CHAPTER III

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3.0 INTRODUCTION

Communication is the interaction between two or more living beings to transfer thoughts, feelings, and messages. Communication is the process of transmitting and receiving the information. In order to communicate, there must be a sender, originating the information to be transferred, and a receiver registering and interpreting the message, and the medium or method, through which the transaction takes place. Skill in communication is related to the ability of the sender to transmit a message precisely and the ability of the receiver to interpret that message accurately. In language acquisition, these two skills are called as productive and receptive skills respectively.

Communication is as vital to life as oxygen. Like the circulatory system that supports an organism, the communication system supports the needs of society. It is necessary to all business, social and political transactions. It is necessary to each individual for physical safety, mental development, and emotional well-being. In all of nature, where there is life, there is a communication system.

3.1 ROLE OF LANGUAGE SKILLS IN COMMUNICATION

Communication occurs among human beings in two different forms – non-verbal and verbal. During interpersonal or face-to-face communication, messages are transmitted and received simultaneously in both forms. The sender uses language deliberately to formulate thoughts and to translate them into symbols that can be understood precisely by the receiver. People tend to believe that if they can read, write, hear, and speak, there is nothing more to know. They seldom relate deficiencies in these skills to their everyday problems.

The ability to form concepts is necessary but not sufficient for language development. Some animals can learn a few rudimentary concepts, but they cannot speak or communicate as efficiently as human beings. To communicate effectively, one must know how to listen, read, write, and speak, and to do these things one should be aware of good grammar and spelling.
Human beings communicate instinctively. From birth, a baby's mental development is measured primarily by its ability to communicate. Its cries relay messages of discomfort: pain, hunger, constriction, fear, and excessive heat or cold, thus protecting its life. Very soon the child becomes the social being and begins to receive messages from other people, interpreting body contacts, facial expressions, and voice tones and responding with gurgles and coos to indicate pleasure. As needs and desires become more sophisticated, the child finds it necessary to use language to get what it wants and to convey its ideas. Language skills are the chief means by which human personality expresses itself and fulfils its social interaction with other people, and hence essential for survival and development as human beings. With the increasing population and rapid development of science and technology, people of various culture and nationalities now meet, interact, and socialize to achieve common goals. To sustain this constant contact and achieve the goals, the need for language skills in a diverse society has become necessary.

3.2 SOCIO-PSYCHOLOGICAL ASPECTS IN LANGUAGE SKILLS ACQUISITION

Initial language acquisition relies mainly on neurological development. In addition, children with their unselfconscious nature and positive advantages of communication environment learn rapidly. A child develops knowledge, attitudes and interests as a result of his exposure to the environment and this enables him to possess readiness skills to learn in new areas. Background knowledge and past experience are two pre-requisites for developing language. These three skills such as readiness, knowledge and past experience, we call as cognitive abilities.

Language development in the child is concurrent with biological maturation in early childhood, and the early language development is activated by the stimuli it receives in the form of linguistic data from its mother and members of the family. The child has the innate ability to learn whatever language it encounters, either mother tongue or the first language, and is able to extract from the speech he hears, a set of construction rules which are abstract though he does not know them in explicit form. The intelligence level of a child depends on the process of maturation of an infant's brain. This process of
lateralization begins around the age of four to six months, during which period, the child starts to produce sounds and babble a few syllables. Around 12 to 18 months, he starts uttering one word and learns mostly the content words. In the two-word stage, around 18-20 months, he begins to use words and phrases and learns the meaning from the context. At the age of two, he uses content words to convey the message, which is similar to the messages sent through telegram. From the telegraphic stage he reaches the morphemic stage at the age of three and starts to use inflectional morphemes in his speech. The child’s language acquisition skill is, thus, active up to 12 years and the parents do not try to teach the formulation of rules.

Words are the basic units of verbal communication. Words are symbols that have been agreed upon by large numbers of people to stand for certain things, places, feelings, etc. There are many kinds of words – those that stand for persons and things (nouns and pronouns), those that stand for action or being (verbs), those that describe (adjectives and adverbs), and those that serve to link other words together to refine meaning (prepositions, articles, conjunctions). Many words have different forms that change meaning through such concepts as time, number, and gender. As language develops, words are put together in certain patterns capable of conveying very complex ideas. These patterns, when also agreed upon by large number of people, become the structure of a language.

Children learn language through an active process that involves exposure to a particular linguistic environment and active language usage. The fact that the nature of early linguistic interaction determines the child’s later language abilities is known to all. Children who are encouraged at an early age to verbalize and expand on their language skills develop superior language abilities, as they get older (Hoff-Ginsberg, 1986).

An important ingredient is the child’s social environment. Children do not acquire language in a vacuum. They are affected by their total environment including the home and day-care center or school they attend. Language is purely functional. The purposes of communication are to convey thoughts, ideas, and desires to one another and
to direct the actions of other people. The child learns that communication involves signaling meaning, sharing experiences, and taking turns. Jerome Bruner (1978) sees language development in terms of problem solving. Children must solve the problem of how to communicate their wishes and thoughts to others. They learn language through interactions with others and by actively using language. The opportunity to engage actively in communication is necessary. Children acquire grammar and vocabulary to accomplish their aim of getting across to others what they want and what they think. Language is learned as an extension on nonlinguistic communication.

Language is an arbitrary system of symbols that allows individuals to understand and communicate an infinite variety of messages. Language is closely related to other mental processes, such as thought and problem solving. Thinking can be defined as an inherent ability to mentally manipulate symbols and concepts in order to organize information, make plans, solve problems, and make decisions. From that point on, the language and the thought processes of an individual are so intertwined that they cannot be studied separately. The ability to think can be indicated only by the ability to use language and vice versa. Ultimately, in most human beings, the quality of language and the individual's success depends on the ability to use languages.

The ability to use language to communicate is the single factor that has made it possible for mankind to formulate great ideas, build civilizations, and begin to understand the universe. Through language, it is possible for people to develop their minds, exchange their thoughts, and understand each other. History tells us that the most advanced civilizations have always been those with the most sophisticated languages, and sociology tells us that the most successful, productive, and influential individuals and groups within a community are those with the best language skills. (Long, 1980).

For years, psychologists have been struggling over the question of how a child develops from a being that understands and produces no language to one that can use language with great ease. At first glance, it appears that children learn language through imitation. The effect of imitation on word acquisition is evident, and parents who label
common, everyday items are more likely to have a child who has a superior early vocabulary (Nelson, 1973). According to B.F. Skinner (1957), operant conditioning – including the processes of reinforcement, generalization, and discrimination – is responsible for language development. Children learn language the same way they learn about everything else. They are reinforced for labeling the environment and asking for things. Through the process of generalization and discrimination, children come to reduce their errors and use appropriate forms of language.

3.3 ROLE OF EDUCATIONAL PROCESS IN LANGUAGE ACQUISITION

Developments in knowledge lead to demand for individuals with a broad background and ability to use language to receive, convey, understand, and write effectively the information associated with their specialist studies. Today in almost all professions, individuals are expected to interact with specialists in other disciplines and to cooperate to work in teams. Cooperation demands skill in communication. Hence, there is a need to promote the language skills, the most essential of all the intellectual competencies. Without the ability to use language effectively and efficiently, an individual in a society is seriously handicapped in everyday life (Hallahan et. al., 1994). In view of these demanding requirements, language teaching and learning has gained greater significance and interest in education.

Education is an important phenomenon for the development of a nation, as the development of a nation largely depends on the natural and physical resources and quality human resources. Through well-trained and skilled human resources, a nation can develop and it is the role of educational system to provide trained and skilled manpower, constantly. Education system of any nation is a mirror through which the image of the nation being shaped and likely to be shaped can be seen. Education has been, is and will remain to be the potential cause for change in any society. If the education system fails to respond adequately to the emerging challenges of a developing society, the stagnation and wastage will be increased and ultimately the growth of the nation will be disturbed.
One of the tasks of education is to hand on the cultural values and behaviour patterns of the society to its young and potential members. By this means, society ensures that its traditional modes of life are preserved. A modern society needs critical and creative individuals, able to make new inventions and discoveries. Hence, to provide for change, the creative function of education is necessary (Venkateswaran, 1993).

Education must aim at developing an integrated growth of man or must aim at the all round development of human personality, which includes developing the physical, emotional and mental growth of the people. These depend largely on two important factors such as nature and nurture. Education should aim at providing the right nurturing opportunities in order to develop the people’s total personality.

Education must also facilitate individual’s personal growth and psychologically equip them to cope with the rapid changes taking place in all the spheres of life. Curriculum, thus, has to provide learning experiences, which help to describe an individual’s thoughts, feelings and actions. Multiple intelligences (MI), as opposed to the traditional concept of intelligence, view every individual as a unique person and this uniqueness influences the various ways in which learning takes place. An idea like this, which does not hold intelligence as a unitary concept but as a multiple attribute, promotes personalization of education by connecting the learner’s total life to the learning in the classroom. Multiple intelligence recognizes intelligence of various varieties such as linguistic, logical-mathematical, spatial, body-kinesthetic, musical, inter-personal, intra-personal and naturalist. It should be possible in an educational institution to develop these eight varieties of intelligence by providing the right kind of environment and experiences. The multiple intelligence approach offers the learners many opportunities to explore significant concepts and topics and to think about them in their own ways, and to have many ways to make sense of what they find. The use of multiple intelligence in the curriculum provides a variety of experiences that become the entry points into the lesson content and reach the learners in ways they can understand. The multiple intelligence education provides a framework that helps curriculum planners and also teachers to look
for the varying levels of strengths of the learners, and develop the optimum range of their intelligences. As it provides for a variety of experiences, it offers to a larger number of learners the opportunity to succeed (NCERT, 2000).

3.4 LANGUAGE EDUCATION AT PRIMARY LEVEL

The National Policy on Education document 1986 of Government of India has observed in para3 and para7: "Minimum levels of learning will be laid down for each stage of education". This concept has been explained in the ‘National Curriculum for Elementary and Secondary Education: A Frame Work’ (1988), prepared by NCERT. ‘Minimum Levels of Learning’ at the Primary Stage, core components are integrated with the language, environmental studies and even mathematics to make them a medium to develop appreciation of culture and perception of the individual, social and national identity through activities, songs, stories, plays, skits, reading materials etc.,

The main focus in prescribing minimum levels of learning is on learning (development) of the child as against on evaluation (assessment of the child). With a view to bringing about a broad uniformity in the standard of education throughout the country, emphasis has been laid on prescribing minimum levels of learning at each stage so that each learner or the student attains these. The minimum learning levels are prescribed depending on the mental ability of the learners at different stages of their development and the academic and physical resources available in the school for the implementation of the curriculum.

In the first two years of primary stages (Classes I and II), the objective would be the development of child’s ability for creative self-expression. Language learning should be used as a potential instrument for encouraging independent thinking among the learners from the very beginning. Therefore, efforts are made to help the learner acquire the basic skills in reading and writing in his mother tongue or regional language.

‘Minimum Learning Outcomes (MLOs)’ help to define in concrete terms, the level or standard at which teaching - learning should be directed to and the extent to
which the topic should be dealt with. Learning outcomes are in terms of numbers, quantum, quality, etc., For instance, a learner should acquire a total vocabulary of 5000 words at the primary stage in the first language. In classes I and II the learner should recognize and recall the sounds of about 1200-1700 (Class I) and 1700-2000 words in Class II in the mother tongue or the regional language. The words may comprise single or combined letters. He should pronounce correctly the same number of words. The number of words prescribed for class III is between 2000 to 2500. For Class IV the suggested number is about 1000 new words. In Class V the learner should be able to recognize, recall and pronounce about 5000 words. (Venkateswaran, 1993)

Language learning at the primary stage is crucial to not only meaningful learning in all the subject areas but also to the learner’s emotional, cognitive and social development. New entrants with poor language background remain poor learners and poor performers in all areas unless specially helped in language skills. Failure to teach language skills properly and adequately in the early years will lead to difficulties in learning subsequently through the upper primary, the secondary and the higher secondary stages. Language education has the greater potential as a means to develop, progressively through various stages, attitudes and values related to all the core components by incorporating appropriate themes and adopting suitable teaching learning strategies.

At the upper primary stage, the students’ competence in both the languages i.e. first and second language, has to be strengthened further to enable them to acquire real life skills to be used in their future day-to-day life. In their first language, they have to be introduced to various forms of literature. They ought to be able to react in speech and in writing to whatever they read and listen to. Balanced stress on both the applied side and the metaphorical aspect of the language will have to be laid. Creative expression and the ability to think on one’s own must be encouraged and nurtured through language teaching with the oral form of language finding important place in language curriculum. Applied or practical grammar also has to be given at this stage so that it may develop the students’ insight into the nature, structure and functions of the languages (NCERT, 2000).
Language education aims at encouraging independent thinking, free and effective expression of opinions and logical interpretation of the present and the past events. It motivates learners to say things in their way, nurture their natural creativity and imagination and thus makes them realize the basic difference between their verbal language and the language of mathematics. These are the reasons why learning of language finds a central place in the total educational process. In this context the following focal points merit serious considerations:

- Despite general acceptance of the central importance of language education in principle, practical effort for improving it has yet to be made at all levels in the country.
- The oral aspect of language has to be duly emphasized in language education and oral examination in language must be made an integral part of the evaluation process.
- Emphasis will have to shift from the teaching of textbooks to extensive general reading and it would need continuous guidance and monitoring.
- Due stress is to be laid, in all language education programmes, on the ability to use the language in speech and in writing for academic purposes, at work place and in community in general.

The crucial factor in the language learning process is the learner and an understanding of the learner factors, which have been proposed as significant predictors of language acquisition, is necessary. The fact that human beings can learn the languages commonly spoken in the community in which they live proves that human beings have the potential to learn languages.

Field – independence and field- dependence, dimensions of difference among individuals, are related to their way of perceiving and responding to situation. The studies on field-independence-dependence have shown that it is relatively a stable trait and that field independence increases as a child matures to adulthood. Field- independent learners are more independent, competitive, and self-confident, whereas field-dependent learners are more socialized, empathic and perceptive of feelings and thoughts of others.
The field-dependent learner by virtue of his empathy and sociability is successful in learning a language in general and second language in specific. However, some studies have also proved positive correlation between field-independence and success in language classroom. It is felt that difference in the cognitive style of a learner may make a significant difference in success in second language learning (Safaya, 2002).

In India, at present, English is widely taught as a second language, practically at all levels of education and it is also the language of instruction or lingua franca among speakers of widely diverse languages. The need for effective communication and language skills in English has been focused, as the process of globalization demands a link language for the dissemination of knowledge throughout the world. Teaching of English language is the basis for national unity and also opportunities for a better and meaningful life. Communication skills being the ultimate goal of language education at higher level, language has to be taught as a functional language rather than as a literary language.

The complexities involved in the process of second language learning can be realized by studying the variables that affect the learning process. An understanding of their abilities, learning style, degree of intelligence, aptitude for language learning, attitude and motivation is required to impart effective second language instruction.

3.5 COMPONENTS OF LANGUAGE SKILLS IN COMMUNICATION

The children need opportunities to develop the four skills –Listening, Speaking, Reading and Writing (LSRW) which are called as receptive and productive skills, by being exposed to situations where the emphasis should be on using their valuable resources for communicating the meaning as efficiently and economically as possible. Therefore, these language skills should be taught as a process or in a developmental sequence, to enable the learners to acquire sufficient proficiency both in the spoken and written modes on completion of their upper primary education. Learners should be
involved in each stage of the language tasks, so that they learn by listening, speaking, reading and writing. The learner’s communicative or language ability involves

- Knowledge of the linguistic structures,
- Knowledge of the communicative system,
- Skills and strategies for using language to communicate meaning in concrete situations and
- Ability to vary the use of language forms according to different social circumstances.

To learn a language is, no doubt, to communicate with others in that language and to develop the learner’s communicative ability is a necessary goal of teaching and learning process.

Children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations (Aiken, 1998)

In addition to these language deficits, the behavioural aspects of the learner influence his reading achievement. The behaviour differences among learners result in varied personality dispositions. Though emotions are important for human development, maladjustive emotional development is believed to cause reading failure. A poor reader develops anxiety and dislike for reading. Anxiety develops the reading disability and prevents the learner from using his intellectual capacity. An individual’s intellectual potential varies from others as it relies on his nature and nurture. Therefore, growth and development vary from one another and so also achievement in reading. Intelligence, the ability to learn and to apply what is learned, is an important determinant of reading readiness and general reading achievement.

Communication among humans is usually through spoken symbols. However, communication may involve expression as through speaking and writing or reception and comprehension as through listening or reading (Beyer, 1958). Listening is the first
language art that the child develops. A child learns to speak fluently the language s/he hears, regardless of his/her race or nationality. Listening goes beyond the mere recognition of sounds. Adequate hearing is only the first step in listening. The ability to listen evolves from hearing. An infant hears, but only after s/he becomes capable of directing hearing or structuring among aural stimuli does listening begin (Way, 1973).

Children are required to listen to varied messages in many different settings within school. Indeed, school success is dependent, in part on children's ability to follow oral directions accurately, comprehend lectures or extended discourses, and respond appropriately in conversations and group discussions. Moreover, as children grow older, teachers require them to listen more during instructional time. Most of the research studies on listening problem found that the primary school teachers spent 80 percent of the time in verbal interactions in the classroom and that this discourse consisted of 75 per cent lecturing and 25 per cent questioning about subject matter. Furthermore, teachers seldom presented advance organizers to help children listen more effectively and their rate of speech was not modified for ease in note taking. Children with adequate listening skills must find this environment demanding and for those with listening deficiencies, it invariably becomes overwhelming.

3.6.0 COGNITIVE AND NON-COGNITIVE ASPECTS INVOLVED IN RECEPITIVE SKILLS

Listening in language teaching has also become significant these days as the spoken language has become the most important source and means of foreign language learning, and hence accuracy of perception and clarity of auditory memory are important focal language skills. Conaway's (1982) review of many studies showed that deficient listening skills were a stronger factor in college failure than were poor reading skills and low academic aptitude. Listening ability is basic to the learning of reading. A review of literature on this point states that listening has a positive effect on reading achievement (Hollingsworth, 1964). Reading and listening involve the reception of ideas from others, therefore, considered as the receptive skills. While listening demands auditory memory and understanding, reading calls for visual memory and comprehension.
3.6.1 LISTENING SKILLS

Listening skills plays a significant role in communication and in language learning. (Anderson and Lynch, 1988; Rost, 1990; Dunkel, 1991 and Rubin, 1994). Listening assumes increased importance in the instructional process because it is not just a skill area in language performance but functions as a channel for acquisition of knowledge. Though developing all the basic skills is essential, listening, the most frequently used, is the first language art that a learner develops, and is an integral part of communicative competence.

Listening is the process of receiving, attending to and assigning meaning to aural stimuli (Wolvin and Coakley, 1985). The process of listening, therefore, includes attending, processing information and having enough knowledge of vocabulary and content to put the message into a meaningful form. Active and effective listening requires careful hearing and understanding of the message. Hearing is a psycho-physical process, while listening is an active part of the communicative process. Listening as a skill is to be taught at early stages because a child learns to speak fluently the language he learns irrespective of his race or nationality, whereas an adult learns with fixed habits of speech and listening. Listening is more than hearing. In a given context two listeners, with the same capacity to hear, receive widely different messages. Ross (1966) found that good listeners rated higher than poor listeners on intelligence, reading, socioeconomic status and achievement (Dechant and Smith, 1977). It has also been stated that a significant deficiency in auditory discrimination is observed in economically disadvantaged preschool children (Clark and Richards, 1966).

3.6.2 READING SKILLS

Reading as an educational activity is a complex process requiring very specialized skills on the part of the reader. Reading requires recognition and perception of language structures in order to comprehend both the surface and deep meaning which these structures communicate (Birkley, 1970). Expertise in reading, therefore, involves many competencies including decoding, word recognition, knowledge of vocabulary and
grammar and familiarity with the topic being read to comprehend the meaning. Comprehension includes the right association of meanings with word symbols, the evaluation of contextual meanings, and the organization of ideas as they read, the retention of these ideas and their use in some present or future activity. A reader’s reaction to a printed word depends on his experience and how he views events and objects, and this is known as perception. Perception is a personal thing, which is influenced by affective aspects and past experience. The emotive and physical state of an individual influences his perceptions, and therefore meaning. Often, students with learning disabilities have negative perceptions of their own competence (Bryan, 1986).

Reading, being a perceptual process, is likely to be influenced by the cultural experiences of the reader, his cognitive style, the purpose for reading and his level of experience with language itself. The ability to read involves recognition, understanding, reaction and integration. Integration is the heart of learning in reading. Any reading activity is complete only when the idea or concept that is read becomes assimilated (Gray, 1957).

Reading tests may be classified as survey, diagnostic, and readiness. Survey tests focus on overall reading ability and most of them have separate sections consisting of vocabulary items and paragraphs that examinees must read and answer questions about. In addition to a total score, separate scores on vocabulary, reading speed, and reading comprehension are provided. Reading is a complex perceptual and cognitive skill, and not all children are physically or psychologically ready to benefit from instruction in this subject at the same age. Intellectually brighter children, without dyslexia or other learning disability, are ready to learn reading at an earlier age than the less bright.

Understanding a written text refers to the extraction of required information efficiently from it. Effective reading focuses economy, which includes comprehension and rate. Learners at higher levels are expected to read fast as they have to do a lot of independent study. However, reading speed depends on the nature of the material,
purpose of the reading task, and the individual's level of reading ability, which is influenced by a number of cognitive and non-cognitive factors.

The psychology of reading has to be concerned with child development. Betts (1957) pointed out that mental, emotional, and physical readiness for sustained reading activities has as much significance in a modern secondary school as it does in a modern primary school. Reading cannot be completely understood until there is an understanding of the perceptual, cognitive and developmental aspects of living and learning in general. The research tends to point out the acquisition of language and reading in some developmental fashion.

Apart from that, the intelligence is an important determinant of reading readiness and general reading achievement. Reading is a thinking process. Essentially intelligence implies the ability to learn and apply what is learned. Both the reading skill itself and the background necessary for the reading-thinking process must be learned. According to Harrison (1939), the successful reader must see likeness and differences, remember word forms, must have a memory span of ideas, must be able to do abstract thinking, and he must be able to correlate abstractions with definite modes of response as this ability is related to the reading process.

The child must be able to tell stories in proper sequence, to interpret pictures, to associate symbols or language with pictures, objects and facts, to anticipate what may happen in a story or poem, to express his thoughts in his own words, and to think on an abstract level. S/he must be able to give identity and meaning to objects, events and symbols. S/he must be able to categorize or to associate the particular object or experience with the appropriate class or category.

3.7 ROLE OF COGNITIVE ABILITIES IN LANGUAGE SKILLS ACQUISITION

As a result of the significance of language acquisition for effective communication among learners, much research has been devoted to studying the ways in which a diverse set of factors affects language learning. Since the early 1970s, beginning
with the work of Gardner and Lambert (1972), numerous empirical studies has shown significant correlations between affective factors and achievement. Most of these earlier studies, conducted at primary and secondary school level, suggested that factors such as socio-economic status, family and school environment, and the cognitive behaviour and personality traits influence the learners' attitude to learning and aspirations, and hence considered as vital determinants of language development.

Human behaviour is differentiated as cognitive and non-cognitive. We usually associate cognitive behaviour with knowledge and perhaps, ability. Non-cognitive behaviour includes personality, attitudes and social interactions. A host of constructs are measurable in psychology. Those constructs with which we are most concerned can be classified by purpose, and as cognitive and non-cognitive (Lemke and Wiersma, 1976). Cognition is biologically and socially influenced and it is the process of thinking, knowing and processing information. The cognitive theorist does not believe that language skills can be explained as habits established by the conditioning of S-R bonds. Rather, he points out that the reader extracts meaning from what he reads not only on the basis of the visual information (the surface structure of the language) but also on the basis of all the deep structure of the language and the knowledge and experiences contained within his brain. Language and what is read cannot be comprehended unless the reader (listener) makes this critical, active contribution. Thus, one of the principal tenets of the cognitive theorist is that perception is a constructive process, adding something to the stimulus aspects. Cognition is defined as the integrative activity of the brain, overriding reflex response behaviour and freeing behaviour from sense dominance (Hebb, 1974). It refers to all the processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used (Neisser, 1967). In general, cognition refers to the thoughts or ideas we have about the world around us. Thus, cognitive behaviour is the process by which individuals come to know their world and acquire knowledge.

In the behavioral sciences, we attribute structure to behaviour and infer constructs from this structure. In the discussion that follows, we will use the terms construct, trait, or attribute to refer to inferences from behaviour or behaviour categories. It is important
that the individual distinguishes between entity and construct, and understands the meaning of construct, trait, or attribute. One example of a construct, trait, or attribute is numerical ability. We give a test of numerical operations to a group and observe that some individuals score higher than others. Next, we infer that some people have greater numerical ability than others. Thus, we infer ability from the observed behaviour.

A set of questions, problems, or tasks designed to elicit responses for use in measuring the traits, capacities, or achievements of an individual is called as psychological tests. Tests designed to measure traits are generally designated as personality tests, inventories, or scales. These types of instruments are sometimes referred to as affective, non-intellective, or non-cognitive measures. They assess motives, interests, attitudes, personal dispositions, and other stylistic characteristics or traits.

Psychological assessment instruments may be classified by what they purport to measure as cognitive (intellective), affective (non-intellective), and psychomotor. Each of these may be broken down into several subcategories. Cognitive tests may measure intelligence, achievement, or special abilities, and personality tests may measure traits, dispositions, or a host of other affective characteristics. Tests of intelligence and special aptitudes may also be described as convergent versus divergent (creative) thinking, academic (or scholastic) aptitude, and culture-fair. Depending on the purpose(s) for which they are used, tests may also be designated as screening, selection, placement, classification, performance evaluation, readiness, prognostic, or diagnostic instruments. There are also behavioural tests, developmental tests, neuropsychological tests, sensorimotor tests, speech and hearing tests, adaptive tests, analogies tests, anchor tests, sequential tests, and many other kinds.

There may be some clear-cut distinction between cognitive and non-cognitive behaviour, but it becomes blurred when operational measurement is attempted. Some measuring instruments try to provide cognitive information when scored in one way, and non-cognitive information when scored in another way. Major purpose of measurement
is generally, appraisal of human behaviour, which quickly leads to the distinction between the cognitive and non-cognitive behaviour. The tests concerned with the measurement of cognitive behaviour or abilities to a large extent are what we have referred as aptitude, ability, or achievement tests. On the other hand, interests, attitudes, and personality characteristics are usually considered to be non-cognitive. We characterize such behaviour as non-cognitive because it is not as clearly a process of perceiving or knowing behaviour classified as cognitive. And personality has also been used to refer to the sum total of an individual's mental and emotional characteristics. Hence, the terms personality, attitudes, interest, emotions, etc., refer to the subset of non-cognitive characteristics.

Tests of cognitive abilities measure the processes and products of intellect such as memory, understanding, reasoning, and problem solving. Most tests of this type are paper and pencil instruments, though some are oral and others are performance tests. Furthermore, tests of cognitive abilities may be classified as achievement tests, which measure current knowledge or skill in some subject or other productive endeavor, and aptitude tests, which measure the capability of learning a particular body of knowledge or skill. Achievement, or attainment, tests focus on the past and present – what a person has already learned or accomplished, whereas aptitude focuses on the future – what a person is capable of learning with appropriate education and training. The term ability, thus, encompasses intelligence, achievement, and aptitude, so all such cognitive measures are often referred to as tests of ability. Thus, intelligence tests are measures of general mental ability, and aptitude tests are measures of specific abilities (Aiken, 1998).

The existence of individual and group differences in cognitive abilities has been recognized since antiquity, but only during the 20th century has there been a concerted effort to measure those differences and to determine their origins and consequences. Binet's definition of intelligence as "the ability to judge well, to comprehend well, to reason well" (Binet & Simon, 1905) is somewhat at variance with the popular notion that intelligence is simply the ability to learn. Intelligence test scores may be compared with scores on standardized achievement tests to determine whether there is a discrepancy
between ability and achievement, that is, whether a child has higher potential than his or her achievement would indicate. If so, then the underachievement may be due to emotional problems of other non-intellectual factors rather than low cognitive ability.

A cognitive ability is also inferred from performance. When someone performs well in mathematics, we say he has high numerical ability. Objectively, abilities are behaviour descriptions. When considered from this point of view, abilities are related to content areas. Numerical ability differs from spatial ability by the nature of the stimulus content. We can look at human abilities in terms of stimulus content and the resulting behaviour description. This method is reflected in theory of Guilford (1959), in the symbolic, figural, and semantic content. Performance on psychological and educational tests depends not only on complex cognitive, affective, and psychomotor characteristics but also on vision, hearing, movement speed and accuracy, and other sensorimotor abilities.

Thus, the tests may be classified not only by their purposes, but also by construction procedure and format, method of administration, method of responding to the questions or tasks presented by them, method of scoring or otherwise evaluating performance, and method of interpreting performance. The procedures involved in constructing a test vary with the aims or goals of testing, but usually begin with a detailed outline or table of specifications of the content of the proposed test. Decisions must also be made concerning the types of test tasks or items to be included objective (multiple-choice, true-false, short answer, matching, etc.), free response (essay), demonstration, and so forth. Items may be arranged as a series of separate subsets or in spiral-omnibus format that is, alternating according to type and in ascending level of difficulty. They may be verbal or non-verbal, language or non-language. The test items may require knowledge, comprehension, application, analysis, synthesis, evaluation, or other cognitive process (Bloom & Krathwohl, 1956). Achievement, the level of knowledge, skill, or accomplishment in an area of endeavor, is one of the easiest and most direct psychological variables to measure. The primary purpose of administering an
achievement test is to assess a person’s current level of competence, knowledge, skill, and/or understanding in a particular cognitive domain.

Achievement refers to something that has already been attained or accomplished. Aptitude, on the other hand, refers to what one is capable of achieving under appropriate circumstances – after receiving the necessary training and experience. The term ability encompasses both aptitude and achievement, in that the ability to do something depends both on what one already knows or can do and what one is capable of learning to do. In terms of their composition, measures of achievement and aptitude are similar in many respects, and the differences between them may not be readily apparent. Both achievement and aptitude tests are measures of present knowledge or skills, which have presumably been learned or developed at one time or another. However, achievement tests focus more on specific information obtained from studying particular school subjects, whereas aptitude tests focus on competencies acquired from general, informal, out-of-school experiences. It may be convenient to view measures of aptitude and achievement as being on a continuum ranging from highly general to highly specific experiences. Between the two extremes are broadly oriented achievement tests and verbal-type tests of intelligence and aptitude (Anastasi & Urbina, 1977). Although aptitude tests are used primarily to predict a person’s performance when given an opportunity to learn, as in an academic course, a training program, or in a particular occupation, many achievement tests serve these purposes equally well. Consequently, the distinction was found in a correlational study conducted by Carroll (1973). Students’ achievement in a course on a foreign language of which they initially had little or no knowledge was significantly related to their scores on the achievement test increased during the course but scores on the aptitude test did not.

Intelligence and achievement are closely related in that intelligence makes possible a high level of achievement, particularly where learning and its applications are concerned. A test of achievement endeavors to determine a person’s level of skill or range and breadth of information and to assess what he has accomplished in a designated area of learning or behavior. In contrast, the aptitude test purports to predict the
probability of success in a given area, disregarding as much as possible the effects of previous training and experience. The aptitude test is designed to look to the future: the achievement test, to the past and present. Actually it is impossible to differentiate clearly between the two. Tests of general ability (intelligence) and aptitude are indirect measures, which have to interpret ability and aptitude on the basis of what a person knows, and can do. This, of course, largely represents what his past environment has meant to him. It follows that the process of obtaining meaning and of retaining and interpreting these environmental impacts is a function of learning or achievement, limited by native capacity. Although the aptitude test is meant for measuring native capacity, it can provide a judgment of native capacity only through what has been learned. Under the circumstances it becomes impossible to separate achievement and aptitude; hence any test of aptitude is in part a test of achievement. Because through training and experience, a student has already used certain inherent capacities, his aptitude scores will give evidence of both achievement and aptitude. Conversely, high achievement in a particular content area will often, on further examination, reveal unusual aptitudes for this area. The tests may also be used for prognostic purposes. A prognostic test measures a person’s present status and enables the tester to judge to what extent that person is capable of profiting from further learning experiences which we call as cognitive abilities.

Intelligence plays a major part in determining what students will read. Generally, the areas of interest of more-intelligent children are on a slightly higher level than are those of less-intelligent children. Children with high IQ’s read books that are more difficult and are of higher level. Mental age rather than the intelligence quotient appears to be the major factor and it seems to direct interest toward specific areas of content rather than toward reading as distinguished from other activities. Though some of the studies indicated the positive relationship between intelligence and success in a foreign language, the test scores are not usually treated as sure predictors of success in a language. However, using an intelligence test has been a regular practice to test the relationship between the students’ reading potential and achievement.
Language aptitude refers to a number of abilities such as the ability to recognize the grammatical function of words in sentences, the ability to recognize sound patterns in a new language, and the ability to infer language rules. Studies of language aptitude by Carroll (1962, 1967) and by Pimsleur (1962, 1963, 1966) tried to isolate abilities, which are predictive of success in learning. The learner’s contact with the real and meaningful use of language provides a valuable opportunity for learning. In the case of language acquisition in formal contexts such as a classroom setting, the environment does not provide favorable condition for learning. The exposure to language is for a limited period, too often focusing the syllabus requirements and grades. The formal context influences a learner’s attitude and motivation, which may affect his level of effort. Opportunity and motivation work together to affect language acquisition. Further, the degree of variation in the levels of proficiency attained by learners in the first and second language acquisition may also be due to the learner characteristics such as age, intelligence, aptitude, motivation, attitude, personality and cognitive style.

Previously, we have defined a construct as an explanatory variable in human behaviour reflecting a process that is not directly observable. Suppose, we multiply the two constructs, intelligence inferred from Raven’s Matrices and drive inferred from Taylor manifest anxiety scale, to develop a third construct that we call tendency to perform. While this is quite a crude theory, it does provide a beginning for considering relationships between constructs such as Intelligence, Aptitude, and achievement (Lemke and Wiersma, 1976) to have a construct of cognitive ability.

Although, consensus about the terms aptitude, intelligence, and achievement vary, Wesman (1968), lends the greatest credibility to these distinctions, while stressing that what does it intellectually reflects learning, he emphasizes that the differences between aptitude, achievement and ability or intelligence tests lie in the purposes for which they are used. If we wish to determine how much a student learned, we are dealing with measurement of achievement. If we wish to predict a specific future performance, we are dealing with aptitude. Similarly, if our interest is to assess rational thinking and adaptability to environment, we are dealing with an ability or intelligence test.
During the first two years of the primary level, children have to be specially helped to acquire the basic language skills of listening, speaking, reading, and writing and thinking. Special attention must be paid to the process of standardization of pronunciation according to the norms. Similarly, the skill of good handwriting, correct spelling and the right habit of silent reading with comprehension should be developed besides nurturing in the students the ability for creative self-expression.

Although learning must be involved in language acquisition at the primary level, the theory does not seem sufficient to explain totally how a child acquires language skills. It is difficult to explain the simple but brilliant creativity and originality of a child’s sentences using learning theory. All children create original sentences they have not heard before. In addition, how could a child of limited cognitive abilities master the complicated rules of grammar that even adults cannot explain and do this without formal training (Bloom, 1975). Based on the above discussion, it has been observed that the differential cognitive abilities of the children definitely influence the language skills, and hence a study of cognitive abilities and their effect on receptive skills to understand the role of cognitive abilities in language skills acquisition is essential.

3.8 SIGNIFICANCE OF THE STUDY

Acquisition of language skills such as listening, reading, speaking and writing are related to child’s psychosocial development and perceptual and psycho sensory abilities. Moreover the biological and environmental factors also facilitate children’s language ability. The development of language skills and process of growth are interdependent, as language acquisition process is both a progressive experience and progressive acquisition of skills viz., listening, speaking, reading, and writing.

Providing adequate inputs for developing these skills is essential. In addition to receiving right kind of input, the individuals should have their affective variables controlled and individual’s readiness skills such as intelligence, past knowledge, aptitude, and interest will have an impact on their acquisition of language skills. Though human beings have a rich resource and potential to learn a language, language abilities proceed
at different rates for different individuals on account of their social, psychological (cognitive and non-cognitive) and contextual characteristics. These disparities are also related to different capacities, which depend on individual’s genetic potential, psychological characteristics and total past experiences.

Biological factors such as brain injury or dysfunction may cause perceptual, cognitive and attention problems which are closely linked with achievement in language skills. Factors such as unstable, abusive or psychologically stressful home life at an early stage lack of sensory, linguistic, and cognitive stimulation activities and interactive environment may hamper intellectual learning and behavioural development. The emotional state of the learner may influence his perception and meanings. Children with mild learning and emotional disorders show lack of self-esteem, feeling of insecurity, frustration to tolerance and impulsive behaviour. These factors are likely to cause reading disability in a formal context and a poor reader develops anxiety, and therefore dislike for reading which causes reading failure. Insufficient development of readiness skills at the early stage due to emotional and behavioural problems would lead to disparities in language acquisition.

The intelligence level of the child is also a decisive factor. It depends on the process of maturation of an infant’s brain called the process of ‘lateralization’. This process begins around the age of four to six months and is complete by the age of nine years. A child learns a language because of this process. By the time the child is 3 to 4 year old, he / she is a perfect user of the language. Nobody teaches him/her the rules of grammar. The use of language skills is crucial for his existence. This helps in getting things done for him / her. This motivates him to learn. The language filled environment helps him in absorbing the language and using it. (Shastri, 2002).

The relationship between cognitive development and language is intimate but very complex. Cognitive development certainly underlies linguistic abilities (Flavell, 1977). For example, words are symbols and the development of symbolic function and deferred imitation and concepts are necessary for language development. A child cannot
use language until he or she has acquired the ability to use one thing to refer or symbolize another. A child must listen to adult speech and learn words to use at a later time. Cognition and language are also linked by a simple truism that people can talk about only what they know. A child who does not understand abstract ideas and cannot talk about them. On the other hand, linguistic skills facilitate cognitive functioning. When children possess a good vocabulary and an ability to express themselves well, they can better communicate their understanding of concepts, understand new concepts, and explore ideas. The process is cumulative, and new words allow students to master new areas of knowledge (Clark & Clark, 1977).

Learning also varies between individuals because of the differences between personalities. The personality traits of a learner allow him to react in a particular way to a learning task. The extroverts and introverts will react differently to verbal activities and instructional methods. An extrovert is always enthusiastic and outspoken, while an introvert is shy and retiring. The effect of extroversion and introversion will have its implication on the language acquisition.

3.9 STATEMENT OF THE PROBLEM

The foregoing discussion and the review of related studies indicate that the perceptual and cognitive abilities nurtured through socialization process definitely influence the language skills viz., receptive and productive skills of the children. More over the non-cognitive factors such as personality, emotions, feelings and interest have an effect on both cognitive abilities and the language skills. In this regard, a study has been undertaken to study the effect of cognitive abilities on receptive language skills viz., listening and reading and also to study the influence of non-cognitive behaviour such as personality traits, self concept, failure tolerance, text anxiety, locus of control and study habits as the intervening factors on receptive skills among the primary school children.