SUMMARY

Education is a lifelong process, begin with birth and ends with the death. It is a continuous process and significantly contributed for balanced personality development process. There are two mode of system—formal and informal, which play a significant role for acquiring of education. Education has two way influencing process. It get influenced by self as well as influenced by different factors, like home where we live, school and society. On the other hand, it is influenced by the other factors like different mode of mass media like films, televisions, state policies and other social, political and economic institutions. It has been observed that the exposure on these factors have been given rise to enrich the mental faculty of the people, who come across on these different socio economic and political factors (NPE, 1986).

The school is considered one of pioneer institution which plays an important role for imparting training for the students for their personality development. They are exposed themselves in the different environment which play a vital role for shaping one’s personality. Different schools are standardized by the different ‘yard sticks’ which have been influenced the present scenario. The competency is achieved by the learners, but some of inheritable questions have been emerging out of current educational paradigm. There are few questions which become ‘burning questions’ in the present scenario. Does the school curriculum relevant for developing knowledge based society? The cognitive based curriculum sufficient for drawing out the best in the child. Should effective based curriculum be framed? In order to answer these questions, the study of cognitive and effective domains of the students has great relevant in the present scenario (NCF, 2005).

It has been observed that the present century is characterized by the multi-culture ‘plural society’. It is because of steady growth of industrialization, urbanization, globalization and dissimulation of family system. It is therefore, the role of competency based education for prospective
Summary

Generation is no doubt a sine non for developing the cognitive, effective and psychomotor abilities (Agrawal, 1986).

Emotional Intelligence

Emotions play a very important role in our lives. It is essential to know how they affect our personal and social adjustment. Adjustment is an important factor to complete a person’s goal successfully. It is the process by which a living organism maintains a balance between its needs and the circumstances that influence the satisfaction of these needs. Adjustment refers to the ability of an individual to fit into his environment. In recent years, there has been an increased interest in the role of emotional intelligence in both the academic success of students and their adjustment in school (Romasz, Kantor & Elios, 2004).

The findings, based on several research projects, indicate that the present school curriculum is completely based on intelligent quotient which has no ground reality. It is therefore, pragmatic and futuristic pattern of curriculum is needed for bringing out the world peace and global prosperity. Keeping in view the all problematic areas of the education, it become imperative to adopt holistic approach for emerging knowledge based society. In this context, Goleman (1995) and Mayer and Salovey (1997) have put forth a novice idea for integrating emotional intelligence in the school curriculum. According to Goleman, there are only 20% of the people, who success in their life. The rest of the 80% can be attributed to emotional intelligence. This classical finding of Goleman (1996) has paved the way for other researchers for conducting further research in this field. There are few numbers of researches till now, which have given a complete insight on issue of competency and quality based curriculum. Therefore, it is a matter of serious thinking which has given impetus to researcher to carry out the study on ‘Emotional Intelligence’ cognitive abilities and perspective-taking ability of the studies.

It has been observed that Indian is experiencing a socio-economic change in the present period. In the age of computers and the Satellite, there are problems like unemployment, hazard growth of industrialization and
urbanization, terrorism, communicable disharmony which has given rise to make instable society. It is therefore, become an imperative to meet ‘challenges’ developed by growth adverse environment. It is therefore very essential to prepare our children to meet to growing challenges in the society. In order to meet these challenges, emotional intelligence cognitive abilities and perspective-taking ability some of emerging areas which are to be explored without delay for tapping the good potential for the students studying in different institutions.

The term ‘Emotional Intelligence’ was introduced in the year 1990 by the two American University Professors, Salovey and Mayer. In their attempt for developing a scientific measure for knowing the variability in people’s ability for the concept ‘emotion’ however, the credit for popularizing this concept went to Goleman (1995), an American psychologist. They have discussed the ‘Emotional Intelligence’ as a set of skills that involve the ability to mentor one’s icon and others feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and action (Goleman, 1997). In other words it can be defined as knowing what feels good, what feels bad and how to get from bad to good. A more formal academic definition refers to “emotional awareness and emotional management skill which provide to ability to balance emotional and reason so as to maximum long term happiness”. (Agrawal, 2012, p. 1).

**Cognitive Abilities**

Cognitive abilities are the brain-based skills which are followed to perform any task from the simplest to the most complex. They are more concerned with the mechanisms of how we learn, remember, solving the problem, and pay attention rather than acquiring actual knowledge. Any task can be bifurcated into the different cognitive skills or functions which are needed to complete that task successfully. For instance, answering the telephone involves at least: perception (hearing the ring tone), decision taking (answering or not), motor skill (lifting the receiver), language skills (talking and understanding language), and social skills (interpreting tone of voice and interacting properly with another human being).
Cognitive is relating to or involving cognition which refers to the process of apprehending environmental stimulus. As a generic terms it encompasses all process through which knowledge of an object is attained (Leeper, 1965). It is also a super ordinate term subsuming the more familiar representational process like imaginary, perception, free association, through mediation, reasoning and problem solving. So it includes vide range of process from simple perceptual to more complex one such as thinking and reasoning and a host of specific function such as recognition, labeling, analysis, categorization, problem solving, planning and decision making. People employ these cognitive abilities to comprehend their environment and to solve problems.

Cognitive process refers to all the processes by which the sensory input is transformed, reduced, elaborated, stored, recovered and used (Neisser, 1967). It represents a group of processes by which the organisms obtain knowledge of various objects of their environment and make use of this knowledge to achieve solutions to their problems. These processes range from the simple perceptual to the more complex thinking and reasoning processes. Recognition, labeling, analysis, categorization and planning are considered some of the basic cognitive processes. These are often viewed as intellectual and it is believed that through these processes people try to comprehend their environment and achieve solutions to a wide variety of problems and they encounter.

Due to its widespread usage, the study of cognitive processes has for a long time been fundamental to all researchers who have some concern with the acquisition, retention, retrieval and utilization of knowledge. For example, learning theorists have always shown concern with the formulation of general principals of acquisition of knowledge and skills; developmental psychologists have tried to understand the growth of knowledge and skills as a function of the biological maturation of human organisms, and their ever-increasing physical and social worlds surrounding them: psychometricians have attempted to develop tools and techniques for the measurement of the skills and abilities of individuals; and educationists have been concerned with the application of
psychological knowledge about individuals for teaching a variety of skills in the most effective ways.

**Perspective-Taking Ability**

Perceptive-taking ability refers to the abilities of an individual child to assess another person emotional state expressed through facial expressions. It is the ability through which an individual child can understand the situations from the non-verbal expressions of another individual. It also includes the ability to convey empathy towards one’s conflict partner.

The second element of effective perceptive-taking is the ability to convey empathy towards one’s conflict partner. Which require one’s ability to put the need for acknowledgement in hold.

The third essence of perspective-taking is demonstrating understanding. In conflict, which one convey understanding of another’s point of view of feelings, it begins to loosen the jam of opposing positions, it quite literally shows a respect for the other’s comprehension of a situation or response to it.

It had been observed that the ability to perceive messages though facial expressions was intimately related with social maturity. The following review, therefore, has been divided into two sections. The first section concentrates on perceptions of facial expressions and the second on performance of hearing impaired and normal children on social maturity scales.

Most persons are born with solid perspective-taking skills that began in uteri and then developed intuitively though basic human interactions shortly after birth through early childhood and ultimately across our adult lives. The growth of perspective-taking skills continues across all persons lives, thus unlike many skills we learn in school this one is evolutionary with each developmental perspective-taking lesson leading to a deepening of awareness that allows for more mature and wiser interpretations and responses. For persons born with social-cognitive deficits, or those who acquire them through accident or injury, the evolution of this critical process is not guaranteed.

Perspective-taking ability one develops by early elementary school has a direct impact on one’s ability to develop and functionally use verbal and non-verbal language and nuance to engage in increasingly sophisticated interactions.
as our students age. Those with sustained weaknesses in this area, even if they have solid cognitive and emerging language learning abilities, often demonstrate difficulty with higher level forms of language, including abstract interpretation of meaning, as well as forming an overall conceptual understanding of what is being discussed or read. Those with severe deficits in PT, may be unable to develop verbal and non-verbal communication skills that move them beyond the initial but very important ability to focus on their own desires, needs and thoughts during communicative interaction. (Heagle & Rehfeldt, 2006).

Although the act of perspective-taking is deeply embedded in our eventual success as communicators and personal problem solvers, the ability to measure it through standardized tests remains elusive. Given its very abstract nature, one’s ability or lack of ability to take perspective of others is not currently associated with the official diagnostic descriptions of persons with autism spectrum disorders as defined in the DSM IV or for persons with nonverbal learning disabilities. While a lack of development in perspective taking directly impact’s one’s ability to develop social skills and language, professionals often only refer to ‘social skill problems’ and ‘difficulties with verbal or non-verbal communicative development’ in the anecdotal descriptions of a larger label such as “autism” or ‘Asperser syndrome’. (Gracia, 2000).

**Rationale of the Study**

The justification of a research project lies in its contribution to society for its welfare. National unity is the basic necessity of India. It is time of lively approval of educational development in India. Now-a-day’s emotional intelligence is considered as vital for success. Infect emotional intelligence is more important than intelligence in success of person. Most of the problems in our life is whether childhood problems, adolescent problems, home and family problems, work situation problems are the results of misinterpretation of the involved sentiments, feelings and emotions of the concerned individuals, group of individuals. We are living in an age of acceleration change and super complexity, which is straining out physical defenses and overwhelming our decisional process. It has been accepted that the environment, both in and
outside school in which the child grows has a great influence on the student. There is growing realization that much more than cognitive abilities is involved in determining one’s level of functioning and ensuring overall success in life. The research studies in this context found that people with the same level of I.Q. and academic credentials differ greatly in their professional abilities and effectiveness (Bhalla & Nauriyal, 2004). In addition to once intellectual capacity a multitude of personality and temperamental characteristic have been identified as playing a crucial role in determining one’s performance. These include emotional stability, adjustment, social maturity, perspective-taking ability and ability to work with other persons. These findings have led to a significant change in the traditional concept regarding the nature of intellectual potentialities in human being. Important among the new development is the theory of multiple intelligence put forward by Gardner (1983) and the theory of emotional intelligence Salovey and Mayer (1990) and Goleman (1995). However pioneers in this field themselves has questioned these assumptions. They point out that the level of performance and success of a person depends upon a variety of competencies and personality characteristics including intellectual competency and emotional competency. Surprisingly very little research has been carried out to explore interrelationship and interaction among these determining factors. The present study conceived in this context. The theoretical framework, the validity of which the present study is taken to examine complex interaction cognitive and non-cognitive aspects of the personality of the able-bodied and differently-abled school-going children.

It may be noted that traditionally these two domains of personality are considered as two distinct entities, which are more or less important of each other. The cognitive domain is believed to be part of one’s biological and endowment, while the non-cognitive domain is considered to be more under the control of one’s environmental and social background. The natures of interaction between these two domains have not been well understood or explored in detail. This account for attempts act enhancing one’s cognitive skills in relative isolation of one’s non-cognitive skills like adjustment, emotional intelligence and perspective-taking ability in the traditional
academic curriculum and at also policy level. It is expected that the present studies which focuses on both the cognitive and non-cognitive domains of personality of particularly differently-abled learners in comparison to their normal pears. Because any form of disability of a person may have significant impact on his/her personality as well as behavioural characteristics. Research studies conducted by Sugarman (1969); Odom, Banton and Laukhuf (1973); Schiff (1973); Streng and Kirk (1938); Avery (1948); Vernon (1964); Schlesinger and Meadow (1976); and Bala (1985), confirmed the above remarks.

There have been fair amounts of evidence indicating that ability to correctly interpretation of emotions through facial expression is correlated with intelligence. Further, research studies conducted on cognitive abilities revealed that deaf children were performed relatively better in performance based I. Q. test than to verbal intelligence, but always less to their corresponding age group of hearing pears. Thus, there is a good reason to expect difficulties in the interpretation of facial expression in deaf children (Sovani & Borcher, 2004).

Further, social acceptance and recognition is one of the issues for able-bodied learners. This problem initially starts from the family. The addition of a differently-abled member in any normal family could be a cause of crisis. No person voluntarily chooses to have a differently-abled child. The time, energy and finance involved in carrying of the differently-abled child is demanding and frustrating for the parent. Further in order to overcome the inferiority complex of differently-abled learners, they must be educated in the normal school. In this context National Policy on Education-1986 and Programme of Action- 1992 and National Curriculum Framework for Secondary Education postulated that learners with disabilities who can be educated in general school should be educated in general schools, and those studying in special school should be transferred to general school once they are ready to make the shift. Corroborated by NCFSE, 2000 that these practices are cost effective and have sound pedagogical practices. Under this backdrop, the following research questions hence need to be answered in the present study.

➢ To what extent perspective-taking ability predicts cognitive abilities of
able-bodied and differently-abled school-going children?

- Does emotional intelligence play any role in the field of cognitive abilities of able-bodied and differently-abled school-going children?
- Does emotional intelligence play any role in the field of perspective-taking ability of able-bodied and differently-abled school-going children?
- Is there any significant difference exist in cognitive abilities, perspective-taking ability and emotional intelligence of the able-bodied and differently-abled school-going children?

**Statement of the Problem**

A COMPARATIVE STUDY OF EMOTIONAL INTELLIGENCE, COGNITIVE ABILITIES AND PERSPECTIVE-TAKING ABILITY OF DIFFERENTLY-ABLED AND ABLE-BODIED SCHOOL-GOING CHILDREN OF DELHI

**Operational Definitions of the Terms Used**

**Emotional Intelligence**

Emotional Intelligence refers to “The subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions” as measured by the Multifactor Emotional Intelligence Scale developed by Shanwal, (2004).

**Cognitive Abilities**

Cognitive abilities refers to all the abilities by which the sensory input is transformed, reduced, elaborated, stored, recovered and used. In the present study cognitive abilities refer to the abilities of children for recognition, discrimination, labeling, categorizing and problem-solving, as measured by Koh’s Block Design Test (Koh, 1923).

**Perspective-Taking Ability**

Perspective-taking ability in the present study refers to the ability of individual child to assess another persons’ emotional state expressed through facial expression. In the present study the perspective-taking ability is accessed
by adapted Facial Expression Test developed by Kapoor, 1990.

**Differently-Abled School-Going Children**

In the present study differently-abled school-going children includes locomotor impaired and hearing impaired children.

(i) Hearing impaired refers to “a person with hearing impairment having difficulty of various degrees in hearing sounds is an impaired person” (PWD Act, 1995, p. 11). In the present study only those hearing impaired children were taken who have 40% or more hearing impairment.

(ii) Locomotor impaired refers to “a person’s inability to execute distinctive activities associated with moving both himself and objects, from place to place and such inability resulting from affliction of musculoskeletal and/ or nervous system” (PWD Act, 1995, p. 12). In the present study only those locomotor impaired children were taken who have 40% or more locomotor impairment.

**Able-Bodied School-Going Children**

In the present study able-bodied school-going children refers to those who do not have disability of any kind in terms of physical, mental & emotional and being educated in the general schools.

**Objectives of the Study**

1. To study the emotional intelligence of differently-abled (locomotor impaired and hearing impaired) and able-bodied school-going children.

2. To study the cognitive abilities of differently-abled (locomotor impaired and hearing impaired) and able-bodied school-going children.

3. To study the perspective-taking ability of differently-abled (locomotor impaired and hearing impaired) and able-bodied school-going children.

4. To investigate the differences in emotional intelligence of locomotor impaired and able-bodied school-going children.

   i) To investigate the differences in identification of emotions (EI Dimension 1) of locomotor impaired and able-bodied school-
going children.

ii) To investigate the differences in assimilation of emotions (EI Dimension 2) of locomotor impaired and able-bodied school-going children.

iii) To investigate the differences in understanding of emotions (EI Dimension 3) of locomotor impaired and able-bodied school-going children.

iv) To investigate the differences in regulation of emotions (EI Dimension 4) of locomotor impaired and able-bodied school-going children.

5. To investigate the differences in emotional intelligence of hearing impaired and able-bodied school-going children.

i) To investigate the differences in identification of emotions (EI Dimension 1) of hearing impaired and able-bodied school-going children.

ii) To investigate the differences in assimilation of emotions (EI Dimension 2) of hearing impaired and able-bodied school-going children.

iii) To investigate the differences in understanding of emotions (EI Dimension 3) of hearing impaired and able-bodied school-going children.

iv) To investigate the differences in regulation of emotions (EI Dimension 4) of hearing impaired and able-bodied school-going children.

6. To investigate the differences in emotional intelligence of locomotor impaired and hearing impaired school-going children.

i) To investigate the differences in identification of emotions (EI Dimension 1) of locomotor impaired and hearing impaired school-going children.

ii) To investigate the differences in assimilation of emotions (EI
Summary

Dimension 2) of locomotor impaired and hearing impaired school-going children.

iii) To investigate the differences in understanding of emotions (EI Dimension 3) of locomotor impaired and hearing impaired school-going children.

iv) To investigate the differences in regulation of emotions (EI Dimension 4) of locomotor impaired and hearing impaired school-going children.

7. To investigate the differences in cognitive abilities of locomotor impaired and able-bodied school-going children.

8. To investigate the differences in cognitive abilities of hearing impaired and able-bodied school-going children.

9. To investigate the differences in cognitive abilities of locomotor impaired and hearing impaired school-going children.

10. To investigate the differences in perspective-taking ability of locomotor impaired and able-bodied school-going children.

11. To investigate the differences in perspective-taking ability of hearing impaired and able-bodied school-going children.

12. To investigate the differences in perspective-taking ability of locomotor impaired and hearing impaired school-going children.

13. To examine the relationship between emotional intelligence and cognitive abilities of school-going children.

i) To examine the relationship between identification of emotions (EI Dimension 1) and cognitive abilities of school-going children.

ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of school-going children.

iii) To examine the relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of school-going children.

iv) To examine the relationship between regulation of emotions (EI
Dimension 4) and cognitive abilities of school-going children.

14. To examine the relationship between emotional intelligence and perspective-taking ability of school-going children.
   i) To examine the relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of school-going children.
   ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of school-going children.
   iii) To examine the relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of school-going children.
   iv) To examine the relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of school-going children.

15. To examine the relationship between cognitive abilities and perspective-taking ability of school-going children.

16. To examine the relationship between emotional intelligence and cognitive abilities of able-bodied school-going children.
   i) To examine the relationship between identification of emotions (EI Dimension 1) and cognitive abilities of able-bodied school-going children.
   ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of able-bodied school-going children.
   iii) To examine the relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of able-bodied school-going children.
   iv) To examine the relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of able-bodied school-going children.
17. To examine the relationship between emotional intelligence and perspective-taking ability of able-bodied school-going children.

i) To examine the relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of able-bodied school-going children.

ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of able-bodied school-going children.

iii) To examine the relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of able-bodied school-going children.

iv) To examine the relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of able-bodied school-going children.

18. To examine the relationship between cognitive abilities and perspective-taking ability of able-bodied school-going children.

19. To examine the relationship between emotional intelligence and cognitive abilities of locomotor impaired school-going children.

i) To examine the relationship between identification of emotions (EI Dimension 1) and cognitive abilities of locomotor impaired school-going children.

ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of locomotor impaired school-going children.

iii) To examine the relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of locomotor impaired school-going children.

iv) To examine the relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of locomotor impaired school-going children.
school-going children.

20. To examine the relationship between emotional intelligence and perspective-taking ability of locomotor impaired school-going children.
   i) To examine the relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of locomotor impaired school-going children.
   ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of locomotor impaired school-going children.
   iii) To examine the relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of locomotor impaired school-going children.
   iv) To examine the relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of locomotor impaired school-going children.

21. To examine the relationship between cognitive abilities and perspective-taking ability of locomotor impaired school-going children.

22. To examine the relationship between emotional intelligence and cognitive abilities of hearing impaired school-going children.
   i) To examine the relationship between identification of emotions (EI Dimension 1) and cognitive abilities of hearing impaired school-going children.
   ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of hearing impaired school-going children.
   iii) To examine the relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of hearing impaired school-going children.
   iv) To examine the relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of hearing impaired school-going children.
23. To examine the relationship between emotional intelligence and perspective-taking ability of hearing impaired school-going children.
   i) To examine the relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of hearing impaired school-going children.
   ii) To examine the relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of hearing impaired school-going children.
   iii) To examine the relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of hearing impaired school-going children.
   iv) To examine the relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of hearing impaired school-going children.

24. To examine the relationship between cognitive abilities and perspective-taking ability of hearing impaired school-going children.

Hypotheses of the Study

1. There exists no significant difference in emotional intelligence of locomotor impaired and able-bodied school-going children.
   i) There exists no significant difference in identification of emotions (EI Dimension 1) of locomotor impaired and able-bodied school-going children.
   ii) There exists no significant difference in assimilation of emotions (EI Dimension 2) of locomotor impaired and able-bodied school-going children.
   iii) There exists no significant difference in understanding of emotions (EI Dimension 3) of locomotor impaired and able-bodied school-going children.
   iv) There exists no significant difference in regulation of emotions
(EI Dimension 4) of locomotor impaired and able-bodied school-going children.

2. There exists no significant difference in emotional intelligence of hearing impaired and able-bodied school-going children.
   i) There exists no significant difference in identification of emotions (EI Dimension 1) of hearing impaired and able-bodied school-going children.
   ii) There exists no significant difference in assimilation of emotions (EI Dimension 2) of hearing impaired and able-bodied school-going children.
   iii) There exists no significant difference in understanding of emotions (EI Dimension 3) of hearing impaired and able-bodied school-going children.
   iv) There exists no significant difference in regulation of emotions (EI Dimension 4) of hearing impaired and able-bodied school-going children.

3. There exists no significant difference in emotional intelligence of locomotor impaired and hearing impaired school-going children.
   i) There exists no significant difference in identification of emotions (EI Dimension 1) of locomotor impaired and hearing impaired school-going children.
   ii) There exists no significant difference in assimilation of emotions (EI Dimension 2) of locomotor impaired and hearing impaired school-going children.
   iii) There exists no significant difference in understanding of emotions (EI Dimension 3) of locomotor impaired and hearing impaired school-going children.
   iv) There exists no significant difference in regulation of emotions (EI Dimension 4) of locomotor impaired and hearing impaired school-going children.

4. There exists no significant difference in cognitive abilities of locomotor
impaired and able-bodied school-going children.
5. There exists no significant difference in cognitive abilities of hearing impaired and able-bodied school-going children.
6. There exists no significant difference in cognitive abilities of locomotor impaired and hearing impaired school-going children.
7. There exists no significant difference in perspective-taking ability of locomotor impaired and able-bodied school-going children.
8. There exists no significant difference in perspective-taking ability of hearing impaired and able-bodied school-going children.
9. There exists no significant difference in perspective-taking ability of locomotor impaired and hearing impaired school-going children.
10. There exists no significant relationship between emotional intelligence and cognitive abilities of school-going children.
   i) There exists no significant relationship between identification of emotions (EI Dimension 1) and cognitive abilities of school-going children.
   ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of school-going children.
   iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of school-going children.
   iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of school-going children.
11. There exists no significant relationship between emotional intelligence and perspective-taking ability of school-going children.
   i) There exists no significant relationship between identification of emotions (EI Dimension 1) and Perspective-taking ability of school-going children.
ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of school-going children.

iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of school-going children.

iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of school-going children.

12. There exists no significant relationship between cognitive abilities and perspective-taking ability of school-going children.

13. There exists no significant relationship between emotional intelligence and cognitive abilities of able-bodied school-going children.

i) There exists no significant relationship between identification of emotions (EI Dimension 1) and cognitive abilities of able-bodied school-going children.

ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of able-bodied school-going children.

iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of able-bodied school-going children.

iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of able-bodied school-going children.

14. There exists no significant relationship between emotional intelligence and Perspective-taking ability of able-bodied school-going children.

i) There exists no significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of able-bodied school-going children.
ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of able-bodied school-going children.

iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of able-bodied school-going children.

iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of able-bodied school-going children.

15. There exists no significant relationship between cognitive abilities and perspective-taking ability of able-bodied school-going children.

16. There exists no significant relationship between emotional intelligence and cognitive abilities of locomotor impaired school-going children.
   i) There exists no significant relationship between identification of emotions (EI Dimension 1) and cognitive abilities of locomotor impaired school-going children.
   ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of locomotor impaired school-going children.
   iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of locomotor impaired school-going children.
   iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of locomotor impaired school-going children.

17. There exists no significant relationship between emotional intelligence and perspective-taking ability of locomotor impaired school-going children.
   i) There exists no significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of
There exists no significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of locomotor impaired school-going children.

There exists no significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of locomotor impaired school-going children.

There exists no significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of locomotor impaired school-going children.

There exists no significant relationship between cognitive abilities and perspective-taking ability of locomotor impaired school-going children.

There exists no significant relationship between emotional intelligence and cognitive abilities of hearing impaired school-going children.

There exists no significant relationship between identification of emotions (EI Dimension 1) and cognitive abilities of hearing impaired school-going children.

There exists no significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of hearing impaired school-going children.

There exists no significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of hearing impaired school-going children.

There exists no significant relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of hearing impaired school-going children.

There exists no significant relationship between emotional intelligence and perspective-taking ability of hearing impaired school-going children.

There exists no significant relationship between identification of emotions (EI Dimension 1) and Perspective-taking ability of
hearing impaired school-going children.

ii) There exists no significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of hearing impaired school-going children.

iii) There exists no significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of hearing impaired school-going children.

iv) There exists no significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of hearing impaired school-going children.

2.1 There exists no significant relationship between cognitive abilities and perspective-taking ability of hearing impaired school-going children.

1.10 Delimitations of the Study

The study is delimited to-

i) the hearing impaired and locomotor impaired children of classes VI to VIII as differently-abled school-going children.

ii) NCR Delhi only.

iii) the tools used i.e. ;

a) The Indian version of Emotional Intelligence Scale developed and published by Shanwal (2004), to measure emotional intelligence.

b) Koh’s Block Design Test (Koh, 1923) to measure cognitive abilities of children.

c) Adapted Facial Expression Test developed by Kapoor (1990), to measure perspective-taking ability of children.

Procedure of the Study

There is a systematic procedure for all researches. But the procedure of all types of research differs and depend on their respective objectives, methods, nature of data collected in order to understand the stepwise procedure of the
research process we followed stepwise proceedings of the research methodology. Firstly problems of the study of objective developing of hypotheses for research which taken and subsequently formulation. To study now different sampling have taken into consideration and analyzed and lastly interpreted on the basis of empirical study, various conclusion have been drawn from the study. In order to testify the precise results, various hypotheses tested too.

**Research Method**

Descriptive survey method was used for the present study.

**Population**

Population means the entire mass of observation which is the parent group from which a sample is to be taken. In the present study, hearing impaired, locomotor impaired and able-bodied children of classes VI to VIII studying in Government, Aided and Private schools from different districts of Delhi constituted the population. The investigator had tried to ensure that the sample of the research study become a true representative of the population under study.

**Sample**

In order to carry out the study, 300 hearing impaired children studying in special schools for the hearing impaired and 300 locomotor impaired children studying in special schools for locomotor impaired and 300 able-bodied children studying from class VI to VIII of National Capital Region, Delhi had been taken for targeted population of the present study. Keeping in view the objectives of the study, the researcher had employed purposive sampling technique for selection of the sampling unit from the targeted population. Three hundred the hearing impaired and 300 locomotor impaired children of class VI to VIII were included in the sample. The equal number of able-bodied children from neighboring schools were purposively selected as a matched sample. Grade was matched in all three targeted groups. So, 100 students from each class (VI to VIII) had been taken as a sample.

**Tools Used**

In order to accomplish the study, the following psychological tools had
been used to collect the data for the study-

(i) **Emotional Intelligence Scale:** The Indian version of Emotional Intelligence Scale developed by Shanwal, (2004) has been used to measure the emotional intelligence of the children.

(ii) **Cognitive Abilities:** Koh’s Block Design Test developed by Koh, (1923) has been used for accessing the cognitive abilities of the children.

(iii) **Perspective-Taking Ability:** Adapted Facial Expression Test developed by (Kapoor, 1990) has been used to measure the perspective-taking ability of children.

**Statistical Techniques Used**

To give meaning to the raw scores, it is necessary that appropriate statistical techniques to be used for detailed analysis and interpretations of different scores, for this purpose, **Mean, S. D., and ‘t’ values,** were used to find out the differences, while ‘r’ was used to find out the relationship, if any among the groups. Further for more vivid presentation, the computed findings had been presented with the help of bar diagrams. All the calculations were done by using Statistical Package for Social Sciences (SPSS) – 20. 0 version.

**Major Findings**

**Section-I**

**Differential Analysis**

1. Locomotor impaired and able-bodied school-going children did not differ on emotional intelligence.
   
i) Locomotor impaired and able-bodied school-going children did not differ on identification of emotions (EI Dimension 1).
   
ii) Locomotor impaired and able-bodied school-going children did not differ on assimilation of emotions (EI Dimension 2).
   
iii) Locomotor impaired and able-bodied school-going children differ significantly at .01 level of significance on understanding of emotions (EI Dimension 3).
   
iv) Locomotor impaired and able-bodied school-going children differ
significantly at .01 level of significance on regulation of emotions (EI Dimension 4).

2. Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on emotional intelligence.
   i) Hearing impaired and able-bodied school-going children differ significantly at .05 level of significance on identification of emotions (EI Dimension 1).
   ii) Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on assimilation of emotions (EI Dimension 2).
   iii) Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on understanding of emotions (EI Dimension 3).
   iv) Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on regulation of emotions (EI Dimension 4).

3. Locomotor impaired and hearing impaired school-going children differ significantly at .05 level of significance on emotional intelligence.
   i) Locomotor impaired and hearing impaired school-going children did not differ on identification of emotions (EI Dimension 1).
   ii) Locomotor impaired and hearing impaired school-going children did not differ on assimilation of emotions (EI Dimension 2).
   iii) Locomotor impaired and hearing impaired school-going children differ significantly at .01 level of significance on understanding of emotions (EI Dimension 3).
   iv) Locomotor impaired and hearing impaired school-going children differ significantly at .01 level of significance on regulation of emotions (EI Dimension 4).

4. Locomotor impaired and able-bodied school-going children differ
significantly at .01 level of significance on cognitive abilities.

5. Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on cognitive abilities.

6. Locomotor impaired and hearing impaired school-going children differ significantly at .05 level of significance on cognitive abilities.

7. Locomotor impaired and able-bodied school-going children differ significantly at .01 level of significance on perspective-taking ability.

8. Hearing impaired and able-bodied school-going children differ significantly at .01 level of significance on perspective-taking ability.

9. Locomotor impaired and hearing impaired school-going children differ significantly at .01 level of significance on perspective-taking ability.

Section II

Correlational Analysis

10. There was a positive and significant relationship between emotional intelligence and cognitive abilities of school-going children.
   i) There was a positive and significant relationship between identification of emotions (EI Dimension 1) and cognitive abilities of school-going children.
   ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of school-going children.
   iii) Positive and significant relationship existed between understanding of emotions (EI Dimension 3) and cognitive abilities of school-going children.
   iv) There was a positive and significant relationship between regulation of emotions (EI Dimension 4) and cognitive abilities of school-going children.

11. There was a positive and significant relationship between emotional intelligence and perspective-taking ability of school-going children.
i) There was a positive and significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of school-going children.

ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of school-going children.

iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of school-going children.

iv) Positive and significant relationship existed between regulation of emotions (EI Dimension 4) and perspective-taking ability of school-going children.

12. There was a positive and significant relationship between cognitive abilities and perspective-taking ability of school-going children.

13. There was a positive and significant relationship between emotional intelligence and cognitive abilities of able-bodied school-going children.

i) Positive and significant relationship existed between identification of emotions (EI Dimension 1) and cognitive abilities of able-bodied school-going children.

ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of able-bodied school-going children.

iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of able-bodied school-going children.

iv) Positive and significant relationship existed between regulation of emotions (EI Dimension 4) and cognitive abilities of able-bodied school-going children.

14. There was a positive and significant relationship between emotional...
intelligence and perspective-taking ability of able-bodied school-going children.

i) There was a positive and significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of able-bodied school-going children.

ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and perspective-taking ability of able-bodied school-going children.

iii) Positive and significant relationship existed between understanding of emotions (EI Dimension 3) and perspective-taking ability of able-bodied school-going children.

iv) There was a positive and significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of able-bodied school-going children.

15. There was a positive and significant relationship between cognitive abilities and perspective-taking ability of able-bodied school-going children.

16. There was a positive and significant relationship between emotional intelligence and cognitive abilities of locomotor impaired school-going children.

i) Positive and significant relationship existed between identification of emotions (EI Dimension 1) and cognitive abilities of locomotor impaired school-going children.

ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of locomotor impaired school-going children.

iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of locomotor impaired school-going children.

iv) Positive and significant relationship existed between regulation
of emotions (EI Dimension 4) and cognitive abilities of locomotor impaired school-going children.

17. There was a positive and significant relationship between emotional intelligence and perspective-taking ability of locomotor impaired school-going children.
   i) There was a positive and significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of locomotor impaired school-going children.
   ii) Positive and significant relationship existed between assimilation of emotions (EI Dimension 2) and perspective-taking ability of locomotor impaired school-going children.
   iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of locomotor impaired school-going children.
   iv) Positive and significant relationship existed between regulation of emotions (EI Dimension 4) and perspective-taking ability of locomotor impaired school-going children.

18. There was a positive and significant relationship between cognitive abilities and perspective-taking ability of locomotor impaired school-going children.

19. There was a positive and significant relationship between emotional intelligence and cognitive abilities of hearing impaired school-going children.
   i) Positive and significant relationship existed between identification of emotions (EI Dimension 1) and cognitive abilities of hearing impaired school-going children.
   ii) There was a positive and significant relationship between assimilation of emotions (EI Dimension 2) and cognitive abilities of hearing impaired school-going children.
iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and cognitive abilities of hearing impaired school-going children.

iv) Positive and significant relationship existed between regulation of emotions (EI Dimension 4) and cognitive abilities of hearing impaired school-going children.

20. There was a positive and significant relationship between emotional intelligence and perspective-taking ability of hearing impaired school-going children.

i) There was a positive and significant relationship between identification of emotions (EI Dimension 1) and perspective-taking ability of hearing impaired school-going children.

ii) Positive and significant relationship existed between assimilation of emotions (EI Dimension 2) and perspective-taking ability of hearing impaired school-going children.

iii) There was a positive and significant relationship between understanding of emotions (EI Dimension 3) and perspective-taking ability of hearing impaired school-going children.

iv) There was a positive and significant relationship between regulation of emotions (EI Dimension 4) and perspective-taking ability of hearing impaired school-going children.


Discussion of Results

Many studies point out the importance of integrated education for the differently-abled children, especially hearing-impaired and locomotor impaired children. The trend shows that the importance of integrated education is beyond debate. The role of heads of schools, regular teachers and resource teachers, able-bodied children and hearing impaired/locomotor impaired children in
integrated education programme is agreed up on by almost all. But there are not many studies about the issues and challenges in implementing the programme.

A detailed description of the procedure followed by the investigator is described in Chapter III. Overview of the studies that are directly and indirectly related to the problem revealed that the mainstreaming of the differently-abled students and integrated education programme should be given importance. The conclusion of most of the studies revealed the fact that the integrated education programme helps to equalize the educational opportunities of the differently-abled, especially hearing impaired and locomotor impaired children.

The studies mentioned clearly indicates that very few attempts have been made to study the differently-abled children in reference to their cognitive abilities, emotional intelligence and perspective-taking ability. In the present attempt it was found that differently-abled school-going children and able-bodied school-going children differ significantly on cognitive abilities. Significant difference was also found between locomotor impaired and hearing impaired school-going children on cognitive abilities. The findings of the present study supported by numerous studies. Blair in 1957 revealed that the hearing children had consistently higher scores on all for the Memory Spam tests. He found deaf children performed like able-bodied children on all the performance subtests except on Coding and Picture Arrangement. On these two subtests, the deaf children perform significantly below their hearing peers. They also found more variance within the scores of deaf children than the comparable groups of hearing children. Sharmista (2013) conducted a study, “Cognitive Development in Deaf Children. ” In her study she found that hearing loss is linked to a faster cognitive decline and cognitive impairment. Hearing loss is linked to a faster cognitive decline and cognitive impairment. The effects of deafness on cognitive development are, therefore, quite diverse and complex due to the multitudinous ways in which families, societies, and cultures, react to and interact with children who are born deaf and hence do not spontaneously learn to talk and comprehend speech.

Hauser and Marschark (2008) discussed a variety of cognitive dimensions on which evidence points to differences between deaf and hearing
students. Historically, investigators have pointed to differences in favor of hearing students and research that has sought to take advantage of the cognitive strengths of deaf students is only recently forthcoming (e.g., greater flexibility in mental generation, mental manipulation, and visuospatial memory). This emerging body of research suggests that such qualities may well be used to offset lesser language fluencies. Kapoor (1990) found that the hearing impaired children differ significantly with the hearing peers. Studies conducted by Ruijs, Nienke, Vander, Peetsma and Thea (2010); Antia, Jones, Read and Kreimer (2009); Ljubesic (1986); Zweibel and Mertens (1985); Wilson (1975) etc., also supported the present study.

In the present study, it was found that the locomotor impaired school-going children and able-bodied school-going children do not differ significantly on emotional intelligence, but while comparing the hearing impaired school-going children with able-bodied school-going children and with locomotor impaired school-going children. It was also found that there is significant difference between the groups on emotional intelligence. Different studies on differently-abled children supported the findings of the present study that the able-bodied peers were found better than the differently-abled peers. Findings of the studies conducted by Rani (2011); Panda (2009); Saenz and Tracy (2009); Eniola and Busari (2007); Kapoor (1990) etc., confirmed the above said findings. Odom, Blanton and Laukhuf (1973) studied seven and eight year old deaf children. They concluded that the deaf were less accurate than the hearing peers in the interpretation of emotions.

Kusche and Greenburg (1983) evaluated the growth of social-cognitive knowledge in deaf and hearing children during the early and middle school years and assessed the relative importance of language in two domains of social cognition. The results showed that deaf children had evidence of a developmental delay in the understanding of the concept good and bad with regard to role taking ability. The developmental delay among deaf children was no longer apparent by the age of six. The results also indicated that language was of varying importance in different domains of social and personality development. Schiff (1973) resulted little age difference in perceptual reports,
after presenting the slides to hearing impaired and hearing adolescents containing facial caricatures and six social interaction cartoon films. Kapoor (1990) found that hearing impaired school-going children and able-bodied school-going children differ on perceptions of parental behavior and perspective-taking ability and cognitive ability. The earlier discussed researches of different researchers support the findings of the present study that the differently-abled school-going children and able-bodied school-going children differ significantly on perspective-taking ability.

It should be kept in mind that it is likely that there are many factors which impact on children’s performance in different areas, which have not accounted for the present research, and for which it would be very difficult to assess. Such factors include the outcome of a children who constantly truants or is inattentive at school. Such behavior would impact upon his/her performance in different areas.

**Educational Implications**

The country has witnessed a phenomenal expansion of educational opportunities in the post-independence period. The differently-abled children, however, have not benefited substantially from this growth in educational facilities. The government of India, therefore, has brought the education of this group of children for special attention to achieve the goal of education for all. The objective is to integrate the differently-abled with general community at all levels as equal partners, to prepare them for normal growth and enable them to face life with courage and confidence.

Differently-abled children as the name itself indicate may have certain behavioral or other innate problems in their social, intellectual and physical abilities, which makes them distinct from able-bodied children. This naturally justifies the need for a special scheme of teaching to meet their requirements in academic works, communication, social and mobilization of skills.

The findings of this study give rise to several crucial issues from the point of view of development and education of the differently-abled children. Though the concept of mainstreaming has not become popular in India, this constitutes an important issue in the education of hearing impaired and
locomotor. Mainstreaming means the inclusion of the differently-abled children in classroom with able-bodied peers for the development of hearing impaired and locomotor children. There are many versions of the mainstreaming concept, and it is important to distinguish among them in the choice of appropriate one into one’s situation. The arguments have also been advanced for many years in relation to day schools versus residential schools and ‘segregated setting’ versus ‘integrated setting.’

One form of educational setting considered relevant to mainstreaming is full-time placement of the hearing impaired and locomotor impaired children in the neighborhood school closest to their home, where he or she may be the only child with a hearing impairment/locomotor impairment in his or her classroom, or indeed in the entire school some variations of this arrangement might include visits of itinerant specialists for tutoring or speech therapy, and the provision of the full-time interpreter if the hearing impaired/locomotor impaired child depends on total communication.

Mainstreaming of the hearing impaired and locomotor impaired needs to be implemented very cautiously particularly in view of the findings of the study that hearing impaired and locomotor impaired school-going children not did equally well as the able-bodied children on measures of emotional intelligence, cognitive abilities and perspective-taking ability.

The findings of the study revealed that cognitive abilities and prospective-taking ability of differently-abled and able-bodied children differ significantly. It means special attention is required by the teachers and administrators to the differently-abled children in all kinds of school activities so that they feel themselves no less than able-bodied children. It seems therefore that the mainstreaming may have culturally and socially especially specific ways which need to be carefully identified and adopted so that the quality development of the hearing impaired can be ensured.

More publicity should be given to the needs of hearing impaired and locomotor impaired children so that there is increased sensitivity of the general public of their responsibilities for the hearing impaired and locomotor impaired children. Alternate ways or mainstreaming should be tried on experimental
Summary

basis. One alternative may be the opening of more special schools in the vicinity of general schools so that after classes (during lunch, play periods and after school hours) the two types of children can meet and know more about each other. This type of mainstreaming is expected to be better than classroom mainstreaming because in the latter case the differentials in perceptions and assimilation of the hearing impaired do not stand as barriers in their growth and development. However such attempts are being experimented upon now in Delhi.

One of the principles of special education is that if rehabilitation is to be effective and lasting, disabilities must be detected as early as possible and followed immediately by training and education. Teaching emotional skills and social skills is very important at school. It can affect achievement positively not only during the year they are taught, but during the years that follow as well. Teaching these skills has a long term effect on achievement. The emotions, feelings and values are vital for a person’s achievement in life. Quality emotions and feelings help students to show their best potentials in the classroom.

The result of the present study can create awareness among parents to concentrate more on providing congenial home environment, which will help the students to grow up as healthy adults. The study will help the curriculum designers to modify the existing curriculum and make it more activity oriented by supplementing it with aids, advice and facilities related to curriculum activities to enhance the non-cognitive or non-scholastic achievements of students. The study reveals the need for implementing certain strategies in schools to enhance the students’ performance with a good amount of emotional intelligence.

No parent expects a child to be born hearing impaired or differently-abled. If a child does not display symptoms of normal hearing pattern and display some deformity, an immediate response of parents, instead of concern, is that the development is delayed. This basically could be attributed to two factors: one is the lack of awareness about the possible hearing loss and the possible intervention at the earliest. Secondly, the parents are not willing to
accept that the child may be differently-abled. Even if one has conscious fears, the fears are repressed under the wishful thinking of delayed hearing and speech as everyone wants to have the fittest child. Soon a stage comes when the hard reality silently starts glaring at the parents. At this stage parents start associating their child’s probable loss or impairment.

**Suggestions for Further Studies**

1. Studies can be conducted on collegiate able-bodied and differently-abled students by taking same variables.
2. The same study can be conducted on students of other states.
3. A study can be conducted to compare the home environment of two different states of able-bodied and differently-abled students.
4. A study can be conducted to determine the correlation between emotional intelligence and cognitive achievements of differently-abled students.
5. Comparative studies can be conducted on students of different economic classes and castes by taking same variables.
6. The same study can be conducted on other categories of differently-abled students.
7. Comparative studies can be conducted on boys and girls by taking same variables.
8. The present study is confined to only students of class VI to VIII. A similar study can be conducted on other children or adult also.
9. Same study can be conducted by taking into account the female and male students of rural and urban areas separately.
10. Replication of the study can be done by using other tools and techniques.