CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Education is the process of developing the capacities and potentialities of individual so as to prepare that individual to be successful in a specific society or culture. From this perspective, education is serving primarily as an individual development function (Kumar, 2013). Human beings are positive assets and precious natural resources, which needs to be cherished, nurtured and developed with care and dynamism. Education is an important factor that helps in bringing about various changes in human beings and also to the society. Education is meant to make one’s life civilized, cultured and progressive in real sense. It helps a person to draw the best out of one’s mind and spirit. It makes a person rational, innovative, constructive, right thinker, intelligent, independent and creator of new values. Education is the process of developing the capacities and potentialities of the individual so as to prepare that individual to be successful in a specific society or culture. It imparts one with all the power of necessities in making a noticeable mark in any of the field. It is generally seen as the foundation of society which brings economic wealth, social prosperity and political stability.

Education is the major aspect of development of any modern society, since if there is a deficit of educated people then society will stop its further progress. Education should not be limited to teaching subjects as one can learn history, math, science and other subjects and be a “book-smart”. But education must be equipped with knowledge and skills which are needed to participate effectively as member of society. In our society academic achievement is considered as a key criterion to judge one’s total potentialities and capacities. Hence academic achievement occupies a very important place in education as well as in the learning process. An information and technology based society requires individuals, who are able to think critically about complex issues, analyze and adapt to new situations, solve problems of various kinds and communicate their thinking effectively. Thus, there is a need to make systematic educational efforts primarily aimed at influencing attitudes, behaviour, values and personality of individuals to manage their growth and development well.
1.2 ACADEMIC ACHIEVEMENT

Academic achievement has always been a crucial point and main center of educational research despite varied statement about the aim of education. Academic development of the pupil is the primary concern and the most important goal of education. Not that other aspect of educational objectives are to be ignored but the fact remains that academic achievement is the unique responsibility of all educational institutions established by the society to promote a wholesome scholastic development of pupil (Saini, 2010).

In this era it is performance of the student which decides their fate. So it becomes increasingly important to perform better in all aspects of life particularly, in examination to progress in life. Achievement is something gained by some person in his field of endeavor. Now a day, tests on achievement have gained significant importance in measuring one's ability. An achievement test is used to measure nature and extent of students learning in a particular subject. Various factors and conditions affect the achievement of a particular student in a particular field. Sometimes quite deserving students may not achieve as can be expected on the basis of their abilities. Students' interest in the field of endeavor, teachers' methodology of teaching, socio-economic conditions and family set up and some other psychological factors also affect students' performance directly or indirectly.

All the human beings are not alike and perform variously on a similar test. There are several factors like interest, attitude, desired knowledge and skill which count toward this difference. The very question as to what factors promote academic achievement in students has exhorted educational researches.

In our society academic achievement is considered as a key criterion to judge one’s total potentialities and capacities. Hence academic achievement occupies a very important place in education as well as in the learning process. An achievement is all an obtaining for an exertion or an accomplishment of an effort. Achievement is thus an attainment, a proficiency gained or an ability required. In the field of education an achievement is the amount of knowledge or skills that a child has learnt in a particular field or subject (Kumar, 2013). It is an exposition of his present level of performance. Academic Achievement is the core of the wider term "Educational Growth" which means
growth in all aspects. It means the amount of knowledge gained by the students in different subjects of study. It encourages the students to work hard. Thus, it helps to know where the student stands. A sense of achievement is a source of joy and good feeling and a failure is a source of anger and frustration. It is the unique, prime and perennial responsibility of a school or any other educational institution established by society to promote a wholesome scholastic growth and development of child. It generally refers to degree of success of that of proficiency attained in some specific area concerning academic work. It indicates what an individual has learnt or acquired in particular field.

1.2.1 Definitions of Academic Achievement

“Academic achievement refers to the knowledge attained or skills developed in school subjects usually designated by test scores or by marks assigned by teacher or by both” (Good, 1959).

Pressey et al. (1959) define achievement as the status or level of a person’s learning and his ability to apply what he has learned. According to them, achievement would not only include acquisition of knowledge and skills but also attitudes and values.

“Scholastic achievement as the attained ability or degree of competence in school tasks, usually measured by standardized tests and expressed in grades or units” (Trow, 1960).

Academic achievement as the extent to which a learner is profiting from instruction in a given area of learning i.e. achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designed by test scores (Crow and Crow, 1969).

Mehta (1969) expresses the view that the word ‘performance’ is a wider term, which includes both the academic and co-curricular performance of an individual. Achievement is the learning outcome of a student. A level of academic achievement in the academic field of a student is included in the performance of an individual.

Academic achievement as the level of proficiency attained in academic work or as formally acquired knowledge in school subjects which is often represented by percentage of marks obtained by students in examination (Kohli, 1975).
Horrock (1976) defines achievement as the status or level of person’s learning and his ability to apply what he has learned. According to him, achievement would not only include acquisition of knowledge and skills but also attitudes and values as aspects of achievement. Achievement as manifested by the application of acquired skills and knowledge is a product of learning attitudes and interests since these factors would implicitly influence the intent of achievement.

Christian (1980) remarks that the word ‘achievement’ indicates the learning outcome of the students. As a result of learning different subjects, the behaviour pattern of the students changes. Learning affects three major areas of behaviour of students (1) cognitive (intellectual development, recall and recognition) (2) affective (Self concept and personal growth) and (3) Psycho-motor (developing muscular skills). He says that all these three levels are not affected in equal measures at a time. It means, a student may be at a higher level in one domain and lower in another.

“The term academic achievement refers to instructional system of formal education within school, college or university” (Hawes and Hawes, 1982).

“Achievement are the scores obtained in the annual examination. It measures or assesses the status or level of person’s skill, the range and depth of his knowledge or his proficiency in designed area of learning or behaviour. It is measured and assessed by achievement tests and compared to the set norms to evaluate an individual’s performance. These tests may be created or standardized” (Hurlock, 1989).

Taneja (1989) states that academic achievement refers to performance in school or college in a standardized series of educational tests.

“Achievement encompasses student’s ability and performance, it is multidimensional, it reflects the whole child, it is not related to a single instance but occurs across time and levels through a student’s life in school and in post secondary years and working life” (Steinberger, 1993).

“At its best, academic achievement represents intellectual ability to participate in the production of knowledge. At its worst, academic achievement represents inculcation and mindless indoctrination of the young into the canons and orthodoxy” (Landson-Billing, 1999).
Academic achievement is excellence in all academic disciplines, in class as well as extra-curricular activities. Academic achievement is knowledge attained or skills developed by pupils usually in the school subject measured by test scores or by marks assigned by teachers or by both. Academic achievement may be defined as the degree or level of proficiency attained in scholastic and academic work. It is the competence that is really revealed in school subjects in which students have received instructions. It is directly related to pupil’s growth and development in educational situations, where learning and teaching are intended to go on.

1.2.2 Factors affecting Academic Achievement

Academic achievement is a multidimensional and multifaceted phenomenon. There are many factors which affect academic achievement viz. intelligence, personality, motivation, school environment, heredity, home environment, learning, experiences at school, interests, aptitudes, family background, socio economic status of the parents and many more other factors influenced the academic achievement (Pannu, 2010).

(i) Individual factors: These factors are related to the individual himself. The main among these factors are:

a) Cognitive like intelligence, learning ability, cognitive styles, creativity etc.

b) Non Cognitive like attitude towards self and others, perceptions of school, interests, motivation, level of aspiration, study habits, personality, self esteem, attitude towards education etc.

(ii) Environmental Factors: These are related to the environment of the individual. These include socio-economic status; family traits and company i.e. value system, educational system, system of evaluation, teachers’ efficiency, training and methods of teaching, school environment and home environment, peer groups etc. (Chhabra, 2012).

(iii) Psychological Factors: These are related to individual himself e.g. intelligence, learning ability, motivation, self-efficacy, learning style, study skills, creativity, level of aspiration, self-concept, locus of control, interest, etc (Kumar, 2010).
In a comprehensive study Sinha (1970) reported that hard work, intelligence, memory, good health, availability of books, methods of study, financial security and interest in social and practical work affect the academic scores. Factors of achievement may also be classified as subjective and objective factors. Subjective factors are related to the individual himself while influencing one’s achievement as intelligence, learning ability, self-efficacy, learning style, study habits, creativity, level of aspiration, self-concept, locus of control etc. whereas objective factors are related to the environment of the individual as socio economic status, educational system, family environment, evaluation system, value system, teachers’ efficiency, school situation and environment. Aggarwal et al. (1998) reported that main factors affecting academic achievement are affective factors viz. cognitive style, motivation, anxiety, study habits, level of aspiration, stress, value, perseverance, self-efficacy, emotional maturity, attitude, adjustment, interest, need and curiosity; cognitive factors viz. ability, intelligence, creativity, problem solving, reasoning ability and learning rate; school related factors viz. type of school, school climate, teacher’s personality, homework, alienation, teachers’ expectation and attitude, training strategies, teachers’ experience, medium of instruction, teachers’ behaviour and competency and class room environment; home related factors viz. family size, birth order, socio economic status of family, gender bias, parental involvement, parental support, deprivation, child rearing practices, working and nonworking parents, parental aptitude and expectations.

1.3 METACOGNITION

Educational psychologists have long promoted the importance of metacognition for regulating and supporting student learning. The concept of metacognition is of recent origin in cognitive theory. It is the process of “thinking about thinking” and knowing “what we know” and “what we don’t know.” It refers to higher order mental processes involved in learning, such as making plans for learning, using appropriate skills and strategies to solve a problem, making estimates of performance and calibrating the extent of learning. It consists of two basic processes occurring simultaneously: monitoring one’s progress as one learns and making changes and adapting one’s strategies if one perceives one is not doing so well (Winn and Synder, 1996).
Metacognition is a very complex phenomenon. It is a combination of two words: Meta and Cognition. The prefix ‘Meta’ refers to something that transcends the subject it is related to where as ‘Cognition’ is the internal structure and process that is involved in the acquisition and use of knowledge including sensation, perception, attention, learning, memory, language, thinking and reasoning. Thus, metacognition refers to a level of thinking that involves active control over the process of thinking that is used in learning situation. The term metacognition refers to the psychological processes that are involved in the way a person controls, modifies, and appraises his own thoughts (Kaur, 2010).

The term ‘metacognition’ is most often associated with John Flavell. According to Flavell (1976), metacognition consists of both metacognitive knowledge and metacognitive experiences or regulation. Metacognitive knowledge refers to acquired knowledge about cognitive processes, knowledge that can be used to control cognitive processes. Flavell further divided metacognitive knowledge in to three categories: (i) person variables or knowledge about one’s self and other’s thinking (ii) task variables or knowledge that different types of tasks exert different types of cognitive demands and (iii) strategy variables or knowledge about cognitive and metacognitive strategies for enhancing learning and performance (Flavell, 1979, 1987). Metacognitive experiences involve the use of metacognitive strategies or metacognitive regulation. Metacognitive strategies are sequential processes that one uses to control cognitive activities and to ensure that a cognitive goal has been met. These processes help to regulate and oversee learning and consist of planning and monitoring cognitive activities as well as checking the outcomes of those activities (Kaur, 2010).

Soon after Flavell’s introduction, interest in metacognition flourished. Brown (1980) applied metacognitive theory to reading and differentiated between cognitive and metacognitive processes. She identified the metacognitive process as reader controlled strategies that include selecting and studying the most important part of text, selecting retrieval cues and estimating readiness for tests. She also distinguished between knowledge about cognition and regulation of cognition. Knowledge about cognition deals with all the concepts which are related to our thinking processes such as self-concept of knowledge, self-intelligence, self-memory, attention, study habits etc. It can be stable, late developing and remain relatively consistent within individuals. Regulation of
cognitive processes includes all those mechanisms through which we regulate our thinking process such as orientation, planning, monitoring, testing, repairing, evaluating, reflecting etc. It can be relatively unstable, age independent and changes rapidly from situation to situation.

Paris, Wasik and Turner (1991), while recognizing the rate of self regulation and motivation in metacognition, emphasized self awareness and self- efficacy. On the other hand, Zimmerman, Bandura and Martinez-Pons (1992) while noting the importance of motivation and self- efficacy to self regulation posed that self regulation differentiates between academic success and failure. Thus, metacognition tends to be interpreted as a process in head, rather than as interactive one.

Thus, the concept of metacognition can be described as a higher order cognitive structure, i.e. knowledge and processes that control, execute, and evaluate cognition. Metacognition is a superior system that encompasses a person's self-awareness of his/her cognitive functions and facts and that enables a person to purposefully direct these functions and facts. In other words, it's a person's knowledge, about his/her own knowledge; thoughts about his/her own thoughts, or eye on his/her own cognitive process.

1.3.1 Definitions of Metacognition

Flavell (1976) refers metacognition as “the individual’s own awareness and consideration of one’s cognitive processes and strategies.”

Paris et al. (1984) describe three aspects of self-control strategies for learning:

- Declarative Knowledge: the ability to describe some thinking strategies.
- Procedural Knowledge: knowledge of how to use the selected strategies.
- Conditional Knowledge: Knowledge of when to use it.

Metacognition refers loosely to one’s knowledge and control of one’s own cognition system (Brown, 1987).

“Metacognitive skills include taking conscious control of learning, planning and selecting strategies, monitoring the progress of learning, correcting errors, analyzing the effectiveness of learning strategies and changing learning behaviour and strategies when necessary”(Ridley et al., 1992).
Houston (1995), Metacognition is “knowledge or beliefs” about factors affecting one’s own cognitive activities; also reflection on a monitoring of one’s own cognitive processes such as memory or comprehension.

Wilson (1999) defines metacognition as:

- **Metacognitive Awareness**: It relates to an individual’s awareness of where they are in the learning process, their knowledge about content, personal learning strategies and what has been done and needs to be done.
- **Metacognitive Evaluation**: It refers to judgments made regarding one’s thinking capacities and limitations as these are employed in a particular situation or as self-attributes.
- **Metacognitive Regulation**: It occurs when individuals modify their thinking.

“Metacognition and reflection both are concerned with the process of monitoring, regulating and controlling an individual’s thinking about their thinking” (Daniels, 2002). Mayer (2003) viewed metacognition “as the knowledge and awareness of one’s own cognitive processes.”

Metacognition is “one’s knowledge and beliefs about one’s own cognitive processes and one’s resulting attempts to regulate those cognitive processes to maximize learning and memory” (Ormrod, 2006).

Thus metacognition is the ability to evaluate one’s own comprehension and understanding of subject matter and use that evaluation to predict how well one might perform on a task. This is the process where the student takes conscious control of the learning and thinks about how one is thinking in a cognitive sense.

### 1.3.2 Components of Metacognition

**I. Metacognitive Knowledge**: Knowledge of cognition refers to what individuals know about their own cognition or about cognition in general. It deals with all the concepts, which are related to our thinking processes such as self- concept of knowledge, self- intelligence, self-memory, attention, study habits etc. (Govil, 2003). It includes three different kinds of metacognitive awareness:

(a) **Declarative Knowledge**: Declarative knowledge includes knowledge about oneself and others as a learner and about what factors influence one’s performance. For example, research investigating metamemory (i.e., knowledge
about memorial processes) indicates that adults have more knowledge than children about the cognitive processes associated with memory (Baker, 1989). As good learners appear to have more knowledge about their own memory and are more likely than poor learners to use what they do know (Garner, 1987; Schneider and Pressley, 1989). Declarative knowledge is stable, familiar, constant, established long-term knowledge which involves self-knowledge, self-awareness and a sensitivity to and evaluation of this knowledge.

(b) **Procedural Knowledge**: Procedural knowledge refers to knowledge of processes and actions and knowledge about the execution of procedural skills. Individuals with a high degree of procedural knowledge use skills more automatically (Stanovich, 1990), are more likely to sequence strategies effectively (Pressley, Borkowski, and Schneider, 1987), and use qualitatively different strategies to solve problems (Glaser and Chi, 1988; Schraw & Moshman, 1995).

(c) **Conditional Knowledge**: Conditional knowledge refers to knowing when and why to apply various cognitive actions. It allows students to allocate resources and use strategies effectively. Students select different strategies most appropriate for each situation in an effort to better regulate their learning. Many theorists believe that metacognitive knowledge appears early and continues to develop throughout adolescence. Adults tend to have more knowledge about their own cognition than do young children and are better able to describe that knowledge (Kaur, 2010). Conditional knowledge supports awareness and knowledge of task type, demands and context and is also needed to support both declarative and procedural knowledge.

II. **Metacognitive Regulation**: It refers to those mechanisms that help to regulate one’s thinking or learning. Three essential skills included in the process of controlling one’s thinking or learning are:

(a) **Planning**: It involves the selection of appropriate strategies and the allocation of resources that affect performance. For example, making predictions before reading, selection of strategies and allocation of resources before beginning a task etc.
(b) **Monitoring**: Monitoring refers to one’s on-line awareness of comprehension and task performance. The ability to engage in periodic self-testing while learning is a good example. Research indicates that monitoring ability develops slowly and is quite poor in children and even adults. Studies also suggest that monitoring ability improves with training and practice (Schraw & Moshman, 1995).

(c) **Evaluation**: Evaluation refers to appraising the products and a regulatory process of one’s learning. For example re-evaluating one’s goals and conclusions. A number of studies indicate that metacognitive knowledge and regulatory skills such as planning are related to evaluation (Schraw & Moshman, 1995).

### III. Metacognitive Experiences

For the effective functioning of metacognitive skills and for metacognitive experiences to occur metacognitive knowledge, including its three main forms i.e. declarative, procedural and conditional is the essential ingredient. Metacognitive experiences are those instigated during the monitoring of cognitive, problem-solving and not all forms are directly related to memory monitoring. Metacognitive experiences are influenced by a number of factors, i.e. task factors such as task complexity, performance and previous experiences; personal factors such as cognitive ability, personality, and self-concept and metacognitive factors such as metacognitive knowledge (Efklides, 2001).

Researchers agree that regulatory competence improves performance in a number of ways, including better use of cognitive resources such as attention, better use of strategies, and a greater awareness of comprehension breakdowns. A number of studies report significant improvement in learning when regulatory skills and an understanding of how to use these skills are included as part of classroom instruction (Cross and Paris, 1988; Brown and Palincsar, 1989).

#### 1.3.3 Theories of Metacognition

Metacognitive theories are those theories that integrate one’s knowledge about cognition and regulation of cognition. By “theory” we mean a relatively systematic structure of knowledge that can be used to explain and predict a broad range of empirical phenomena. By a “metacognitive theory” we mean a relatively systematic structure of knowledge that can be used to explain and predict a broad range of cognitive and metacognitive phenomena. There are three different types of theories:
(i) Tacit Theories

Tacit theories are those acquired or constructed without any explicit awareness that one possesses a theory (McCutcheon, 1992). For example, children’s beliefs about intelligence affect their behavior in the classroom. As in incremental theory, child believes that intelligence is subject to change through other or self-directed processes. Tacit theories provide limited guidance and explanatory power. These theories are characterized by loosely systematized knowledge and postulates that are not known consciously by the theorists (Kaur, 2010). Tacit theories about one’s own cognition or about the epistemic nature of the world also affect the way adults perform (Sternberg and Caruso, 1985). McCutcheon (1992) describes how teachers’ tacit theories affect their interactions with students and curricular choices. The most salient aspect of a tacit metacognitive theory as opposed to an explicit one is that an individual is not readily aware of either the theory itself or evidence that supports or refutes it. Thus, tacit theories are not readily distinguished from, or tested against, relevant data (Kuhn, 1989; Moshman, 1979). To the extent that they remain tacit, metacognitive theories as they persist even when they are false and maladaptive.

(ii) Informal Theories

Informal theories often are fragmentary in that individuals are aware of some of their beliefs and assumptions regarding a phenomenon, but have not yet constructed an explicit theoretical structure that integrates and justifies these beliefs. Informal theories develop slowly and are affected by a number of social and personal influences (Schraw & Moshman, 1995). Informal theories start as domain specific entities and gradually are generalized to other domains (Kuhn et al., 1992; Paris and Byrnes, 1989). Research indicates that very young children do not question the truth and certainty of their own beliefs or those of others (Montgomery, 1992). The reason is that they are unable to conceptualize false beliefs and therefore find it impossible to think of true or false beliefs as subsets of beliefs in general. By the age of four, most children recognize that beliefs can be false and thus it is reasonable to inquire about the truth or falsity of a claim as a part of the reasoning process (Flavell et al., 1993). At this age, children begin to
develop postulates regarding the truth and certainty of a claim. At the age of six, children also begin to develop an awareness that knowledge and understanding are constructed and that they have some degree of control over this process which may help children develop rudimentary informal theories of their own thinking (Montgomery, 1992). Although initially tacit, such postulates over time may provide a basis for testing an increasingly explicit metacognitive theory. An advantage of an informal metacognitive theory compared to a tacit one is that it enables individuals to reflect purposefully and systematically on their performance.

(iii) Formal Theories

Formal theories consist of highly systematized approach to learn something that has a specific form or structure (e.g. physics, music, or statistics) that needs to be known, used or remembered. Formal theories exert a profound impact on performance and on the understanding of performance. Formal theorists possess some explicit awareness of the constructive nature of theorizing and engage in purposeful efforts to construct and modify metacognitive theories (Kuhn et al., 1992; Paris and Byrnes, 1989). One potential advantage of a formal metacognitive theory is that it allows the individual to make informed choices about self-regulatory behaviors and the individuals who make such choices are known as “producers of their own development”. Kuhn (1989) has described two skills that may be necessary for the construction of a formal theory. One is the ability to clearly distinguish and coordinate the formal and empirical aspects of a theory. Formal theorists understand that the formal and empirical aspects of a theory are conceptually independent of each other even though each can be used to evaluate the adequacy of the other. The second skill is the ability to evaluate and interpret the meaning of empirical evidence apart from the formal aspects of one’s theory. Kuhn reports strong developmental changes in this regard in which children and some adolescents appear unable to evaluate the adequacy of empirical data.

Three types of metacognitive theories have been proposed and considered how each differs from the others. These theories form a naturally occurring hierarchy of knowledge about cognitive and metacognitive processes. At one end of this continuum
are tacit theories, which provide limited guidance and explanatory power. These theories are characterized by loosely systematized knowledge and postulates that are not known consciously by the theorist. Informal theories are partially accessible to the theorist and presumably play a greater role in self-regulation. Formal theories provide an explicit framework for understanding and regulating one’s cognition.

1.3.4 Strategies for Developing Metacognition

Nair, Sudharma & Poulouse (2004) gave following strategies for developing metacognition among children:

(i) Planning Strategy: Prior to any learning activity, teachers should point out strategies and steps for tackling problems, rules to remember and directions to follow.

(ii) Choosing consciously: Teachers can provide the students with chances to select their own choices for learning and select appropriate methods for fruitful learning.

(iii) Modeling: The probability of greatest influence on pupils is that of teachers modeling. Modeling and discussion develops the vocabulary that the learners need for thinking and talking about their own thinking. The teachers who publicly demonstrates metacognition produce pupils who metacogitate.

(iv) Asking thought provoking questions: It causes pupils to define their terminology operationally and examine the premises on which their thinking is based. It is also helpful to clarify pupils’ problem solving processes.

(v) Clarifying pupils’ terminology: Pupils often use hollow, vague and non-specific terminology. Teachers need to clarify them in detail so that the meaning and values are explained to the full extent.

(vi) Paraphrasing: Teachers should invite pupils to restate, translate, compare and paraphrase ideas of other people. It would lead them to become not only better listeners of other’s thinking, but also better listeners of their own thinking as well.

The above given literature is helpful for a rudimentary understanding of metacognition. Evaluation, planning and regulation help students gain executive control of behaviour. These processes should take place at before, during and after stages of task.
1.4 SELF-CONFIDENCE

Confidence is learned, it is not inherited. If you lack confidence, it probably means that, as a child, you were criticized, undermined, or suffered an explicable tragic loss, for which you either blamed yourself or were blamed by others. Lack of confidence is not necessarily permanent but it can be if it is not addressed. Confident people have faith in their future and can accurately assess their capabilities (Goel & Aggarwal, 2012).

Self-confidence is the conviction that one is generally capable of producing desired results. Self-confidence is the confidence one has in oneself, one’s knowledge and one’s abilities. It is the confidence of the type: “I can do this”. “I have the ability to do this”. Self-confidence is the one thing that is much more important than any other abilities and traits. Self-confidence integrates the powers of mind and body and focuses them towards the goal. Only such a concentrated energy can reach the goal. Self-confidence is the first step to progress, development, achievement and success. Even if you have a lot of abilities and a lot of knowledge, if you do not have self-confidence you cannot be a success. Self-confidence is essentially an attitude which allows us to have a positive and realistic perception of ourselves and of our abilities. It is characterized by personal attributes such as assertiveness, optimism, enthusiasm, affection, pride, independence, trust, the ability to handle criticism and emotional maturity.

For one person self-confidence might be about speaking in public. For another, it might be about being confident in social situations. But whatever the situation that reveals our lack of confidence, the definition of confidence that is implicit here is always something about being self-assured, showing self-reliance, or not being anxious or nervous.

1.4.1 Definitions of Self-Confidence

"Self-Confidence means faith in one's own ability" (Good, 1959).

In the words of Basavanna (1975), “In general terms, Self-Confidence refers to an individual’s perceived ability to act effectively in a situation to overcome obstacles and to get things go all right.”

“Self-confidence considered as one of the motivators and regulators of behaviour in an individual’s everyday life” (Bandura, 1986).
The self is a composite of a person’s thoughts and feelings, strivings and hopes, fears and fantasies, his view of what he is, what he has been, what he might become, and his attitude pertaining to his worth. Self-confidence is a positive attitude of oneself towards one’s self-concept. It is an attribute of perceived self. Self-Confidence refers to a person’s perceived ability to tackle situations successfully without leaning on others and to have a positive self-evaluation (Agnihotri, 1987).

Sieler (1998) define Self-confidence as an individual’s characteristic which enables a person to have a positive or realistic view of themselves or situations that they are in.

New Webster’s Dictionary (2004) defines self-confidence as “confidence in oneself or on one’s own unaided powers, judgment, etc.”


Self-confidence refers to a person’s expectation of his or her ability to achieve a goal in a given situation and is a very influential factor in ensuring a person’s potential is realized (Stevens, 2005).

Thus, a self-confident kind of person is a man who strikes us, very sure of himself, he is relatively unworried, is not hypersensitive and is usually in good spirits. Self-confident people trust their own abilities, have a general sense of control over their lives, and believe that, within reason, they will be able to do what they want to do.

Self-confidence is central to good psychological adjustment, personal happiness and effective functioning in children and adults. The term self-confidence is used to refer to individuals’ judgment about themselves. The nature of self-confidence is to analyze ‘himself’ and this analysis helps the children in his development, emotional maturity and achievement. A child has faith in himself is a child of self-evidence. He takes challenges as motivation, struggle hard for getting success.

1.4.2 Characteristics of a Self-Confident Personality

The following are the nine characteristic traits and behaviours of a self-confident person (Given by Oldham & Morris, 1995 in their book, The New Personality Self-Portrait):
**Self-regard.** Self-confident individuals believe in themselves and in their abilities. They have no doubt that they are unique and special and that there is a reason for their being on this planet.

**The red carpet.** They expect others to treat them well at all times.

**Ambition.** Self-confident people are unabashedly open about their aspirations and possibilities.

**Politics.** They are able to take advantage of the strengths and abilities of other people in order to achieve their goals, and they are shrewd in their dealings with others.

**Competition.** They are able competitors, they love getting to the top, and they enjoy staying there.

**Stature.** They identify with people of high rank and status.

**Dreams.** Self-Confident individuals are able to visualize themselves as the hero, the star, the best in their role, or the most accomplished in their field.

**Self-awareness.** These individuals have a keen awareness of their thoughts and feelings and their overall inner state of being.

**Poise.** People with the Self-Confident personality style accept compliments, praise, and admiration gracefully and with self-possession.

Some other characteristics as given by Agnihotri (1987) are: a self-confident person perceives himself to be socially competent, emotionally mature, intellectually adequate, successful, satisfied, decisive, optimistic, independent, self-reliant, self-assured, forward-moving, fairly assertive and having leadership qualities.

**1.4.3 Cycle of self-confidence**

Psychologists have known for a long time what child feel, do and think are linked in a cycle, a continuous loop. Suppose someone feels nervous about going to a party. So what that child does is staying at home. Which makes child think himself be lonely forever, feel unhappy and even less confident about future happenings. If an individual thinks himself a loser, by thinking himself as a loser, feel unhappy, and even less likely to do anything. On the other hand, if a person thinks differently, feel differently and will do differently. Force an individual to think more positively and start to feel happy and confident, that helps a person to do something new, who in turn reinforces positive thinking and feelings, it goes round again, creating a virtuous cycle that grows the self-
confidence (Varshney, 2013). A person can develop self-confidence by intervening at any of the four steps: Practise the skill, Apply them effectively, Assess the results and Modify as needed (Fig 1.1).

**Fig. 1.1: The Confidence Cycle**

1.4.4 Role of teacher in developing self-confidence in their students

A teachers’ role in instilling self-confidence in their students is paramount, as students tend to believe what their teachers think of them. When a teacher holds each of her students in high regard and believes that all of them are capable of performing at a high academic standard, students begin to believe in themselves. Teachers, who think all their students are competent, create a self-fulfilling prophecy that all students are capable of achieving academic success (Mandava, 2011). Teachers need to create classroom environments that foster confidence, building skills such as allowing students to take part in a talent show, or a presentation on a special skill they have. If students are given opportunities to show their positive side, this builds self-confidence.

1.4.5 Role of parents in developing self-confidence

Many factors affect the development of self-confidence. Parents' attitudes are crucial to the way children feel about themselves, particularly in their early years. When
parents provide acceptance, children receive a solid foundation for good feelings about themselves. If one or both parents are excessively critical or demanding, or if they are overprotective and discourage moves toward independence, children may come to believe they are incapable, inadequate, or inferior.

However, if parents encourage a child’s moves toward self-reliance and they are not overly critical when the child makes mistakes, the child will learn to accept himself, and will be on the way to developing self-confidence. A lack of self-confidence is not necessarily related to a lack of ability. A lack of self-confidence is often the result of focusing too strongly on the unrealistic expectations of others, especially parents and friends. The influence of friends can be more powerful than those of parents in shaping the feelings about one's self (Jafri, 2011).

To improve your self-confidence improves your self-esteem. Self-esteem depends on how one evaluates oneself, one’s abilities and achievements rather than the quality and quantity of these. By improving one’s self-acceptance, self-concept and self-image, one can improve one’s self-esteem. Parental habits, whether positive or negative, can influence the development of those same habits of self-perception in their children. The role of parents in instilling self-confidence in their children is very important. Parents who are always critical of their children without acknowledging the latter’s strengths unknowingly dampen the development of their self-confidence. On the other hand, parents who are always willing to give support while encouraging their children to take a step forward will most likely rear self-confident children. Parents who make their children feel loved and accepted despite their imperfections will most likely encourage self-confidence.

1.5 FAMILY ENVIRONMENT

The family is the oldest and the most important of all the institutions that man has devised to regulate and integrate his behaviour as he strives to satisfy his basic needs. The family is basically a unit in which parents and children live together. Its key position rests on its multiple functions in relation to overall development of its members, their protection and overall well-being. Therefore, it would emerge that not only the social and physical well-being of the individual is taken care of by the family, but the psychological wellbeing as well (Bhatia & Chadha, 1993).
The family is the only social institution other than religion which is formally developed in all societies. Family duties are the direct sole responsibilities of everyone in the society, with rare exceptions. Almost everyone is both born into a family and founds one of his own. Participation in family activities has a further interesting quality, that though it is not backed by the formal punishments supporting many other kinds of obligations, almost everyone takes part nonetheless. The family is the fundamental instrumental foundation of the larger social structure, in that all other institutions depend on its contributions. The sole behaviour that is learned within the family becomes the model or prototype for sole behaviour required in other segments of the society.

The family is also for most people the most essential link between the individual and society in so far as it provides the individual with an identity in the wider society. The family is an involuntary group and the status derived from an involuntary group is always ascribed. From the family the individual initially receives a socially ascribed status, so that membership of a family gives the child a position in the social hierarchy, the absence of such status being illegitimacy. Legitimacy confers on the child a position that defines his relationship to other members of the society, so that he has certain ascribed positions which the illegitimate child does not. The ascriptive importance of the family varies at different stages of social development and from society to society.

The family is the first to affect the individual. It is the family, which gives the child his first experience of living. It gets him when he is completely uninformed, unprotected, before any other agency has had a chance to affect him. The influence of the family on the child is, therefore, immense. The influence of other agencies, although indispensable, must build upon the ground work furnished by the family (Bhatia & Chadha, 1993).

Family is an enduring association of parent and offspring whose primary function are the socialization of the child and satisfaction of the members. However, to understand the influence of the family on the child, it is important to understand the family and its functions.

Family has been defined in the Oxford Dictionary as:

(i) The body of persons who live in one house or under one head, including parents, children, servants, etc.,
(ii) The ground consisting of parents, and their children, whether living together or not;

(iii) A person’s children reared collectively; and

(iv) Those descended, or claiming descent from a common ancestry.

“The family is the only socially recognized relation for child bearing and the essential agency for child rearing, socialization, and introducing the child to the culture of the society, thereby shaping the basic character structure of our culture and forming the child’s personality” (Frank, 1948)

“A family is a group of persons united by the ties of marriage, blood or adoption constituting a single household, interacting and inter-communicating with each other in their respective social role of husband and wife, mother and father, son and daughter, brother and sister, creating and maintaining a common culture (Burgess and Locke, 1953; Mitchell, 1979)

Bell and Vogel (1968), defines the family as a structural unit composed an ideal type of man and woman joined in a socially recognized union, with their children.

Sills (1968), suggest that the word family has its origin in a Latin word which could be roughly equated with domestic group. A domestic group may be defined as a group of people who habitually share a common dwelling and a common food supply.

‘Family’ as a group of persons, consisting of parents and their children (New Webster’s Dictionary, 2004).

Family is the fundamental group of society which provides the natural environment for the growth and well-being of all its members, particularly children. Earlier at one time family was defined as the group of people composed of a man and a woman who were permanently tied in marriage and the children that this particular couple had brought into the world. This traditional family was regarded as the bedrock of a stable society and assumed to be the essential context for bringing-up well-adjusted children. Today, the nature of family is changing. Marriage is no longer regarded as an essential pre-requisite to family life. Divorce rate has increased rapidly resulting in single parent families. Joint family has been replaced by nuclear family / single parent family (Rais, 2011).
1.5.1 Distinctive features of the family organization

The varieties of the family are endless, and the range of its functions, no less than
the mode in which it performs them, varies enormously. Of all the organizations, large or
small, which society unfolds, none transcends the family in the intensity of its
sociological significance. It influences the whole life of society in innumerable ways, and
its changes, as we shall see, reverberate through the whole social structure. It is in many
respects unlike any other association, having besides those already suggested several
distinctive features (Vig, 2010).

a. Universality: It is the most nearly universal of all social forms. It is found in all
societies, at all stages of social development, and exists far below the human level,
among a myriad species of animal. Almost every human being is or has been a
member of some family.

b. Emotional basis: It is based on a complex of the most profound impulses of our
organic nature, those of mating, procreation, maternal devotion, and parental care.
These are fortified in man by a highly significant and close-knit group of secondary
emotions, from romantic love to the pride of race, from the affection of mates to the
desire for the economic security of a home, from the jealousy of personal possession
to the baffled yearning for perpetuity.

c. Formative influence: It is the earliest social environment of all the higher forms of
life, including man, and the profoundest formative influence in the awakening lives of
which it is the source. In particular, it moulds the character of the individual by the
impression both of organic and of mental habits.

d. Limited Sizes: It is a group very limited in size, for it is defined by biological
conditions, which it cannot transcend without losing its identity.

e. Nuclear position in the social structure: It is the nucleus of other social
organizations. Frequently in the simpler societies, as well as in the more advanced
types of patriarchal society, the whole social structure is built of family units. One of
the first definitions ever given of a community made it “a union of families,” and for
the local community the definition, with some qualification, still holds today.

f. Responsibility of the members: It makes more continuous and greater demands of
the members than any other association. In times of crisis men may work, fight, and
die for their country, but they toil for their families all their lives. The family leads men and women still more to perform for others than themselves the most exacting tasks and to undertake the heaviest responsibilities. The life of the family is too deeply rooted in basic impulses to be interpreted in this way. These impulses lead men into the increasing responsibilities of the family and sustain them in the fulfillment of tasks, which they did not foresee.

g. **Social regulation:** In modern society, the family is one of the few associations, in which the consenting parties may freely enter but may not, even by mutual consent, freely leave or dissolve.

h. **Permanent and Temporary nature:** While the institution of the family is so permanent and universal, the family as an association is temporary and the most transitional of all the important organizations within society. The contrast between these two aspects of the family is so significant, and throws so much light on many of the perplexing social problems that cluster about the family, that it demands our special attention.

Family environment refers to the climate prevailing in the home, which varies from culture to culture, society to society, family to family. Family environment is influenced by a number of factors like the nature of family constellation; number of children in the family; marital relationship between husband and wife; parental employment; and socio-economic and religious background of the family.

The family environment possesses a certain consistency so that the impact of the same basic values, individuals, material objects etc., is felt over and over. Parental influence may not be felt in a specific situation, but the attitudes and ideas expressed day after day inevitably leave their mark (Bhatia & Chadha, 1993).

1.6 **NEED OF THE STUDY**

Adolescence is the most important period of human life during which the young individual develops physically, intellectually, mentally, socially and emotionally. It is a period of great excitability and turbulent emotions. The individual is faced with a perennial conflict in all spheres of life. So, it is crucial time to draw out attention towards the youngsters so that they can develop positive and healthy attitude towards life. Educationists are always interested to study different problems of school going
population especially of adolescents. One of the most challenging problems of adolescents faced by educationists today is that of accurate prediction of their academic achievement.

Parents, guardians, teachers, educationists, institutions and society at large are concerned about how best to enhance academic standards and achievement. Knowledge of factors that influence learners’ success has important implications for learning and education. Many educators are interested in knowing beforehand who will perform well and who will perform poorly, in academic progress. It has been realized that there is a need to go beyond the traditional criterion of academic success. Students should be engaged in intellectually and socially satisfying activities so that they can become confident enough to forge ahead in their thinking on the basis of information, facts, clues and concepts. The students who are aversive and think negatively cannot concentrate for a long time and have more difficulty in reaching their potentials than others. Some studies have been conducted on adolescents to study their academic achievement with different variables. Few studies have been conducted on academic achievement and metacognition, academic achievement and self-confidence; and academic achievement and family environment. After reviewing the related literature the investigator concluded that no attempt has been made so far to study the variables metacognition, self-confidence, family environment and academic achievement together. This gap in the area led the investigator to take the combined study of metacognition, self-confidence and family environment in relation to academic achievement. Thus, keeping in mind these points, the present problem is selected for investigation.

1.7 STATEMENT OF THE PROBLEM

“A Study of Academic Achievement of 10+1 Students in Relation to Their Metacognition, Self-Confidence and Family Environment”

1.8 OPERATIONAL DEFINITIONS OF THE KEY TERMS USED

Academic Achievement

Academic achievement is the percentage of marks obtained by the students in class X of schools of Board of School Education Haryana (HBSE) in different school subjects.
10+1 Students

The students who have passed class X and are studying in class XI of schools of Haryana, recognized by Board of School Education Haryana.

Metacognition

Metacognition includes two components - knowledge of cognition and regulation of cognition. Knowledge of cognition deals with all the concepts, which are related to our thinking processes such as self-concept of knowledge, self intelligence, self memory, attention, study habits etc., and regulation of cognitive processes, includes all those mechanisms through which we regulate our thinking process, such as orientation, planning, monitoring, testing, repairing, evaluating, reflecting etc.

Self-confidence

The self is a composite of a person’s thoughts and feelings, strivings and hopes, fears and fantasies, his view of what he is, what he has been, what he might become, and his attitude pertaining to his worth. Self-confidence is a positive attitude of oneself towards one’s self-concept. It is an attribute of perceived self. Self-Confidence refers to a person’s perceived ability to tackle situations successfully without leaning on others and to have a positive self-evaluation.

Family Environment

Family environment refers to the climate prevailing in the home, which varies from culture to culture, society to society, family to family. There are three dimensions in the family environment scale used in the present study. The subscales in each dimension were operationally defined as follows:

Relationship Dimensions

1. Cohesion: Degree of commitment, help, and support family members provide for one another.

2. Expressiveness: Extent to which family members are encouraged to act openly and express their feelings and thoughts directly.

3. Conflict: Amount of openly expressed aggression and conflict among family members.
4. **Acceptance and Caring:** Extent to which the members are unconditionally accepted and the degree to which caring is expressed in the family.

*Personal Growth dimensions*

5. **Independence:** Extent to which family members are assertive and independently make their own decisions.

6. **Active-Recreational Orientation:** Extent of participation in social and recreational activities.

*System Maintenance Dimensions*

7. **Organization:** Degree of importance of clear organization structure in planning family activities and responsibilities.

8. **Control:** Degree of limit setting within a family.

1.9 **OBJECTIVES OF THE STUDY**

1. To study the relationship between Academic Achievement and Metacognition of 10+1 students.

2. To study the relationship between Academic Achievement and Self-Confidence of 10+1 students.

3. To study the relationship between Academic Achievement and Family Environment of 10+1 students.

4. To study and compare the Academic Achievement, Metacognition, Self-Confidence and Family Environment of Male and Female 10+1 students.

5. To study and compare the Academic Achievement, Metacognition, Self-Confidence and Family Environment of Rural and Urban 10+1 students.

6. To study and compare the Academic Achievement, Metacognition, Self-Confidence and Family Environment of 10+1 students studying in Government and Private Schools.

7. To study and compare the interactional effect of Gender, Locale and Type of School on Academic Achievement, Metacognition, Self-Confidence and Family Environment of 10+1 students.
1.10 HYPOTHESES

a) Hypothesis related to Academic Achievement vs. Metacognition

\(H_01\) There exists no significant relationship between Academic Achievement and Metacognition of 10+1 students.

b) Hypothesis related to Academic Achievement vs. Self-Confidence

\(H_02\) There exists no significant relationship between Academic Achievement and Self-Confidence of 10+1 students.

c) Hypotheses related to Academic Achievement vs. Family Environment

\(H_03\) There exists no significant relationship between Academic Achievement and Family Environment of 10+1 students.

\(H_04\) There exists no significant relationship between Academic Achievement and ‘Relationship Dimensions’ of Family Environment of 10+1 students.

\(H_05\) There exists no significant relationship between Academic Achievement and ‘Personal Growth Dimensions’ of Family Environment of 10+1 students.

\(H_06\) There exists no significant relationship between Academic Achievement and ‘System Maintenance Dimensions’ of Family Environment of 10+1 students.

d) Hypotheses Related to Academic Achievement

\(H_07\) There exists no significant mean difference between Academic Achievement of Male and Female 10+1 students.

\(H_08\) There exists no significant mean difference between Academic Achievement of Rural and Urban 10+1 students.

\(H_09\) There exists no significant mean difference between Academic Achievement of 10+1 students of Government and Private Schools.

\(H_010\) There exists no significant interactional effect of Gender, Locale, and Type of School on Academic Achievement of 10+1 students.

e) Hypotheses Related to Metacognition

\(H_011\) There exists no significant mean difference between Metacognition of Male and Female 10+1 students.
There exists no significant mean difference between Metacognition of Rural and Urban 10+1 students.

There exists no significant mean difference between Metacognition of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on Metacognition of 10+1 students.

f) Hypotheses Related to Self-Confidence

There exists no significant mean difference between Self-Confidence of Male and Female 10+1 students.

There exists no significant mean difference between Self-Confidence of Rural and Urban 10+1 students.

There exists no significant mean difference between Self-Confidence of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on Self-Confidence of 10+1 students.

g) Hypotheses Related to Family Environment

There exists no significant mean difference between Family Environment of Male and Female 10+1 students.

There exists no significant mean difference between Family Environment of Rural and Urban 10+1 students.

There exists no significant mean difference between Family Environment of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on Family Environment of 10+1 students.

h) Hypotheses Related to Relationship Dimensions of Family Environment

There exists no significant mean difference between ‘Relationship Dimensions’ of Family Environment of Male and Female 10+1 students.

There exists no significant mean difference between ‘Relationship Dimensions’ of Family Environment of Rural and Urban 10+1 students.
There exists no significant mean difference between ‘Relationship Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on ‘Relationship Dimensions’ of Family Environment of 10+1 students.

i) **Hypotheses Related to Personal Growth Dimensions of Family Environment**

There exists no significant mean difference between ‘Personal Growth Dimensions’ of Family Environment of Male and Female 10+1 students.

There exists no significant mean difference between ‘Personal Growth Dimensions’ of Family Environment of Rural and Urban 10+1 students.

There exists no significant mean difference between ‘Personal Growth Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on ‘Personal Growth Dimensions’ of Family Environment of 10+1 students.

j) **Hypotheses Related to System maintenance Dimensions of Family Environment**

There exists no significant mean difference between ‘System maintenance Dimensions’ of Family Environment of Male and Female 10+1 students.

There exists no significant mean difference between ‘System Maintenance Dimensions’ of Family Environment of Rural and Urban 10+1 students.

There exists no significant mean difference between ‘System Maintenance Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.

There exists no significant interactional effect of Gender, Locale and Type of School on ‘System Maintenance Dimensions’ of Family Environment of 10+1 students.
1.11 DELIMITATIONS OF THE STUDY

Due to paucity of time and resources, the study has been delimited in the following areas:

1. The study is confined to 10+1 students of senior secondary schools of Board of School Education Haryana only.
2. The study is confined to only four districts of Haryana i.e. Kaithal, Rewari, Hisar and Rohtak.
3. The study is delimited to a sample of 800 students.
4. The study is delimited to the variables Academic Achievement, Metacognition, Self-Confidence and Family Environment only.
5. The study is delimited to the tools: Metacognition inventory by Govil (2003), Self-Confidence inventory by Agnihotri (1987) and Family Environment scale by Bhatia and Chadha (1993) only.