achievement. Dixit (1989) also found that personality factors significantly influenced the educational achievement. The study of Rindermann & Neubauer (2001) reveals that personality trait correlates and predicts academic performance. Bratko (2006) concluded that personality contributes to the prediction of school performance. Thus, the role of personality dynamics with regards to school achievement is significant and thus Garrett proclaimed that although enough progress had been made in discovering and attempting to measure the factors which contribute to scholastic success in school but scholars agree that there still remain a gap of some factors which need to be investigated.

Personality is a forceful determinant of human activities and hence also of achievement. The amount and quality of achievement in the different walks of life are certainly the output of distinct organization of different traits of personality. Our unique composite of the temperament, traits, needs, interest, values, problems, adjustment, aptitudes and talents decide our achievement not only in the academic field but in every field. The present study is concerned only with the academic field. It is a common notion that some students, who fail in the school examination, obtained better scores on tests of intelligence and some of the good achievers in earlier classes unexpectedly fail and lag behind the standards of achievement in the next higher classes. It shows that the primary operant factor in academic achievement is not only intelligence but something more than this. For all this the pupil’s personality structure may be considered responsible without much hesitation. The individual’s self-esteem may depend greatly on academic progress in school as it is a substantial indication of his potential.

Personality factors have an important bearing on academic achievement. It is generally believed that a well-developed personality would help the developing students to adapt themselves to the changing system of today’s scenario. Now-a-days a large number of educationist and psychologists have shown their interest
around the study of personality in relation to scholastic achievement. Academic achievement is considered as a function of one’s personality. This new emphasis has stemmed from the new generally accepted belief that the academic performance of the students is another aspect of his total behaviour and as such is determined and influence by the dynamic process of personality. It is clear from the above mentioned studies that personality is an important factor in determining academic achievement. The basic assumption underlying this study is that academic achievement is a form of behaviour which is influenced by personality factors.

(B) Socio-Economic Background:

Socio-economic background means the position that an individual or family occupies by means of his/her education, occupation and income in the group activities of the communities. So, Socio-economic background of the family not only helps a student in getting higher education but also it helps in academic achievement. It is important in one’s achievement, because the higher the socio-economic background, the better the educational facilities that are available together with more intellectual stimulation. Socio-economic background seems to influence a student’s attitudes, values, motivation etc. and thus his academic achievement. Economic background of the parent also plays an important role because smooth continuation of study becomes difficult under economic deprivation. Balasubramanyan (1997) reported that socio-economic status was the domineering variable in the cluster of environmental variables. Clark (1927) found that students whose parents had college education ranked higher in scholarship. Occupational background is an important socio-economic characteristic that go together with educational accomplishment Likewise, income of the parents also play an important role in contributing to the academic achievement of the students as higher income of the parents can be helpful in providing better facilities for the children at home.

Some studies report that difference in socio-economic background does not show any evidence in the difference of achievement. But it has been observed from the studies of Pandey and Maikhuri (2003) that “there is a significant difference between academic achievements of adolescents belonging to high and
low socio-economic background”. It is, thus apparent that socio-economic background is positively associated with the academic achievement of the students. Zora (2008) reveals that “socio-economic status has either significant positive relationship with students’ academic achievement or a significant impact on achievement”. This suggests that a measure of socio-economic background of an individual includes both a measure of social aspects and economic aspects. In the case of students, since they are individual dependent on parents it is accepted to consider the social and economic components of the parents as to represent the socio-economic background. In the tool used to measure the socio-economic background of students in the present study, the social component is composed of fathers and mothers educational and occupational level. The economic component is composed of fathers and mothers income. Parents who are educated may be expected to try to imbibe the needed interest and motivation to learn in their offspring. Also parents who are in an occupation considered high in the society would expect their children to reach similar high occupational position. These parental expectations indirectly push the children to put in more effort in the academic studies the success in which will be a major factor in fulfilling these expectations. The economic component of the parents can also be expected to contribute to the academic achievement of pupils. In the present world today a home which provides better opportunities for students offers better learning provision for them. Providing such opportunities to children depends mostly on the economic position of their parents.

Socio-economic background plays a significant role in academic achievement. Children coming from good socio-economic background are often found to be better academically than those from poor socio economic background. Educationist turned the attention to this direction to find the contribution of this variable to academic achievement.

Chamorro-Premuzic and Furnham (2008) put forward “a model of academic performance which incorporated personality, intelligence and approaches to learning as predictors of academic performance”. Their study used path analytical approach based on recent theoretical development to account for the empirical relationships among these constructs. Hierarchical regression was
performed to test the degrees to which personality predicts academic performance over and above intelligence, as well as the incremental validity of learning approaches over personality and intelligence. In addition, two path analyses were conducted to examine the meditational effects of personality and learning approaches in the relationship between ability and academic performance, as well as whether learning approaches mediated the effects of personality on academic performance.

O’Connor and Paunonen (2007) stated that “as predicted, both ability measures (viz., IQ and fluid intelligence), openness, conscientiousness, and deep learning were all positively related to academic performance. Particularly, conscientiousness accounted for a substantial amount of additional variance in academic performance. On the other hand, deep learning approach contributed to the prediction of academic performance beyond personality and intelligence. Results were supportive of initial hypothesis and highlight the importance of including different ability and non-ability factors when predicting performance. Although conscientiousness was the strongest predictor of exam grades, a combination of fluid intelligence, conscientiousness, openness, and deep learning approach explained the highest percentage of variance”.

1.3 SELF-EFFICACY

Bandura (1986) defined, “self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. It refers to a person's judgment of own capabilities to organize and execute courses of action required to attain designated type of performance has also been found to be a major contributor to an individual's academic achievement.” It includes following dimensions.

1. Academic self-efficacy.
2. Social self-efficacy.
3. Emotional self-efficacy.

Zimmerman (1995) defines academic self efficacy “as personal judgements of one’s capabilities to organize and execute course of action to attain designated types of educational performance”. Bandura, Babaraneli, Caprara & Pastorelli
(1996) stated that “academic self-efficacy promotes academic achievement directly and indirectly by increasing academic aspirations and prosocial behaviours.” Many other researchers (Chemers, Hu & Garcia, 2001; Robbins, Lauver, Le, Davis, Langley & Carlstrom, 2004; Green, Miller, Crowson, Duke & Akey, 2004; Sharm & Silbereisen, 2007) have reported “a direct positive relationship between academic self-efficacy and academic achievement.” Other studies (Lin, 1990; Jackson & Smith, 2001; Brown & Robinson Kurpius, 1997; Hill, 2003) have identified “academic self-efficacy as a predictor of American India students’ academic achievement and persistence in post-secondary academic activities”. In the study carried out by Dubow, and Tisak (1989) have reported that “academic self-efficacy correlated positively with academic outcomes in elementary and secondary school students”. Ahangi and Sharaf (2013) pointed out that, “nowadays students’ academic achievements are considered as a significant indicator for evaluating educational systems. Moreover, academic achievements are steadily considerable for teachers, students, theorists and cultural scholars. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important—procedural knowledge such as skills or declarative knowledge such as facts. Individual differences in academic performance have been linked to differences in intelligence and personality”.

Bandura (2001) Coutinho & Neuman (2008) reported that “The prediction of academic achievements is important in scientific and applicability aspect. Academic achievement is one of the acceptability factors in the class, also it is important to gain an occupation and promotion in it. Academic achievements is also important from another aspect, that is, due to the fact that each cultural system is continuously evaluated by experts in order to gain best conditions and results and to resolve shortages and obstacles through entire cultural and educational processes and gaining the optimum usage of inside data, and finally the outcome of cultural and educational systems are the students with some special ability's, academic achievements could be one of the most important and explicit indicators for investigating and evaluating cultural systems efficiency”.
Elliot & McGregor (1999) reported that “in the first attitude, familial environment's processes influence is considered in academic achievements and in the second attitude that is used in this study, students' specific processes such as self-discipline and self efficacy is discussed. Considering the motivation aspect including self-efficacy, internal value, and emotional response is one important issue in educational scheduling and academic achievement and the most important aspect of that is a relatively brand concept called self-efficacy. Self-efficacy points out belief and self-judgment of one's own ability's in doing a certain assignment.”

Bandura (1997) believes that “the children who believe that they are able to afford some assignment actually do it and the children who are satisfied about themselves and their abilities are likely to promote. Conversely, those students who think varied about themselves and their abilities, fail. Persons, who have a high self-efficacy concept, show a greater perseverance in doing their assignments, are not afraid of situations and choose high level aims for them”. Different researchers (Pressley, Borkowski, & Schneider 1987; Hwang and Vrongistinos 2002; McKenzie, Gow, & Schweitzer 2004; Yip & Chung 2005; Rollnick et al., 2008) indicate that “the way learners make use of the learning strategies increases their academic achievements”. Bandura (1989) has also found that “the perceived self-efficacy increases academic achievement in a direct and an indirect way, by influencing individuals’ goals. Self-efficacy, together with the goals, influences academic performance. Individuals with a high level of self-efficacy assign higher goals to them and exercise more effort and willingness to have them accomplished”. Locke and Latham (1990) defined that “the more challenging the goals are, the more motivation they stimulate Due to the fact that the self-efficacy cannot be presumed as the direct reason for the academic achievement, however, it will be the self-regulation that causes the academic achievements. The self-efficacy will cause the use of self-regulation and therefore the relation between self-efficacy and the self-regulation may be defined as follows: self-efficacy for self-regulated learning”. Bandura (2006) stated that “the self-efficacy for self-regulated learning refers to the individual's beliefs on application of the self-regulation processes such as the goal setting, self-monitoring, strategy use, self-evaluation and self-reaction.”
Marsh & Craven (2006), Swann et al. (2007) and Marsh & O’Mara 2008 pointed out that "self-efficacy is an individual’s belief in their own ability, locus of control is their belief that their own actions can make a difference, self-concept is their perception of themselves, and self-esteem is an individual’s evaluation of their own worth or goodness.” According to Schunk (1991), Momanyi, Ogoma, Misigo (2010), Peterson, Milstein and Chen, & Nakazawa (2011) “A huge amount of research has attempted to identify important factors to student success by assessing the relations among many psychological and academic variables. Few studies have used different methods to propose and test models that can be used to understand the relations among factors that influence student academic success.” According to Mbathia (2005) “education supplies people with specific skills and therefore it enables them to perform their tasks effectively. The better the performance of an individual is, the more competitive and rewarded the individual will be”.

Many factors have impact on academic performance, as Owiti (2001) describes “attitude leads to achievement and abilities are needed for successful performance”. Bandura (1997) confirmed that “intellectual capability and motivation are significant factors on academic performance”. Bandura and Schunk (1981), Bandura (1986), Hackett and Betz (1989), came to the conclusion that “self-efficacy influences the choice and commitment in a task, the energy spent in performing it, and the level of the performance. One important variable for the prediction of individual behavior is self-efficacy”. Bandura (1997) points out that “attitude and gender are influential to some extent for some people regardless of their mediating effects on self-efficacy beliefs”. According to Mbathia (2005) “good academic performance influences not only students’ choices in major higher school but also their admission to college/university.” Pajares (2000) showed that “from the seventh grade onwards, girls are inclined to underestimate their capacities in science regardless of the fact that their performance is poorer that of the boys. Due to this tendency which continues in high school, fewer female students study science at college level. Self-efficacy is a strong predictor of academic achievement”. 
1.3.1 Self-Efficacy and Its Dimensions

Bandura (1977a, 1997) formally defined perceived self-efficacy “as personal judgments of one’s capabilities to organize and execute courses of action to attain designated goals, and he sought to assess its level, generality, and strength across activities and contexts. The level of self-efficacy refers to its dependence on the difficulty of a particular task, such as spelling words of increasing difficulty; generality pertains to the transferability of self-efficacy beliefs across activities, such as from algebra to statistics; strength of perceived efficacy is measured by the amount of one’s certainty about performing a given task. These properties of self-efficacy judgments are measured using questionnaire items that are task specific, vary in difficulty, and capture degrees of confidence (e.g., from 0 to 100%).”

Zimmerman (2000) stated that “With regard to their content, self-efficacy measures focus on performance capabilities rather than on personal qualities, such as one’s physical or psychological characteristics. Respondents judge their capabilities to fulfill given task demands, such as solving fraction problems in arithmetic, not who they are personally or how they feel about themselves in general. Self-efficacy beliefs are not a single disposition but rather are multidimensional in form and differ on the basis of the domain of functioning. For example, efficacy beliefs about performing on a history test may differ from beliefs about a biology examination. Self-efficacy measures are also designed to be sensitive to variations in performance context, such as learning in a noisy lounge compared to the quietude of the library. In addition, perceptions of efficacy depend on a mastery criterion of performance rather than on normative or other criteria. For example, students rate their certainty about solving a crossword puzzle of a particular difficulty level, not how well they expect to do on the puzzle in comparison to other students. Finally, self-efficacy judgments specifically refer to future functioning and are assessed before students perform the relevant activities. This antecedent property positions self-efficacy judgments to play a causal role in academic motivation.”
1.3.2 Role of Self-Efficacy in Academic Motivation

Self-efficacy beliefs have shown convergent validity in influencing such key indices of academic motivation as level of effort, choice of activities, emotional reactions and persistence. Bandura (1997) stated that “there is evidence that self-efficacious students participate more readily, work harder, persist longer, and have fewer adverse emotional reactions when they encounter difficulties than do those who doubt their capabilities”. In terms of choice of activities, self-efficacious students undertake difficult and challenging tasks more readily than do inefficacious students. Bandura and Schunk (1981) found that “students’ mathematical self-efficacy beliefs were predictive of their choice of engaging in subtraction problems rather than in a different type of task: The higher the children’s sense of efficacy, the greater their choice of the arithmetic activity”.

Zimmerman and Kitsantas (1997; 1999) also found “self-efficacy to be highly correlated with students’ rated intrinsic interest in a motoric learning task as well as in a writing revision task”. Furthermore, according to many researchers (Hackett & Betz, 1989; Lent, Brown, & Larkin, 1984) “measures of self-efficacy correlate significantly with students’ choice of majors in college, success in course work, and perseverance”.

Schunk & Hanson (1985) and Schunk, Hanson, & Cox (1987) have found that “self-efficacy beliefs are predictive of two measures of students’ effort: rate of performance and expenditure of energy. For example, Schunk and colleagues found that perceived self-efficacy for learning correlates positively with students’ rate of solution of arithmetic problems.” Salomon (1984) has found that “self-efficacy is positively related to self-rated mental effort and achievement during students’ learning from text material that was perceived as difficult.” Schunk (1981) has found that “regarding the effects of perceived self-efficacy on persistence, path analyses have shown that it influences students’ skill acquisition both directly and indirectly by increasing their persistence. The direct effect indicates that perceived self-efficacy influences students’ methods of learning as well as their motivational processes. These results validate the mediational role that self-efficacy plays in motivating persistence and academic achievement”. In a
meta-analytic review of nearly 70 studies of persistence and rate measures of motivation.

Bandura (1997) stated that “student’s beliefs about their efficacy to manage academic task demands can also influence them *emotionally* by decreasing their stress, anxiety, and depression.” For example, Pajares and Kranzler (1995) have studied “the relationship between self-efficacy and students’ anxiety reactions regarding mathematics. Although the two measures were negatively correlated, only self-efficacy was predictive of mathematics performance when compared in a joint path analysis”.

There is also evidence that students’ performance in academically threatening situations depends more on efficacy beliefs than on anxiety arousal. Siegel, Galassi, and Ware (1985) found that “self-efficacy beliefs are more predictive of math performance than is math anxiety. The strength of efficacy beliefs accounted for more than 13% of the variance in their final math grades, whereas math anxiety did not prove to be a significant predictor. These studies provide clear evidence of the discriminant and predictive validity of self-efficacy measures, and they suggest particular benefit if educators focus on fostering a positive sense of personal efficacy rather than merely diminishing scholastic anxiety.”

### 1.4 ADJUSTMENT

Adjustment is a harmonious relationship with the environment in which most individual’s needs are satisfied in socially acceptable ways resulting from passive conformity to vigorous action (Veena et al., 2003). It is a condition or state of mind and behaviour in which one feels that one’s needs have been, or will be, gratified. The satisfaction of these needs, however, must lie within the framework and requirements of one’s culture and society. As long as this happens, the individual remains adjusted; failing this, he may drift towards maladjustment and mental illness. Adjustment is the adaptation to different areas as per the demands of the reality, which means the necessity for the organism to govern and would itself in response to the conditions and also to manipulate the surrounding
conditions to meet the needs of survival. It includes the possibility of inconsistencies and conflicts which constitute some of the major problems of adjustment that individual has to face. A well adjusted individual can meet his needs with the resources available in his environment (Broota et al., 1992). According to Arkoff (1968) “adjustment is the interaction between a person and his environment.”

Gates et al. (1970) pointed out that “how one adjusts to a particular situation depends upon one’s personal characteristics and the circumstances of the situation. It is a continual process in which a person varies his behaviour to produce a more harmonious relationship between himself and his environment.” In other words, both personal and environmental factors work side by side in adjustment.

According to Shaffer (1961) “an individual is adjusted if he is adjusted to himself and to his environment and maintains a balance between his needs and circumstances that influence the satisfaction of needs.” While Crow et al. (1956) stated that “an individual’s adjustment is adequate, wholesome or healthful to the extent that he has established harmonious relationship between himself and the conditions, situations and persons who comprise his physical and social environment.” A person with adjustment difficulties is often a nuisance in the family and society. An adjusted learner is one who attacks problem directly, accepts and tolerates normal amount of frustration, acts rationally, makes sincere efforts to reach his goal, enjoy company of others, remain cheerful, energetic and possesses an optimistic view of life and things around him. So “it is the establishment of a satisfactory relationship, as representing harmony, conformance, adaptation or the like” (Webster, 1951). For making the distinction between adjusted and maladjusted behaviour, White (1956) emphasized that “adjustment implies a constant interaction between the person and his environment, each making demands on others; sometimes it is accomplished when the person yields and accepts conditions which are beyond his power to change and sometimes it is achieved when the environment yields to the person’s constructive activities. In most cases adjustment is a compromise between these two extremes and maladjustment is a failure to achieve a satisfactory compromise”. The
important components of adjusted behaviour according to Crow (1974) are the possession of a wholesome outlook of life, a realistic perception of life, emotional and social maturity and a good balance between inner and outer forces that activate human behaviour. A failure to achieve these is likely to be conducive to maladjustment which may lead to a variety of emotional disorder as sadness, hopelessness, lack of enjoyment, nervousness, thoughts of suicide, anxiety, worry, troubled sleeping, feeling overwhelmed and behavioural symptoms as fighting, reckless driving, avoiding family or friends and poor school performance.

1.4.1 Areas of Adjustment

**Home Adjustment:** As home is the basic unit of society, its importance in an individual life is fairly obvious. According to Stover (1974), a person’s home is his castle. The function of the family is to love, to nurture and to support its members (Lystad, 1974). The well adjusted family is not one without problems, it is one which is able to deal successfully with its problems.

**Health Adjustment:** As health is the broadest aspect and essential for a well balanced personality, it depends to a large degree on energy, ideals and happiness. People in poor health are often difficult in surplus energy lacking in self control and pessimistically oriented towards life. Physical changes in adolescents have often been observed which produces stresses and strains and these stresses often disrupt the normal health adjustment of individuals (Bell, 1939).

**Social adjustment:** It is determined by how adequately the individual plays the social role that is expected from him and personal satisfaction he derives from playing this role (Hussain, 1998). It is needed at every age, and influenced by social maturity of the person. Maturity in social relationships mean establishment of good relations with family, neighbours, playmates, classmates, teachers and other members of the society. A socially mature person behaves in accordance with social norms, customs and traditions and possess social qualities as patience, kindness, sympathy, cooperation, courtesy, cheerfulness, respect for others’ opinion, self confidence and self control.
**Emotional adjustment**: This deals with how intensely you experience and express emotions both positive and negative. Experiencing emotions and sorting them out, experiencing joy, love, pleasure and sharing it with concerned person is healthy. Similarly allowing others to express their emotions, helping to sort them out (when their experiences are distressing) involves adjustment with emotional experiences. The emotional development of well adjusted individual depends upon maturation and learning (Wolf, 1992).

Joshi et al. (1964) in their research study “covering school and college students and gave 11 areas of an individual’s adjustment viz. health and physical development; finance, living conditions and employment; social and recreational activities; courtship, sex and marriage; social psychological relations; personal psychological relations; moral and religious; home and family; future-vocational and educational; adjustment to school and college work; curriculum and teaching. Adequate adjustment is achieved by a person who has a healthy self concept” (Gupta, 2001).

In evaluating the adjustment of an individual one must consider all the habits and attitudes, which are used to satisfy an organism’s social and personal needs. Rajput (1985) asserts that poor achievers seem to have no desire to succeed at home, school and community and they are often in a state of tension and anxiety, which interferes with their learning. Children who make poor adjustment are victims of parental rejection, sibling rivalry, culture of parents, undue emphasis on achievement, over indulgence inconsistency, economic strain and poor health conditions (Rajamanickam et al., 1993). A well-adjusted person is one who have awareness of his own strengths and limitations, respecting himself and others, have adequate level of aspiration, satisfy his basic needs, absence of a critical or fault-finding attitude, flexibility in behaviour, capacity to deal with adverse circumstances, feel satisfied with surroundings, always plan, think and act pragmatically.

The methods employed for keeping and restoring harmony between the individual and his environment may be described as direct or indirect. Direct methods are used by the individual intentionally at a quite rational and conscious
level. These may include one’s efforts to increase the number of traits, improve efforts or adopt compromises by resetting the goal or level of aspiration etc. Indirect methods of achieving adjustment are used at the unconscious level. Their aim is to provide temporary adjustment to the individual by protecting him against the psychological dangers. Various types of mental or defence mechanism like compensation, rationalization, projection, identification, repression, regression, withdrawal, sympathism etc. are indirect methods which provide temporary relief from the psychological tension, conflict and stresses and make one able to seek adjustment for the time being.

The age of the student during senior secondary level is of adolescence, which is the transition period between childhood and adulthood. This is a period of heightened sensibility for rapid learning and of critical acquisition, which determines the future life. They have many questions surfacing their mind about themselves i.e. self, sexuality, self work, independence, choice of courses and career, role in family, social relations, religious activities, political ideology and participation in political activities etc. They search for answers to all these questions with certainty. Erickson (1968) believes that adolescents want to work out their identity in four major areas viz. career, morality and religion, political ideology and social roles including sex role. It is believed that adolescents suffer severe conflicts in major areas of life such as education, occupation and home. In these areas, they need to establish their real identity, their actual being. However, important environmental changes do not necessarily cause crises in all adolescents. It is their status and role in the family, school, among peer groups; their achievement, aspiration, conflicts, choice of career.

The period of adolescence is related to storm, stress and age of revolt. It is the most critical stage with distinct phase of rapid physical, psychological and social behavioural changes and emotional disturbances, and where occupational, educational and personal contexts develop. During this period, expectations of the individual drastically undergo modification. Thus the programs for adolescents should focus on the development of academic and career guidance and provision of economic and social constructive activities. Mohan (2000) opines that
adolescence is probably the most turbulent, challenging, stressful and uncertain of all phases in life, both for themselves as well as for their parents, teachers and health professionals.

World Health Organization (1997) has defined adolescence as being between the ages of 10-19 years. The National Council of Educational Research and Training defines adolescence as the period of physical, psychological and social maturity from childhood to adulthood, the period extending from puberty to the attainment of full reproductive maturity. They don’t want to be dependent on their parents, but they are unable to take part in the interdependent system of adulthood. They rebel against childhood dependence, but before they reach interdependence they crave independence and tend to be rebellious.

1.4.2 Adjustment as Achievement or Process

According to Mangal (2006), “adjustment can be interpreted as both, process and the outcome of that process in the form of some attainment or achievement. When a poor child studies under the street light because he has no lighting arrangement at home he is said to be in the process of adjustment. What he attains in terms of success in his examination or the fulfillment of his ambition or pride in his achievement is nothing but the result of his adjustment to him self and his environment.” Mangal further cites from Lazarus (1976) stating that “adjustment as an achievement means how the effectiveness with which an individual can function in changed circumstances and is, as such, related to his adequacy and regarded as an achievement that is accomplished either badly or well. Adjustment as a process describes and explains the ways and means of an individual’s adaptation to his self and his environment without reference to the quality of such adjustment or its outcome in terms of success or failure. It only shows how individuals or a group or groups of people cope under changing circumstances and what factors influence this adjustment. Let us now consider some salient features of adjustment as an interaction between a person and his environment”.

Continuous process: “The process of adjustment is continuous. It starts at one’s birth and goes on without stop till one’s death. A person as well as his environment is constantly changing as also are his needs in accordance with the demands of the changing external environment. Consequently, the process or terms of an individual’s adjustment can be expected to change from situation to situation” according to Arkoff (1968), “there is nothing like satisfactory or complete adjustment which can be achieved once and for all time. It is something that is constantly achieved and reached by us”.

Two-way process: Adjustment is a two-way process and involves not only the process of fitting oneself into available circumstances but also the process of changing the circumstances to fit one’s needs. Emphasizing this two-way nature of the adjustment process, Robert W. White (1956) writes, “The concept of adjustment implies a constant interaction between the person and his environment, each making demands on the other. Sometimes adjustment is accomplished when the person yields and accepts conditions which are beyond his power to change. Sometimes it is achieved when the environment yields to the person’s constructive activities. In most cases adjustment is a compromise between these two extremes and maladjustment is a failure to achieve a satisfactory compromise.”

1.4.3 Educational Adjustment

Concept of Education: Education is the process of manifestation of potentialities of human beings. It brings changes in the pattern of behavior of individuals for better adjustment in different situations of life. It enlightens the human mind to perceive the truth, beauty and nature of things in their proper perspectives. It uplifts people to the higher aspects of life by gathering knowledge, wisdom and experience. It explores the resources for development of human culture and civilization. It assists in upholding the human welfare and prosperity for peaceful living in a better world (Das, 2008, p. 186). The peak of performance is in maturity, but the peak of learning is in adolescence (Cantwell & Svajian, 1974, p. 92). Good adjustment makes the children proud and self-satisfied, motivates them for further success, encourages them to be an independent thinker and builds their confidence (Hurlock, 1972, cited by Jain & Audichya, 2008, p. 186). An intimate
home-school gives all those concerned a much better understanding of the importance to the growing boy or girl of a well-adjusted school life than is possible if parent, school adviser, and pupil attempt to carry out their own ideas concerning educational values independently of one another (Crow & Crow, 1956, p. 425). Statements in this area are concerned with his education, whether he is satisfied with it or not, what improvements, he wants to suggest and do, whether he wants to take higher education, etc. It also covers the students’ relations with the teachers, the administrators and also the co-students. In academic areas, most of the subjects were in favor of resolutions related to schools. They agreed that the school culture should be more compatible, according to one’s background as it facilitates them to better adjust in their school environment.

1.4.4 Academic Achievement and Adjustment

According to Subramanyam, Shreenivasa Rao, (2008) “Academic achievement has become an index of a child’s future in this highly competitive world. It is only a drop in the vast sea of education. A great many students seem not to get credit commensurate with their known or rated abilities. Many a time, we often find students with average abilities who excel. The baffling facts, which have come into the limelight, are that in spite of having similar educational facilities, environment, aspiration and even intelligence, the academic achievement of students differs from one another.” “The pupils’ knowledge attainment and skills developed in the school subjects and is assessed by the authorities with the help of achievement tests in the form of communication” (Bajwa, Sukwant, Setia et al; 1994 cited by Sarode, 1995, p.102).

Jain & Audichya (2008, p. 186) quoted the following authors: Subramanyam (1984) found that “academic environment of a school, which consists of qualified teachers, and good and healthy interaction between teachers and students, has a positive relationship with the achievement of the rural students.” Atkinson and Green (1990) stated that teachers must help to develop a positive attitude in children during schooling. They must also help in the development of self discipline, self-confidence and encourage the children to
actively participate in school activities. Hence, adjustment of students plays a major role in academic achievement of students.

1.5 LOCUS OF CONTROL

According to Njus & Brockway (1999) “Locus of control is an individual’s belief regarding the causes of his or her experiences and the factors to which that person attributes success or failure.” “This can either be internal or external” (Rotter, 1966). Tella (2009) stated that “If a person has an internal locus of control, that person attributes success to his or her own effort and abilities. A person who expects to succeed will be more motivated and more likely to learn. This person will seek out information and is more likely to have good study habits and a positive academic attitude.” Thelma (1998) pointed out that “a person with an external locus of control on the other hand, will be less likely to make the effort to learn since he or she attributes his or her success to luck or fate. In relation to academic achievement, internal were more likely to believe that the achievement was related to their ability and failure related to a lack of effort.” He further explains that “on the other end of the continuum were the externals that were more likely to reject responsibility for failure.” “A locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation).” (Zimbardo, 1985) It is also important to note that locus of control is a continuum. No one has a 100% internal or external locus of control. Instead, majority of the people lie somewhere on the continuum between the two extremes.

Those with an internal locus of control:

- Are more likely to take responsibility for their actions;
- Tend to be less influenced by the opinions of other people;
- Often do better at tasks when they are allowed to work at their own pace;
- Usually have a strong sense of self efficacy;
- Tend to work hard to achieve the things they want;
- Feel confident in the face of challenges;
- Tend to be physically healthier;
- Report being happier and more independent; and
- Often achieve greater success in the workplace
Those with an external locus of control:

- Blame outside forces for their circumstances;
- Often credit luck or chance for any successes;
- Don't believe that they can change their situation through their own efforts;
- Frequently feel hopeless or powerless in the face of difficult situations; and
- Are more prone to experiencing learned helplessness

Internal locus of control is often used synonymously with “self-determination” and “personal agency.” Research has suggested that men tend to have a higher internal locus of control than women and that locus of control tends to become more internal as people grow older. Experts have found that, in general, people with an internal locus of control tend to be better off.

However, it is also important to note that persons having internal locus of control do not always equal “good” and external locus of control do not always equal “bad.” In some situations, an external locus of control can actually be a good thing, particularly if a person's level of competence in a particular area is not very strong.

For example, a person who is terrible at sports might feel depressed or anxious about their performance if they have a strong internal locus of control. If the person thinks, “I’m bad at sports and I don’t try hard enough,” they might feel stressed out in situations where they need to participate in athletics, such as during a physical education class. If this person takes an external focus during such activities (“The game is too hard!” or “The sun was in my eyes!”), they will probably feel more relaxed and less stressed.

Anderson, Hattie, and Hamilton (2005) “a novel multidimensional locus of control instrument (ISEE) to investigate the relationship between locus of control, motivation, and academic achievement in three different types of school. The strengths of the I-SEE are that it incorporates the construct of self-efficacy and that it is embedded in a model of personality and action based on field-theoretical conceptions.” It includes the role of the environment and personality in
determining action. The results support a multidimensional conceptualization of locus of control and the utility of the I-SEE. There were statistically significant differences between schools for motivation and achievement and also a mediating effect between locus of control and school type, suggesting that interactional models were required in investigations of motivation and achievement. Furthermore, moderate levels of locus of control and self-efficacy appeared to be more adaptive than either extremely high or low levels. Martinez (2003) examined “the impact of academic self-efficacy, locus of control, and achievement motivation on academic achievement. Ninety-five 7th and 8th grade students, derived via a convenience sample from a district in the Central Valley of California, participated. Students were surveyed using three scales: the Multidimensional Children’s Perception of, Harter’s Scale of Intrinsic Versus Extrinsic Orientation in the Classroom, and the Student Self-Concept Scale. Among the significant findings: non-Hispanics demonstrated a higher level of achievement motivation than Hispanics. It was suggested that interventions should be designed to promote academic self-efficacy and achievement motivation in children, especially children; this to the author may kindle academic growth.” Liu, Lavelle and Andri (2000) also suggested that “there is need to continue to study Locus of control since it affects achievement as a predictor of persistence in education. Hence the major focus of the present study was to find out if locus of control together with interest in schooling and self-efficacy could predict academic achievement.”

Adeyem (2005) posited that “the importance of interest in whatever a person does cannot be underestimated when it comes to making choice, this is because interest is of considerable importance (pp. 166).” When making a distinction about the structure of interest Hidi and Anderson (1992) identified “two forms of interest, namely, personal and situational interest. They noted that students can approach learning situation with or without interest. Situational interest on the other hand, refers to an interest that people acquired by participating in an environment or context.” Locus of control represents a generalized expectation of effective factors that pertain to reward and punishment in life. On one side of the locus control continuum are those who believe that locus
of control can fix their ability to control life events, whereas on the other side there are individuals who believe that life events occur in conjunction with external factors such as accidents, by chance, or destiny (Borich & Tombaric, 1995). The latter can be explained by factors such as effort and ability which are derived from within an individual having a core of internal causality. Factors such as the difficulty level of a task and chance, both of which arise from outside of the person are considered to be a part of external locus of control. External factors beyond one's control and those with an internal causation core are under the control of an individual (Forsterling, 2001). On the other hand, motivational research believes that progress motivation is an interaction between the situational variables and an individual's motivation to achieve success. Both factors are directly involved with implicit and explicit motivations in expecting the behavior implicit motives act spontaneously, are classified as task performance, and stimulated by inherent incentives to work. Explicit incentives, however, are stimulated by deliberate choice and often provoked by external reasons. Therefore a number of psychologists believe that achievement motivation, locus of control and academic achievement are interrelated. Increasing or decreasing any one of these variables will affect the remaining two variables (Sheikhi Fini, 2011).

Numerous studies have shown that being extremely extrovert in the form of learned helplessness and neglecting efforts and responsibilities as well as one who is extremely introvert are abnormal because of challenges to reality (Klein & Keller, 1996). Research has also shown that the locus of control is related to psychotic symptoms such as self-esteem, anxiety, depression, learned helplessness, and stress, among others (Kalantarkousheh, Alinezhadi, Usefy Nezhad, & Taherian, 2013). Extroverts, by having an external locus of control, presume they have less control over their future and destiny. These individuals are affected by emotional stress and prone to depression (Maltby, Day, & Macaskill, 2007). In terms of mental health, it has been proven that introverts adjust more easily and worry less than extroverts. On the contrary, those with an external locus of control feel more frustration, anxiety and stress (Ghasemi, 1375). Results show that the locus of control is a strong, significant predicator of health and life satisfaction (Kelly, 2000). This assumption is confirmed by Bong (1998) who has
shown that people who have an internal locus of control tend to predict their performance more accurately compared with those who have an external locus of control.

An important consequence of causal attribution in relation to internal and external locus of control is self-concept. The positive consequences of behavior attributed to internal causes enable an individual to feel proud and confident, however luck or success attributed to external factors such as assistance from others and chance do not result in a positive self-concept. This material clearly indicates the relationship between internal and external locus of control and progress motivation. It is presumed that there is a relationship between external locus of control and progress (Maltby, et al., 2007). In another research, a relationship between locus of control and academic achievement has been observed; others have reported a negative relationship between external locus of control and academic achievement (Wood, Saylor, & Cohen, 2009).

Academic problems, on the other hand, can lead to secondary problems such as psychological and relationship problems (Bigdeli & Malekzadeh, 2005). As with self-efficacy, self-esteem is also an aspect of self-concept acquired in a relationship with others (Mazaherei, Bagheban, & Fateheizadeh, 2006). The purpose of self-esteem pertains to how people think about themselves, how they feel about themselves educationally and academically, and the extent to which real-self and ideal-self are consistent (Hosseini, Dejkam, & Mirlashari, 2007). According to the results of one survey the possibility of a significant relationship between locus of control, self-esteem and academic achievement exists. These results have shown a relationship between personality characteristics and academic achievement (Tuzan-dehjany, Nejat, & Kamalpour, 2008).

McIlroy and Bunting (2002) in a research on Irish students have shown a significant relationship between final scores and personality characteristics, self-efficacy, and particularly former academic achievement. According to various studies, a strong and positive relationship exists between locus of control and high self-confidence, motivation, creativity and problem solving.

In recent decades, psychologists have attempted to investigate and identify the factors that affect academic achievement. Their research findings have shown
an association between academic achievement and personality variables, family, school and community (Assadi, Nakaei, Najafi, & Fazel, 2007). Research in this field, in addition to the above mentioned factors, has shown the importance of locus of control in decision making, its successes and failures as well as the affective role of the locus of control in academic achievement. Hence, by adjusting and improving locus of control, mental health can be improved. The recognition and survey of the locus of control has a tremendous role in describing peoples' functions.

Lefcourt (1976) posited that “with the Locus of Control construct, we are dealing with a person as he views himself in conjunction with the things and the meaning that he makes of these interactions between himself and his experiences.” It is a measure of a person’s perception of the determinants of the reinforcement he receives. According to Rotter (1966), “if the person believes that the event is contingent upon his own behaviour or his own relatively permanent characteristics, he has belief I, i.e., ‘internal control’. But if he believes that reinforcement is not due to his actions, and so is contingent upon connections, fate, chance or as under the control of powerful others, the individual has a belief E, i.e., ‘external control’.” In the words of Ducette and Wolk (1972), “an internal person perceives that he is in control of his fate and that effort and reward will be correlated. But an external person perceives that powerful others or the systems determine how well he can do and that rewards are distributed by such powerful others in a random fashion.” So Locus of Control refers to the extent to which a person believes that he has control over there enforcements which he experiences. Those who believe, report, or act as though forces beyond their control are the important factors in determining the occurrence of reinforcing events are referred to as having an External Locus of Control. Such forces might include fate, chance, powerful others, social constraints and the complexity in unpredictability of the world, etc. On the other hand, those who believe and act as though they control their own future and believe that they are the effective agents in determining the occurrence of reinforcing events are referred to as having an Internal Locus of Control.
1.6 ACADEMIC ACHIEVEMENT AND SELF-EFFICACY

Self-efficacy plays an important and major role in lives and future of students. The decrease and increase of self-efficacy will contribute a lot towards their achievement in life. Students with high or low level of self-efficacy will display different attitudes in learning. Study done by Abu-Tineh, Khasawneh, and Khalaileh (2011) have shown that “when students have low level of self-efficacy, they have the potential to commit discipline problems at school.” “The self-efficacy which is centred in the mind, works to control the attention of the human discipline” (Ashley & Rittmayer, 2003). These concepts were strongly supported by Sanders and Wooley (2005) they observed that “self-efficacy is the best predictor of discipline problems. Thus, self-efficacy has the potential to guide human actions and behaviours. Students, who have high level of self-efficacy, will have more awareness about their learning and they will not commit discipline problems.” From this statement, it could be understood that self-efficacy can be described as the key factor and cause of discipline problems. According to Bandura (1997), “One of the social characteristics of a learner is the belief he holds in his capability to accomplish a task or activity that affect his live. In other words, self–efficacy belief is very essential in guiding learner’s personnel and academic accomplishments. Self-efficacy belief as one of the learner’s emotional input behavior with which he enters the learning environment. Self-efficacy as people's beliefs about their capability to produce designated level of performance that exercise influence over events that affect their lives.” Three critical issues related to individuals self-beliefs thus; “That students difficulties in basic academic skills are often directly related to their beliefs that they cannot read write, handle numbers, or think well- that they cannot learn- even when such things are not objectively true; That many students have difficulty in school not because they are incapable of performing successfully but because they are incapable of believing that they can perform successfully- they have learned to see themselves as incapable of handling academic work or to see in the work as irrelevant to their perceptual world; and that many if not most academic crises are crises of confidence”. Human accomplishment and well being is enhanced by a strong self efficacy. A person high assurance in his/her capability enable him/her
view difficult tasks as challenges to be addressed rather than threats. This fosters intrinsic motivation of doing different activities despite of their nature. People with strong self-efficacy maintain strong commitment to the set challenging goals and incase of failure they are able to sustain their effort and their sense of efficacy is recovered. Failure is attributed by these students to lack of effort or deficit in knowledge and skills, which one can acquire easily. They belief they can exercise control over threatening situations and come up with solutions. All these outlooks produce different achievements to the satisfaction of the individual (Walker et al., 2004). To the matter of impact of student self-efficacy to student academic achievement, Bandura (1993) stated, “student belief (self-efficacy) to regulate their own learning and to master their academic activities can determine a student’s aspirations, level of motivation, and academic achievement.” The work of Schunk (193), “provides additional evidence. Schunk provides significant review of literature on this topic over several years of study, and his individual research on the impact of self-efficacy to student educational outcomes is noted. Therefore, it is important for the researcher to investigate students’ self-efficacy.”

1.7 ACADEMIC ACHIEVEMENT AND ADJUSTMENT

Adjustment is a key concern in all developmental stages, but is of great relevance during adolescent. Adapting to the changes within themselves and to the changed expectations of the society is a major developmental task of the adolescent stage. Their motivation levels, happiness, aspirations, emotional wellbeing and subsequent achievements are linked to their adjustments with the ever changing external and internal environment. Dishion (1990); Feschbach & Feschbach (1987) and Green, Forehand, Beck & Vosk (1980) found “a positive relationship between adjustment and school attainment has long been known.” Krishnan (1977) stated that “good adjustments make the adolescents proud and self-satisfied, motivate them for future success, encourage them to be an independent thinking person and build their confidence and in turn improve the mental health. The environment created in the school as well as home either accelerates or retards the development of any pupil.”
According to Greenbaum (1974) “school plays a vital role in the development of an adolescent as they spend most part of their day attending school, engaging in extra curricular activities; and even at home engaged in scholastic work. School is an institution which contributes to the total educational and socialization process directed to the development of personality of an adolescent.” Newman and Newman (1986) found that “school environment includes relationships among and between administration, teachers, parents, students and the community that influences over all development through the academic demands of formal curricula and through exposure to teachers who emphasize academic achievement, motivation to learn and self-improvement.” Juvonen & Wentzel (1996) pointed out that “there is increasing realisation among scholars that there are many aspects of interpersonal relationships that have the potential to influence academic motivation and scholastic attainment too.” These relationships can either facilitate or hamper the developmental trajectory of the student.

1.8 ACADEMIC ACHIEVEMENT AND LOCUS OF CONTROL

There has been much interest in the relationship of locus of control to education. Rotter (1966) stated that “one may predict a positive relationship between internal locus of control and school achievement. When a child believes that his rewards or punishments depend on his own efforts (internal control), it is most likely that he will strive to do those things that bring about rewards and minimize punishments.” Keith, Pottebaum, & Eberhardt (1986) posited “the relationship between locus of control and academic achievement is convoluted. Intuitively, students who attribute success to internal factors are likely to expect future successes; students who attribute failure to internal factors may expect future failure unless they consider themselves capable of and actively address those factors. Conversely, attributing success to external factors would make future successes unpredictable and deem the student powerless to address what they perceive to be uncontrollable factors.” Within the domain of education, internal locus of control has been found to be a positive predictor of academic
achievement, while Eachus & Cassidy (1997a) stated that “external locus of control to be a negative predictor of academic achievement”

This point has been confirmed by several studies (McGhee & Crandall, 1968; Linter, 1972; Bartel, 1971; Messer, 1972). However, it has been shown that “there were more consistent effects for males than for females” (Crandall, Katkovsky, & Preston, 1972; Nowicki & Roundtree, 1971), “social desirability effects confounded relationship between achievement and locus of control for females” (Nowicki & Walker, 1973). Using the Intellectual Academic Responsibility (IAR) Questionnaire, McGhee and Crandall (1968) found that “the both internal responsibility for success (1+) and internal responsibility for failures (1-) predicted girls' grades and achievement test scores, while boys' scores were predicted consistently only by belief in their responsibility for failures (1-)”. Daum & Wiebe (2003) stated that “ locus of control has been affiliated with academic performance and achievement in the professional realm, as well as health and psychological well-being. The authors describe internals as having a tendency to perform better on academic tasks than externals, and have more effective coping strategies which lead to better psychological adjustment. These enviable characteristics reduce the negative health effects associated with high stress. The type of locus of control has effects on reason of concerning a specific event of a person. When people are successful, they have internal locus of control and when they are failure, they have external locus of control.” Saricam & Duran (2012) stated that “academic locus of control is the same structure like locus of control and it shows the control of beliefs in terms of achievement and academic contexts (Daum & Wiebe, 2003; Auer, 1993; Trice, 1985).” Persons prefer to be internal academic locus of control at the situations of being successful and prefer to be external academic locus of control during being failure. Daum and Wiebe (2003) found that “students in their first year in university have a high score in external academic locus of control regardless of their success or failure in their midterm-exams results.” Crandall & Katkovsky (1965) and Tella, Tella & Adeniyi (2009) found that “there is a significant correlation between locus of control and academic achievement”.
Shepherd, Owen, Fitch & Marshall (2006) and Yates (2009) showed that “high-achieving students have high score in internal locus of control than low achieving students.” According to the study of Bostic (2010), “there is a significant difference in academic achievement of students who have internal locus of control between students who have external locus of control. This research showed that students having internal locus of control are more successful than students having external locus of control are and this difference changed when gender is considered; the score of female is higher than male’ in terms of locus of control. Students who have higher locus of control have high score.”

1.9 RATIONALE OF THE STUDY

The public debate now in educational sector is whether there is falling or decline in standard of education. This debate continues to ravage the minds of researchers and educational stakeholders because precise answer is yet to be sought but rather speculation of what might be responsible for this assertion or claim. Many factors had been adduced for this, if it is actually true. Among the factors, are classroom management, educational materials, qualified personnel, education/school phobia or fright, factors which recognized as physical variables.

Now-a-days academic achievements of students are measured as a key indicator for evaluating educational systems. Academic achievement is one of the suitability factors in the classroom, also it is too much essential to get an occupation and promotion in it. Academic achievement is also an important factor from another aspect, i.e., due to the fact that each cultural system is continuously evaluated by experts in order to gain best results and conditions and to resolve obstacles and shortages through entire educational and cultural processes and gaining the best possible usage of inside data and finally the outcome of educational and cultural systems are the students with some special abilities. Academic achievements is the one of the most explicit and important indicators for evaluating and investigating cultural systems efficiency.
Many research have shown that there is a significant and positive and relationship between self-efficacy and academic achievements. These researches have shown that regardless of gender, age, disciplines, domains and countries, a student with higher sense of self efficacy will attain better academic performance. For example Louis and Mistele (2011) reported that “although there were differences in level of self-efficacy by gender in young adolescents taking mathematics and science, self-efficacy is still found to be a good predictor of the achievement scores.”

It is an eminent reality that healthy adjustment is essential for normal growth in the life of an individual. Education guides person for healthy adjustment in a range of life situations of the present and future. This reason implies that adjustment and education are inter-linked and complementary to each other.

Locus of control and academic achievement have a meaningful and positive correlation between each other. “The locus of control in relationship with the culture and education and its’ dependent variants, could be studied and investigated as a main indicator in predicting students’ achievements, failures and academic drop. Persons who are identified by personality of internal locus of control, believe that some other factors such as luck or difficulty of the assignment causes achievement or failure (Slaven, 2003)”. Findly and Coper (1983) found that “locus control and academic achievement in a study and concluded that there is a meaningful and positive correlation between locus of control and academic achievement and the correlation’s amount for middle limit of directing of internal and external locus of control. They concluded that internal persons consider success (good grade) as a result of ability and attempt and persons with external control supply, consider gaining grade as matter of chance and fortune. Internal persons try more than external persons to achieve grade (achievement), internals also adopt themselves with the conditions more than externals”. In addition the study will found out the relationship between academic achievement & self efficacy, academic achievement & adjustment and academic achievement & locus
of control and finally draw implications on the improvement of students performance.

1.10 STATEMENT OF THE PROBLEM

“ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN RELATION TO SELF EFFICACY, ADJUSTMENTS AND LOCUS OF CONTROL”

1.11 OPERATIONAL DEFINITIONS OF THE TERMS USED

1.11.1 Academic Achievement: “Academic achievement or academic performance is the outcome of education— the extent to which a student, teacher or institution has achieved their educational goals”.

1.11.2 Self Efficacy: “It is the power or capacity to produce desired effects. It is a belief that one has the capability to execute the course of actions required to manage perspective situation”, According to Bandura (1994), “Self efficacy is defined as belief about capabilities to show required levels of performance”.

1.11.3 Adjustment: “An individual’s adjustment is adequate, whole some or healthful to the extent that he has established harmonious relationships between and the conditions, situations and person who comprise his physical and social environment.”

1.11.4 Locus of Control: “Locus of control is a theory in personality psychology referring to the extent to which individuals believe that they can control events that affect them. A person’s ‘locus’ is conceptualized as either internal or external meaning they believe that their decisions and life are controlled by environmental factors which they cannot influence.”
1.12 VARIABLES USED IN THE STUDY

**Dependent Variable**
- Academic Achievement

**Independent Variables**
- Self-Efficacy;
- Locus of control;
- Adjustments; and
- Gender (Girls/Boys)

1.13 OBJECTIVES OF THE STUDY

1. To study and compare the academic achievement of male and female secondary school students.
2. To study and compare self-efficacy of male and female secondary school students.
3. To study and compare the adjustment of male and female secondary school students.
4. To study and compare the locus of control of male and female secondary school students.
5. To see the relationship between academic achievement and self-efficacy of secondary school students.
6. To see the relationship between academic achievement and self-efficacy of male secondary school students.
7. To see the relationship between academic achievement and self-efficacy of female secondary school students.
8. To see the relationship between academic achievement and adjustment of secondary school students.
9. To see the relationship between academic achievement and adjustment of male secondary school students.
To see the relationship between academic achievement and adjustment of female secondary school students

11. To see the relationship between academic achievement and locus of control of secondary school students

12. To see the relationship between academic achievement and locus of control of male secondary school students

13. To see the relationship between academic achievement and locus of control of female secondary school students

14. To see the relationship between academic achievement and emotional adjustment of secondary school students

15. To see the relationship between academic achievement and social adjustment of secondary school students

16. To see the relationship between academic achievement and educational adjustment of secondary school students.

17. To see the relationship between academic achievement and powerful control of secondary school students.

18. To see the relationship between academic achievement and chance control of secondary school students.

19. To see the relationship between academic achievement and individual control of secondary school students.

1.14 HYPOTHESES OF THE STUDY

1. There is no significant difference in academic achievement of male and female secondary school students.

2. There is no significant difference in self-efficacy of male and female secondary school students.

3. There is no significant difference in adjustment of male and female secondary school students.
4. There is no significant difference in locus of control of male and female secondary school students.

5. There is no significant relationship between academic achievement and self-efficacy of secondary school students.

6. There is no significant relationship between academic achievement and self-efficacy of male secondary school students.

7. There is no significant relationship between academic achievement and self-efficacy of female secondary school students.

8. There is no significant relationship between academic achievement and adjustment of secondary school students.

9. There is no significant relationship between academic achievement and adjustment of male secondary school students.

10. There is no significant relationship between academic achievement and adjustment of female secondary school students.

11. There is no significant relationship between academic achievement and locus of control secondary school students.

12. There is no significant relationship between academic achievement and locus of control of male secondary school students.

13. There is no significant relationship between academic achievement and locus of control of female secondary school students.

14. There is no significant relationship between academic achievement and emotional adjustment of secondary school students.

15. There is no significant relationship between academic achievement and social adjustment of secondary school students.

16. There is no significant relationship between academic achievement and educational adjustment of secondary school students.

17. There is no significant relationship between academic achievement and powerful control of secondary school students.
18. There is no significant relationship between academic achievement and chance control of secondary school students.

19. There is no significant relationship between academic achievement and individual control of secondary school students.

1.15 DELIMITATIONS OF THE STUDY

Keeping in view the time available and limited resources, the present study was delimited to the following aspects:

1) The study was delimited to secondary students studying in 10th class only.
2) The sample was taken from a few districts of Haryana only.
3) Only academic achievement was taken as dependent variable in the present study.
4) The study was delimited to find out the effect of independent variables such as self-efficacy, adjustments and locus of control.