A STUDY ON SELF-CONCEPT, PSYCHOSOCIAL ADJUSTMENTS AND ACADEMIC ACHIEVEMENTS OF CHILDREN WITH HEARING IMPAIRMENT AT SECONDARY SCHOOLS

Thesis submitted for the award of the degree of
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By

P.T. BABURAJ

Under the guidance of

Prof. (Dr.) K. SIVARAJAN

DEPARTMENT OF LIFELONG LEARNING AND EXTENSION
UNIVERSITY OF CALICUT
KERALA
2012

CERTIFICATE

This is to certify that this dissertation entitled "**A Study on Self-Concept, Psychosocial Adjustments and Academic Achievements of Children with Hearing Impairment at Secondary Schools**" is an authentic record of research work carried out by **Mr. BABURAJ P.**T., Research Scholar in the Department of Lifelong Learning and Extension, University of Calicut, Malappuram, Kerala under my supervision and guidance for the fulfilment of the requirement for the award of degree of **Doctor of Philosophy in the Faculty of Education** in University of Calicut, No part of the thesis has been presented earlier for any degree, diploma, or similar title of any other University.

Calicut University Campus,
31/12/2012.

Prof. (Dr.) K. SIVARAJAN
Department of Lifelong Learning and Extension
University of Calicut

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DECLARATION

I, **P.T. Baburaj** hereby declare that this thesis entitled as "**A study on Self-Concept, Psychosocial Adjustments and Academic Achievements of Children with Hearing Impairment at Secondary Schools**" is a bonafide and genuine record of research work done by me and that no part of this thesis has been presented earlier for any degree, diploma or similar title of any other University.

Calicut University **P.T. BABURAJ**
31/12/2012

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Dedicated to the
Loving Memory of my beloved parents (Late) Sri. P.A.

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CHAPTER I
INTRODUCTION

Hearing impairment is a generic term which indicates hearing disability and which may range from mild to profound. It includes subsets of deaf and hard of hearing. Hearing impairment is more baffling in some respect than the totally blind or the physically crippled whose handicaps are immediately observable and for whom social communication is possible. Unfortunately, hearing impairment is a hidden handicap that cannot be seen but only felt by the affected person not by others. The degree of hearing impairment can vary widely from person to person. Hearing impairment can impose a heavy social and economic burden on individuals, families, communities and countries. For many underdeveloped countries the cost of special education and loss of employment due to hearing impairment can burden the economy.

In the past pity for the deaf child led to early establishment of custodial institutions. Although pity may be a positive attitude with respect to their general welfare, it can deprive the deaf of the range and nature of experience necessary to maximize their functioning levels and to aid them in achieving self-sufficiency. A reduction of pity for the deaf and an increase in the expectation that they can become self-sufficient have been viewed as a significant phenomenon of the twenty-first century.

Providing an opportunity to for handicapped persons to live in good physical health and helping them become productive members of the family as well as the society is a dual task of any civilized nation. Education is one of the parameters which determine potential improvement in the quality of life of people with a disability. Our nation has revealed its willingness to shoulder the responsibility through Kothari Commission Report (1964) and the probable strategies of action towards completion of the task through education in the National Policy on Education (1986).

The term hearing impairment denotes that hearing is not normal, that there is a physical/ physiological auditory problem. Similarly one can describe persons with difficulties in hearing as being 'hearing impaired'. The term hearing deficient/deficiency are synonymous with the term 'hearing impairment'. Impairment in hearing capacity is defined in terms of degree of hearing loss. Scheetz (1993) defines hard of hearing and deaf as: 'if an individual with a hearing loss is able to receive language aurally, that is, by hearing it, either with or without amplification, that individual is functionally 'hard of hearing'. On the other hand, "if that person is unable to understand speech aurally, even with amplification, that person is usually referred to deaf." For practical purpose deafness means the absence of hearing in both ears whereas hard of hearing means significant difficulties in hearing.

It is universal truth that parents live for children and they dream about their children's future and aspire the best in everything for their children regardless of caste, sex, creed and class. Children are their strength and big

resources and hope for the future. We want our children to be happy, successful and function independently in the real world. The history of social attitude towards all categories of disabled is full of harsh and inhuman treatment. The only silver lining in the cloud is that flashed by the ideals of charity and philanthropy, mercy and compassion, taught from time to time by leaders of various religious faiths.

In the period of Sparta, the Laws of Lycargus approved the abundant of the idiots and exposure of handicapped infants. The Athenians even under Solon and the time of Plato practiced exposure and kill out their deaf children. The Spartans with their finer sense of cruelty merely put them in the great pity. In the Christian Era the teachings of Jesus Christ and the Herbanian Law exhorted that the handicapped should be helped to better their life.

Hearing impairment is prevalent in all societies. According to Javed Abidi, “Disable peoples International in India’’ there are about 4.482 million deaf persons in India. According to W.H.O (1998) through out the world there are 123 million people with hearing loss. According to 1991 Survey Report of National Sample Survey Organization, India has about 32,42,000 persons with heaving impairment and 601 lakh children in Kerala (Rehabilitation Council of India (2000). World wide, approximately one in 100 is born deaf and equal number of people born with normal hearing will develop deafness during their lifetime. The problems of deafness are complex. It is much misfortune for it means the loss of most vital stimulus the sound of voice. No physical calamity provokes more despair, hopelessness and depression than

defective hearing. Compared to other human possessions; hearing is next to the mind, man's most important asset for integrated and satisfying social existence. It is a serious handicapping condition which engenders the most conflicting emotions and leaves the person affected in a baffling situation. On a sensory level, it isolates its victims from the total world of sound and sound experiences. It isolates a person from his family, his peer and his community thus creating emotional and social problems. Relevance of hearing ability is intimately connected with the development of language and communication. Due to deafness it became difficult to establish communication through speech and language, which is so essential for normal living, as language is to be acquired, by all for making friends, exchanging ideas, carrying out day-today life transactions.

The deaf have always faced the problems about their handicap. Most people unless they have a deaf person in their family or in close circle are not aware of these problems of the deaf and deafness and do not know how to respond and interact with a deaf person. This makes his life more problematic and hampers the process of his social interaction. The society has always treated its deaf members as a strange segment altogether. Often they are regarded as inferior not only with respect to their specific limitations but also as 'total beings'. Deaf persons have been singled out and often made fun of. They are often characterized as self-centered, rigid and impulsive and lacking empathy with other people or lacking understanding of the effects of their behaviour on others. Their chances of employment are jeopardized because of

deafness, although it may not constitute a vocational handicap for a member of suitable jobs. The hearing impaired person is thus considered as a ‘marginal person’ from physical, social and vocational point of view. The most harmful outcome of this attitude is the exclusion of hearing impaired from social intercourse.

When considering the objectives of providing equal opportunity for the hearing impaired can be achieved only if the general public accepts the social philosophy underlying the new approach to their problems and new concept of their welfare. People at large have to be made aware of the possibility of community based rehabilitation of the hearing impaired. Community awareness education and training for deafness prevention and rehabilitation must be fostered through information system making use of all communication media available in the community. The exchange of information promotes research and the development of rehabilitation services. Nowadays, the people do not have an understanding about the needs of the hearing impaired. An attitudinal change is therefore called for transforming the approach from one of sympathy to one of empathy, where the emphasis is on providing opportunities for developing the abilities of the hearing impaired for their own social well being and happens to maximize their social contribution through leading an improved quality of life and having a new sense of self reliance and belonging.

While social integration can be considered in terms of the participations of the deaf in activities of their families, schools and in other

social activities. Social integration is a very necessary attribute and the objectives of every institution for the hearing impaired should be to further it. The fundamental problem in social integration is the attitude of the society. If we consider integration as a necessary attribute to social life, special emphasis has to be laid on the fact that a deaf person should not be looked at as a disabled human being but as a human being who has some disability. The most important thing is that the hearing impaired person should not be looked upon as a burden, an unfortunate being and an object of pity. With proper care and attention, the hearing impaired too can be helped to realize their full potential, making them into assets for themselves, their families and the nation.

The development of the child with a handicap occurs along the same time as that of the non handicapped child. However, an individual handicapped child's development will exhibit qualitative variation from the normal. The specific deviation from typical development depends both on the nature of severity of the handicapping condition and the level of adjustment achieved by the child. Adolescence is a process rather than a period, a process of achieving the attitude and beliefs needed for effective participation in society. It is the only stage after birth in which the velocity of normal growth increases. The growth furnishes the brain for emotional, social and intellectual maturity. During the adolescent period, the hearing impaired has to face a lot of problems. Most of the students try to adjust with the problems in the way they can. The hearing impairment itself acts as a major problem for them.

Because of this, they perceive themselves as incomplete persons and develop adjustment problems.

Adjustment is a process by which a living organism maintains its balance in the environment by fulfilling its need that arises from time to time. Adjustment to hearing impairment is a process wherein the individual make cognitive and behavioral changes to minimize the problems experienced secondary to hearing impairment. An adolescent who is hearing impaired goes through normal changes, but also deals with some additional adjustment because of the hearing loss. Adolescents, who are hearing impaired, need an avenue, through which they can express their aspirations, verbalize their fears, assess their strength and identify and test their personal limitations.

Thus hearing impairment penetrates into all aspects of individual growth, development and adjustment. The areas of adjustment like home, health, emotional, social and educational adjustment are interrelated and influence one another whether an adolescent is handicapped or not he/she at school, home, society, health in addition to problems in the areas of emotion.

Hearing impairment may influence an individual's behaviour and induce inferiority feeling or complex or lack of self-confidence. Hearing loss can lead to social isolation, particularly if no one takes time to explicitly teach them social skills that other children acquire independently by virtue of having normal hearing. The type of inferiority experienced by the individual and loss of confidence may have far reaching effect on the personality of the individual. Hearing impaired children evoke conflicting reactions among their

parents. Parents of hearing impaired children experience difficulty in accepting their children and may unconsciously tend to reject or punish them and ultimately loss of confidence eventually results in loss of self-esteem.

Delay in social behaviour is one of the most debilitating outcomes of hearing impairment. Lack of communication between the child and the parents also results in over protection which can cause the development of negative self-esteem and feeling of shame and doubt. Instead of supporting their kids to express themselves, the parents tend to control them. As the child grows their surroundings change from family to school and neighborhood settings. They start interacting with peers and begin to realize the differences they possess. Then they start to compare themselves with the normal people and become aware of their weaknesses which cause the development of a sense of inferiority. In the school setting, towards achievement, expectations of the hearing impaired are less than that of the potential. This puts the hearing impaired as a major disadvantage in competition for professional jobs since they are not given opportunities. Another problem of the hearing impaired is the inability to receive the special education programmes they might need.

The hearing impaired children have a strong bond with their home and the members there. The home is the place achieve the individual is born and brought up. It is his primary environment. The relation between individuals and the members of his family rank first. Home has a predominant influence in personality and adjustment in life. When the parents known that their child

is deaf, ranges of reactions appear before them. Some parents collapse in the face of the problems and accept the fact that the hearing impaired child will always be a seriously deficient member of the society. The others refuse to face or accept of fact of deafness and force the deaf child into medical, educational and therapeutic settings. If the home climate is favourable, the individual will react to his personal problems and frustrations in calm philosophical manner and to people in a co-operatic way. If the home climate is frictional, person will develop a habit of reacting to family members and outsiders in a hostile and antagonistic way. If the child perceives his father or mother shows favoritism towards his sibling, he may develop an attitude of resentment towards people in authority position. A good have climates fostered by communication between family members help to solve many serious issues and it is possible when there is respect for the opinion of other. The hearing impaired child should be given equal chance to take part in the activities of home. The good relationship with the members of the family helps the child to have better home adjustment.

Another important aspect is health adjustment. Good adjustment in turn contributes to good physical and mental health poor health and illness adversely affect personality though unfavourable effects they have on social and personal adjustment. Poor adjustment often predisposes the person to illness or intensities an already existing illness. Good health helps to maintain homeostasis and make person feel better both physical and psychological even when best by stressors, anxiety, depression etc. Personality is the most

important factor no health adjustment. Poorly adjusted people tend to suffer more strong illness. They tend to over estimate poor health and are anxious and pessimistic about fully recovery. Hearing impairment itself is a major health problem. It may sometime lead to associated disease. Many of the children hide their diseases from parents and they develop serious disease. Students should be made aware about the importance of personal hygiene to prevent disease. The hearing impaired students should be taught about the importance of balanced diet to have better health. Measure to protest ears should be taught to children through school. The use of appropriate aid can lead to many health problems. Later this will create certain series personality problems in the hearing impaired children.

Considering the social adjustment aspects, hearing impairment act as a limiting facto in social adjustment in hearing impaired students. Social adjustment means the success with which a person adjust to people in general and to group with in he/she is identified in particular. A well adjusted person learns social skill as the ability to deal diplomatically with people both friends and strangers so that their attitudes towards him will be favourable and they will receipt him. He/she develop good social attitudes such as willingness develops good social attitudes such as willingness to help others and is not self bound. In the present world the hearing impaired are given more chance to interact wit normal people and people with other types of impairment. This given them better social adjustment. The hearing impaired when they mingle with other forges about their disability. They use the remaining sense to

convey their needs and wants in the society. Every person needs the friendship of other people to develop into a personality and socially well-adjusted individual. If the companions are appropriate they will contribute for good adjustment and if they are inappropriate they will not only interferes adjustment and adds unhappiness. Over performance, ability to adjust to various groups, social attitudes and personal satisfaction are the four criteria to determine better social adjustment of a person.

Hearing impaired children seriously suffer with emotional problems, most of their life. Emotions color the individuals perception about himself and his environment and affects his behaviour. Emotions can add pleasure to a personal life and moderate actions that improves his personal and social adjustment or they can make life painful. Emotions can hinder a person's physical wellbeing by upsetting the homeostasis and hence interfere with normal mental functioning. Emotions can affect the person's attitudes, interests and values. It disorganizes the person's normal pattern of behaviour. If emotions are expressed the person will experience a state of relation. On the other if they are inhibited the person is likely to experience functional physical disorders, psychosomatic disturbances, delusions, hallucinations and personality adjustment.

Hearing impairment itself causes emotional problems. The child is not able to express his emotions since he lack communication. He expresses his emotions in a very unhealthy manner. The anxiety and frustrations in hearing impaired students act as detrimental in learning complicated things. People

judge a person more favourably if he keeps his negative and unpleasant emotions under control. Frequent and intense emotional outburst leads to the judgement the person in emotionally immature.

School is an important place in the life of every child. It is the place where the child gets more opportunity to know, mingle with them and learn from them. Special educational facilities should be given to hearing-impaired student now a days integrated education and inclusive education is practiced throughout the world in which handicapped children are taught along with normal children. This gives handicapped child more opportunity to mingle with others and thus develop better communication. Good emotional climates in schools promote good mental health and good morale among the students. A good emotional climate changes the personality of the child and helps him to achieve high in the studies and in later life. Role of teachers, peers, the school atmosphere all these affect the educational adjustment of the child. Better interaction with school environment gives better adjustment. With help of special education and guidance, the problems of hearing impaired can be solved and the auditory impaired children can be made more functional and useful members of the society.

Globally, there are over 250 million persons with hearing impairment of whom 2/3 are in developing countries. Adult onset of deafness is considered 15th amongst Golbal Burdon of Disease (GBD) and 2nd in the leading causes of years lived with the Disability. However, the impact of

hearing impairment is substantial on a persons life if the onset is since birth in early childhood before acquiring language and speech.

There are over 3.1 million persons with hearing impairment affected with moderate or above severity in both the ears, as per 58th round of NSSO(2002). The Census of India (2001) reports that 1.62 million persons have hearing loss. The difference is due to differences in definition. The definition of hearing impairment as well as other disabling conditions is known to affect global understanding of the disability issues. It is truth that 1/1000 live birth is a child with hearing impairment. Over 25,000 children are born deaf every year in India. of this 40% is due to maternal rubella and another 40% is due to Genetic mutations. The prevalence rate of hearing handicap based on NSSO (2002) report is as given below.

Prevalence rate per 100,000 population

Rural Male 319, Female 301, Persons 310

Urban Male 234, Female 238, Persons 236

291/100,000 population are affected by moderate, severe or profound bilateral hearing loss.

NEED AND SIGNIFICANCE OF THE STUDY

Hearing impairment causes more disability them other impairment. All the forms of physical impairment, it is the only handicap which is not visible in our present curriculum, every attempt has been oriented towards achieving

educational excellence through the teaching of subject matter. Of course, almost no one disputes the legitimacy of the schools concern about educational achievement, but this should not in anyway hinder the all-round development of the personality of the child. Modern education must not content itself with developing mere rote-learning, but also nurture the growth of these factors that contributes to the development of the personality of pupils especially at the threshold of their adolescence. Self concept is one of the major components of personality. Stability of self-concept plays on important role to the degree of organisation of the personality pattern. Also self concept has been considered as a key point in understanding of human behaviours. Loeb and Sare Giani (1986) revealed that the hearing impaired person have a poor self-concept myklebust (1964) states that the deaf children possessed low self-concept. Whereas James (1984) found that no significant relationship exist between self concept and hearing impairment.

The Children with hearing difficulty show some problem in adjustment in their psychosocial aspects because the handicap in the development of their language creates a barrier for normal communication. Sense of reality is very limited and so the deaf child is deprived of experiencing his surrounding. In order to understand them, we have to understand their problems and their adjustment to various problems.

Research have established that the range of intelligence in the deaf population is the same as that of the normal hearing population and that deafness imposes no intellectual deficits. Hearing impaired whilst many

children have all the intellectual abilities possessed by normal children of the hearing-impaired children are labeled as intellectually poor, due to their inability to hear and express idea they lag backward in academic performance.

So as the quality of performance is the determinant for success in an ever-growing competitive world. Everyone desires a high level of achievement. The whole system of education is centred on academic achievement. Hence scholastic achievement has becomes a for ground for research work to identity the factors and their influence on achievement. Level of adjustment is also an important determinant of academic achievement.

Various studies on self concept, psychosocial adjustment and academic achievements of normal students are conducted. But not many studies exist on self concept psychosocial adjustment and academic achievement of hearing impaired students.

Adolescence is the period when boys/girls become conscious of their challenging status in the society. They need to re-evaluate themselves socially; emotionally in relation to their peers and society belonging is a life long process. Our environment and the experience with which we interact provide as with the knowledge base and skills to cope with life's daily challenges. It also helps us to gain insights into who are and explore what we want to become. The self concept is developed on the basis of evaluation by self and by others during interpersonal interactions. Thus, the self concept is

what a person perceives himself/herself to be, it is what she/he believes about himself/herself and this is a product of his/her social experience with others.

The self-concept is an organization of beliefs about the self. These are important for the person who holds them, as this is his their personal fashion in which all other perceptions are acquired as consequences of experiences. Once established, this self concept will exert its influence on every behavior for their rest of its owner's life (Combs, Avila, Parkey 1979).

Physical disability is often an assault on one's self-concept. Adjustment to the disability is a complex phenomenon that is affected by factors. One of the most important factors is the attitude society, of parents, professional towards disability provide the young person with a clearly defined self image which becomes a negative identity. In the absence of any success, the young person accepts these negative labels as self defining and proceeds to validate this identity by continuing to behave in ways that strengthen it (Gurney, 1988).

Thus adjustment means not only learning how to best manage one's physical environment but also developing a new self-concept. This fragile period of development is strangely influenced by the attitudes time in the company of the persons with the disability. The basic deprivation due to deafness is not just the deprivation of sound, it is also affects the acquisition of communication skills. As deafness is both a communication disability and a sensory defect, the adolescent with hearing impairment may not be able to communicate clearly about his their own needs thoughts, experience nor can

his their parents communicate with him/her adequately (Meadow, 1980). It is difficult for adolescents with hearing impairment to learn naturally about what is expected of people, and why and how to obtain satisfaction of their needs in approved ways. This leads adolescents with hearing impairment to behave in an impulsive way and resort to outbursts and tantrums when they are frustrated (Freeman et al, 1981) This also affects the kind of social relationship of adolescents with hearing impairments have with hearing impairment because of a pervasive failure to understand “deafness” and its ramifications. They also get labeled which causes stigma to be attached. This stigma generally carries negative connotation and can remain throughout one’s lifetime. Thus, the period of adolescence becomes a time of personal crisis for adolescents with hearing impairment and their parents.

Therefore, it is important to view the impact of deafness both from the way society reacts and how the adolescents with hearing impairment respond. Communication barriers language problems, negative attitudes of the non-disabled population towards the adolescents with hearing impairment affects the psychological development and adjustment of adolescents with hearing impairments. While struggling to discover their own identity and making an effort to be part of a group, they realize that they can never become hearing members of society. Their insights into themselves coupled with their perceptions of how society views their deafness, have a significant impact on their identity.

The strong feelings of being deaf occur at an age, when the adolescents with hearing impairment are unequipped to examine if critically. Adjustment to their feelings about being deaf becomes a complex phenomenon for them and many of them experience emotional and behavioral problems such as social withdrawal, short tendertantrum angers towards themselves and their parents.

Research conducted on self-concept of deaf students focused primarily on comparison between deaf and hearing population and found that the results have been inconsistent. Some researchers have found that deaf and hard-of-hearing students have scored lower than hearing students on self-concept measures. (Garrison, Teach Dccaro, 1978; Leigh & Stinson 1991; Labol Sarigiani, 1986, Maxon, Bracket and Vanden Berg, 1991) Where others have found no significant difference (Cates, 1991, Koelle & convey, 1982).

Four studies have been conducted to examine self-concept among deaf and hard-of hearing students attending different school situation. In the study Craig (1965) used Peer nominations, assessing peer acceptance, rather than self-concept found that the deaf students enrolled in residential programs, were less accurate than hearing students in predicting how others would rate them. They also had the highest ratings of self-acceptance and social expansiveness, followed by the hearing group and the deaf day school group. Regarding academic achievements, overall students who were fully mainstreamed performed better in language and academic achievement but had more personal and social problems.

Academic self-concept is affected by both an external and an internal frame of references (Margh, walker and Dc Bus, 1991) The external frame of reference involves an individuals comparison of perceived academic abilities with the perceived skills of other students. Examining the effects of educational placement on academic self-concept, marsh (1991) found that equally able students attending high ability schools had more negative academic self concept than those who attended regular programs because of comparison with their high achieving peers. Comparing matched groups in different settings, marshal found these negative effects for students of all ability level, across a variety of outcome variables, including academic achievement and subsequent class attendance.

Hartq (1986) also emphasized the importance of social comparison, where by children's self concepts are affected by comparisons with others. Looking at two groups of special populations she found that main streamed learning-disabled students had lower academic self-concept scores than non-disabled students because they compared themselves with their non-disabled peers.

Adolescence poses challenges for all children with its Physiological, psychological, and social development. However adolescence constitutes an even greater hurdle for those teenagers with severe-profound sensory neural hearing loss who confront challenges of being deaf in a sound dominated world nor always aware of their needs and challenges-especially in school settings (Leightetal, 2009) Difficulties with spoken communication imposed

on individuals by sensory neural hearing loss offered interactions with hearing peers and incidental learning of social interactions typically are not directly taught but rather are learned by passive exposure to events witnessed or overheard in incidental situations. Deaf children who are raised by deaf parents may acquire social skills naturally in an environment where communication is depending on visual and not on oral case (schemer 2001) Deaf children who are raised in hearing families may not acquire understanding of the subtleties of social language. They may feel uncomfortable in social situations and may not be accepted by their hearing peers because they cannot pick up important social-verbal behaviours (Marschasketal 1993). Deficiencies in vocabulary and other aspects of Malayalam language affect the child's ability to express his or her needs, thoughts and feelings in the hearing world and to understand the feelings expressed through spoken language.

The Accurate measurement of academic achievement depends on a number of considerations. In the deaf students these considerations include important attribute school language use, physical, emotional, or learning disabilities or limited fluency in that mother tongue that may prevent them from their academic performances.

An extensive literature survey on hearing impaired children showed that very few studies directly addressed the relationship between psychosocial adjustment and academic achievement of hearing impaired children. Academic performance correlated positively with every kind of positive

adoption including health, self-concept adjustment, social functioning and morale of students having no impairments. However the relationships were not explored systematically among the hearing impaired adolescents. A number of researchers pointed out the facilitative role of higher socio-economic background on psychological well-being and academic achievement of children without impairment, as well as on adjustment, cognitive functioning and examination success hearing impaired students. However the number of studies addressing the direct correlation between demographic variables, and psychosocial adjustment and academic achievement are scent in the case of hearing-impaired children. This study is intended to examine the differences on self-concept, psychosocial adjustment and their correlation with academic achievement of the hearing-impaired adolescents studying at secondary school.

Therefore, it is incumbent upon parents and teachers to impart students on developing good self-concept, psychosocial adjustments and not assumes that they are automatically acquired without specific attention and instruction. Further, this study intends to generate thought and ideas among the parents and teachers in devising efficient and exhaustive methods for assessing psychosocial aspects and implementing more dynamic methods for self concept development of students with hearing impairment who is in the threshold of their growth and development.

In this context, a venture to study the self concept, psychosocial adjustments and academic achievement of hearing impaired students assumes

major importance, since it contributes directly towards improving the position and status of the hearing impaired individuals in the society. The investigator tried sincerely to conduct this study on hearing impaired students at secondary level and pinpoint the self concept, psychosocial problems they face and relate it to their academic achievement and highlights the need for collaborative and integrated effort among institutions and individuals to pursue systematic in this area.

STATEMENT OF THE PROBLEM

The major aim of the present study is to assess the self-Concept of hearing impaired students, the psycho social adjustment of hearing impaired students at secondary schools in Kerala and their relationship with their academic achievement.

Hence the study is entitled as 'A STUDY ON SELF-CONCEPT, PSYCHOSOCIAL ADJUSTMENTS AND ACADEMIC ACHIEVEMENTS OF CHILDREN WITH HEARING IMPAIRMENT AT SECONDARY SCHOOLS.'

OPEREATIONAL DEFINIONS OF KEY TERMS

1. Self- Concept

The term self concept may be defined as the aggregate sum of scores of the physical, social, temperamental, educational, moral and intellectual concept of one's self as revealed through the responses to the standardized questionnaire administered.

Physical self-concept is the individual's view of their body, health, physical appearance and strength. Social self-concept is the individual's sense of worth in social interactions.

Temperamental self-concept is the individual's view of themselves in relation to schoolteachers and extracurricular activities.

Moral self-concept is the individual's estimation of their moral worth: right and wrong activities.

Intellectual self –concept is the individual awareness of their intelligence and capacity of problem of solving and adjustments.

2. Psychosocial Adjustment

Dictionary of psychology defined psychosocial is the term used to cover any situation in which both psychological and social factors are assumed to play a role in the present study, psychosocial adjustment refers to social or psychological adjustment in terms of self esteem interaction, social adaptability, anxiety, alienation and depression that helps the hearing impaired students to adjust with their environment, environment achievement.

3. Academic Achievement

Academic achievement refers to the result obtained from the headmasters of the concerned schools for the hearing impaired studying at standards IX, X. Achievement of subject, their aggregate scores obtained in

the terminal and continuing evaluation from the schools conducted by district examination boards.

4. Hearing Impaired Children

Hearing impaired children refers to students who are not able to hear and belongs to the categories of mild, moderate severe or profound who studying in special schools.

5. Secondary school

In this study secondary school means hearing impaired students pursuing their education in standard IX, X particularly for the hearing impaired.

OBJECTIVES OF THE STUDY

1. To find out the extent of self-concept in hearing impaired students at secondary school.

2. To asses the self-concept and its dimensions such as physical, social, temperamental, educational, moral and intellectual self-concept of children with hearing impairment at secondary school with respect to socio demographic variables gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

3. To find out the extent of psychosocial adjustment in hearing impaired students at secondary school.

4. To find out the extent of psychosocial adjustment in hearing impaired students with respect to total and each of the positive psychosocial adjustment variables.

5. To find out the extent of psychosocial adjustment in hearing impaired students with respect to total and each of the negative psychosocial adjustment variables.

6. To asses the psychosocial adjustment and it's components such as self-esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school with respect to socio demographic variables such as gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

7. To asses academic achievement of children with hearing impairment at secondary school with respect to socio demographic variables such as gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

8. To find out whether there exist significant relationship between self-concept and psychosocial adjustment of children with hearing impairment at secondary school.

9. To find out whether there exist significant relationship between self-concept and academic achievement of children with hearing impairment at secondary school.

10. To find out whether there exist significant relationship between psychosocial adjustment and academic achievement of children with hearing impairment at secondary school.

11. To find out whether there exist significant relationship between self-concept and severity of hearing loss of children with hearing impairment at secondary school.

12. To find out whether there exist significant relationship between psychosocial and severity of hearing loss of children with hearing impairment at secondary school.

13. To find out whether there exist significant relationship between academic achievement and severity of hearing loss of children with hearing impairment at secondary school.

HYPOTHESES

1.A

The children with hearing impairment at secondary school posses low self-concept.

a. There will be significant difference between self-concept and gender of children with hearing impairment at secondary school.

b. There will be significant difference between self-concept and domicile of children with hearing impairment at secondary school.

c. There will be significant difference between self-concept and type of school of children with hearing impairment at secondary school.

d. There will be significant difference between self-concept and the age group of the children with hearing impairment at secondary school.

e. There will be significant difference between self-concept and severity of hearing of children with children hearing impairment.

f. There will be significant difference between self-concept and religion of the children with hearing impairment at secondary school.

g. There will be significant difference between self-concept and father's education of the children with hearing impairment at secondary school.

h. There will be significant difference between self-concept and father's occupation of the children with hearing impairment at secondary school.

i. There will be significant difference between self-concept and father's income of the children with hearing impairment at secondary school.

1. B

a. There will be significant difference between gender and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

b. There will be significant difference between domicile and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

c. There will be significant difference between type of school and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

d. There will be significant difference between age group and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

e. There will be significant difference between severity and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

f. There will be significant difference between religion and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

g. There will be significant difference between education of father and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

h. There will be significant difference between occupation of father and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

i. There will be significant difference between income of father and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

2. A

1. The children with hearing impairment at secondary school posses low psychosocial adjustment.

2. The children with hearing impairment at secondary school posses low psychosocial adjustment with respect to total and each of the positive psychosocial adjustment variable.

3. The children with hearing impairment at secondary school posses low psychosocial adjustment with respect to total and each of the negative psychosocial adjustment variable.

2.B

a. There will be significant difference between psychosocial adjustments of hearing impaired boys and girls at secondary school.

b. There will be significant difference between psychosocial adjustments of hearing impaired rural and urban at secondary school.

c. There will be significant difference between psychosocial adjustment and type of school of hearing impaired at secondary school.

d. There will be significant difference between psychosocial adjustment and age group of hearing impaired at secondary school.

e. There will be significant difference between psychosocial adjustment and severity of hearing impaired at secondary school.

f. There will be significant difference between psychosocial adjustment and religion of hearing impaired at secondary school.

g. There will be significant difference between psychosocial adjustment and education of father of hearing impaired at secondary school.

h. There will be significant difference between psychosocial adjustment and occupation of father of hearing impaired at secondary school.

i. There will be significant difference between psychosocial adjustment and income of father of hearing impaired at secondary school.

2.C

a. There will be significant difference between gender and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

b. There will be significant difference between domicile and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

c. There will be significant difference between type of school and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

d. There will be significant difference between age group and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

e. There will be significant difference between severity and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

f. There will be significant difference between religion and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

g. There will be significant difference between education of father and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

h. There will be significant difference between occupation of father and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

i. There will be significant difference between income of father and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

3.A

a. There will be significant difference between academic achievement and gender of hearing impaired children at secondary school.

b. There will be significant difference between academic achievement and domicile of hearing of hearing impaired children at secondary school.

c. There will be significant difference between academic achievement and type of school of hearing of hearing impaired children at secondary school.

d. There will be significant difference between academic achievement and age group of hearing of hearing impaired children at secondary school.

e. There will be significant difference between academic achievement and severity of hearing of hearing impaired children at secondary school.

f. There will be significant difference between academic achievement and of religion of hearing impaired s children at secondary school.

g. There will be significant difference between academic achievement and of education of father of hearing impaired children at secondary school.

h. There will be significant difference between academic achievement and of occupation of father of hearing impaired children at secondary school.

i. There will be significant difference between academic achievement and income of father of hearing impaired children at secondary school.

4.A

a. There will be significant relationship between self-concept and psychosocial adjustment of children with hearing impairment.

b. There will be significant relationship between self-concept and academic achievement of children with hearing impairment at secondary school.

c. There will be significant relationship between psychosocial adjustment and academic achievement of children with hearing impairment at secondary schools.

4.B

a. There will be significant relationship between academic achievement and positive components of psychosocial adjustment such as self esteem, interaction and social adaptability of children with hearing impaired at secondary school.

b. There will be significant relationship between academic achievement and negative components of psychosocial adjustment such as anxiety,

alienation and depression of children with hearing impaired at secondary school.

c. There will be significant relationship between self-concept and positive components of psychosocial adjustment such as self esteem, interaction and social adaptability of hearing impaired children at secondary school.

d. There will be significant relationship between self-concept and negative components of psychosocial adjustment such as anxiety, alienation and depression of children with hearing impaired at secondary school.

e. There will be significant relationship between academic achievement and dimensions of self-concept such as physical, social, temperamental, educational, moral and intellectual self-concept of hearing impaired children at secondary school.

f. There will be significant correlation between self-concept and severity of hearing loss of children with hearing impairment at secondary school.

g. There will be significant correlation between psychosocial adjustment and severity of hearing loss of children with hearing impairment at secondary school.

h. There will be significant correlation between academic achievement and severity of hearing loss of children with hearing impairment at secondary school.

METHODOLOGY IN BRIEF

The present study intended to find out the self concept, psycho-social adjustment and academic achievement of students with hearing impairment at secondary school. This would be into light to what extent the hearing impairment affect self-concept, psychological adjustment and academic achievement of those students. The study has been designed with self concept and psychosocial adjustment as independent variable sand academic achievement as dependent variable. Hence, normative method was adopted for the present investigation in which survey is the technique used. Considering the nature of the study statistical sampling technique was used. The sample includes 2458 hearing impaired secondary school students, selected from eight districts of Kerala (Thiruvanathapuram, Kollam, Pathanamthitta, Kottayam, Ernakulam, Thrissur and Palakkad). The tool used for the study were the self concept scale (adopted from Rajkumar Saraswath) Psycho social adjustment scale (prepared and standardized by the investigator), Socio Economic Status Scale and the achievement score collected from the school. The data thus collected were consolidated, codified suitably and subjected to analysis. For analyzing the data appropriate descriptive and inferential statistical procedures were employed.

SCOPE OF THE STUDY

The present study is expected to throw high light on the self-concept, psychosocial adjustment and academic achievement of students with hearing impairment at secondary school. The advantage of examining the self-concept, psychosocial adjustment and academic achievements are many. Being an exploratory study it is expected to reveal many interesting finding sand there are by increasing the knowledge base regarding the self-concept, psychosocial adjustment and its relation to academic achievement of students of students with hearing impairment. The expected findings of the studies have immense value to disability managers who develops and strengthens various programmes for the benefit of hearing impaired. Thus this study helps to understand the various psychosocial problems and its relationship with various selected variables. Thus this study helps us to find out solutions to their problems and develop new policies or improve existing ones to the betterment of hearing impaired. It is hoped that the findings of the study will help the social welfare agencies, planners, special educators, parents, social workers, rehabilitation workers, and counselors to create awareness among themselves about their own roles in providing help to such students and to develop better action plan to develop the potentials of hearing impaired students and thus help them to have better adjusted life in the future.

LIMITATION

The sample for the study was taken from 11 secondary schools for the hearing impaired. More samples can produce more general sable results. There can be several factors that determine the self-concept and psychosocial

adjustment of hearing impaired students at secondary school. In the present study deals with the major variable of self-concept and psychosocial adjustment were taken into account. The study was intended to through light into the psychosocial factors and their relation with academic achievement and does not cover the physiology and medical remedies for the hearing impaired.

1. The study was restricted to hearing impaired secondary school students in the age range of 13-18+ years.

2. The study was restricted to secondary special school for the hearing impaired situated in Kerala state.

3. Residential and Non-residential schools.

4. Government and aided schools.

5. Study was carried out on a sample of 248 subjects, which was considered adequate due to the time consuming tests like self-concept inventory and psychosocial adjustment scale which are individually administered and due to the intensive nature of study.

ORGANIZATION OF THE REPORT

The report has been divided into six chapters. Chapter I presents the rationale for selecting the present problem, its significance, statement of the problem, definition of key terms used, objectives and hypotheses of the study along with a discussion on the scope and limitations of the study.

Chapter II presents an overview of hearing, impairment and its effect on the individuals.

In chapter III a brief survey of related literature pertaining to the area of study has been attempted.

Chapter IV contains the methodology in detail, including a description of the method adopted, sample for the study, tools and techniques used for collection of data, preparation and description of various tools, and the procedure adopted for the collection of data.

In chapter V the analysis of data is given in detail followed by interpretation and discussion.

Chapter VI contains a summary of the study together with conclusions arrived at, suggestions for improvement and for further research, Bibliography is presented after the sixth chapter, which is followed by appendices.

CHAPTER II

THEORETICAL OVERVIEW

Theor

CHAPTER 2
THEORETICAL OVERVIEW

Research in the field of special education is scanty in India because educationists concentrate much on formal education and non-formal education to normal children. Special education is individually planned instruction designed to respond to the unique characteristics of children who have needs that cannot be met by the standard school curriculum. It is estimated that between 15 to 20 percent of the children under the age of 15 need special education service. In the past, even nowadays the handicapped are sometimes cared and many times their abused. But today, the growth of systems and media technology is having a profound affection the provision of special education services. Only very few special education services are utilizing these modern facilities, which is not sufficient for the upliftment of entire special children.

In a country like India, we are still not having and solid growth in the field of special education especially for the hearing impaired. The formal and non-formal education for normal pupil has been given more priority than special education. It does not mean that the special children are totally neglected in our educational setup, but there is no adequate and better environment for empowerment of special children like hearing impaired. There is lack of adequate educational institutions for the hearing impaired in India. Only a few educationists and researchers are attempting this area in

recent days. Even there are children who require special attention in normal schools, such children are not all identified and cared for and are the potential dropouts in school system. Many researchers in foreign context have demonstrated the importance of providing early identification of hearing impairment and early education of hearing impairment and early education for the hearing impaired children. Hearing impaired children who do not receive early special education programmes may actually decline in their development. Hence, it is importance to identify the hearing impaired children at early stage itself and based on their impairment, appropriate education should be provided both for their physical and intellectual growth.

Hearing sensitivity is measured in decibels. Decibels are units of relative loudness of sounds; Zero decibels (0 dB) designates the point at which people with normal hearing can just detect sound. Each succeeding number of decibels indicates certain of hearing loss. The following threshold classification are common: mild (26-54 dB), moderate (55-69 dB), severe (70-89 dB), and profound (90 dB and above). These levels of severity according to loss of hearing sensitivity cut across the broad classification of deaf and hard of hearing (Hallahan & Kauffman, 1997).

Causes of Hearing Impairment

Conductive, Sensorineural, and Mixed Impairments

A conductive hearing impairment refers to an impairment that interferes with the transfer of sound along the conductive pathway of the outer or middle ear. A sensorineural hearing impairment involves problems in the inner ear. A mixed hearing impairment is a combination of the two. Impairment of the outer ear is not as serious as those of the middle or inner ear.

Several conditions of the outer ear can cause a person to be hard of hearing. In some children, the external auditory canal does not form, resulting in a condition known as atressia. Children may also develop external otitis or simmer's ear, an infection of the skin of the external auditory canal. A much less common extreme form is called malignant otitis externa, in which the infection from the outer ear can spread, causing inflammation and eventual permanent damage to the bones and cartilage at the base of the skull and to the cranial nerves, the brain or outer part of the body.

Most causes of the conductive hearing impairment are due to either inflammation of the outer ear or middle ear. The most common problem of the middle ear is otitis media-an infection of the middle-ear space caused by viral and bacterial infections. It is primarily a disease of childhood and is not easy to detect, especially in infancy when it often occurs with no symptoms. Otitis media is linked to abnormal functioning of the eustachian tubes. If the

eustachian tube malfunctions because of a respiratory viral infection, it cannot do its job of ventilating draining, and protecting the middle ear from infection. The prevalence of otitis media is much higher in children with down syndrome. Otitis media can result in temporary conductive hearing loss and, if untreated, can lead to rupture of the tympanic membrane (cited in Hallahan & Kauffman, 1997).

The most hearing impairments are associated with the inner ear. Inner ear hearing losses present the greatest problems for both education and medicine. Disorders of the inner ear can result in problems of balance and vertigo along with hearing loss. Some individuals with inner ear impairments may hear roaring or ringing noices. The causes of inner ear disorders can be heredity. Acquired hearing losses of the inner ear include those due to bacterial infections (e.g. meningitis, the second most frequent cause of childhood deafness), prematurity, viral infections (e.g. mumps and measles), anoxia (ie, deprivation of oxygen at birth), pre-natal infection of the mother (e.g. maternal rubella, congenital syphilis and cytomegallovirus), Rh incompatibility, blows to the head, unwanted side effects of some antibiotics and excessive noise levels.

Genetic Causes

Hearing loss can be inherited. Both dominant and recessive genes exists which can cause mild to profound impairment. If a family has a dominant gene for deafness it will persist across generation because it will manifest itself in the offspring even if it is inherited from only one parent. If a family had genetic hearing impairment caused by recessive gene it will not always be apparent as it will have to be passed on to offspring from both parents. Down syndrome or trisomy 21, caused by a chromosomal abnormality which can express itself in two different ways, conductive deafness often occurs from frequent middle ear infections, and in some cases Down syndrome patients are born with irregularities in the middle and inner ears that can also result in conductive hearing impairment.

The relationship between hearing loss and diabetic is relatively a recent discovery. The diabetic's poor control of glucose metabolism results in high level of glucose in blood. This condition is correlated to the incidences of microangiopathy, whereby the basement membrane in capillaries is thickened. So the space inside the capillary is reduced. Microangiopathy occurs in the cochlear vessels of the ear and results in sensorineural hearing loss.

Psychosocial Consequences of Hearing Impairment

The effects of hearing loss are complex and pervasive. The educational achievement, social development, and vocational success of an individual with a hearing loss in influenced by many factors, including the type and

degree of hearing loss, the age at which the hearing loss began, the attitude of parents and siblings, the opportunities available for the child to acquire a first language, and the presence or absence of other disabilities (Marschark & Clark, 1998; Paul & Quigley, 1990, 1994). The psychosocial aspects of hearing impairment have been given significant attention. The aspects subsumed under the general term ‘psychosocial’ typically include the psychological, social, emotional, personality and intellectual variables that are likely to be affected when there is impairment. The dimension of the effect will depend largely on the degree of impairment and the age of onset of the impairment. Adjustment, behaviour, and learning usually go hand in hand. The children who are unhappy and poorly adjusted often fail to learn. Children who have hearing impairment and associated communication problems are unwilling or limited capacity to learn. Hearing impairment may interfere with social interaction between adults and other children in many ways. It is difficult to manage these children with temper tantrums. These children show much more maladaptive behaviour such as lack of concentration, high dependence on adults, restlessness, disobedience and social isolation. Clinical observations showed that hearing impairment may lead to shy and withdrawing personality. Research evidence indicates that deafness restricts what the child can hear and also disrupts social interactive processes which take place between children and adult. These social interactive processes are very crucial in the normal development of the child. The opportunity provided to a hearing child to be with his peers allows him to express his emotions and needs. Thus communication and interaction permits

the hearing impaired child to have better psychosocial development and the better psychosocial adjustment further facilities the achievement of better academic grades (Kundu, 2000).

Hearing impaired people think and behave differently from hearing people in order to make sense of the word. Abstract thinking is more difficult for the hearing impaired children. Severely hearing impaired children are impulsive and socially immature, less able to care for their own needs, lacking self direction, and more dependent on adults than normally hearing peers. They are less motivated to achieve, unable to see other people's point of view, poor at making friendship, restricted in general knowledge and experience, and requiring great adult direction and external control. Deafness not only interferes auditory input but also interferes with social interaction between children and their care takers. This view emphasizes that characteristic behaviour traits in the hearing impaired children are a product of learning experience and may be specific to those situations in which learning takes place, rather than being part of deaf personality.

There are certain behavioral problems which are associated with hearing impairment. They feel invariably inferior and helpless in adapting to circumstances that require verbal communication. They have poor self concept which damages the development of personality. A number of hearing impaired children have additional perpetual motor deficits due to brain damage or cerebral dysfunction. Delay in achieving motor milestones, poor gross motor coordination, delayed hand preference, perseveration

impressiveness, short attention span, emotional liability are some of the characteristics of hearing children.

Education of hearing disabled

Effort of Pedro ponce de Le'on of Spain to demonstrate that hearing disabled can be taught and are capable of learning in late 1500s marked the beginning of education of heparin disabled. Different approaches to education of hearing disabled have been in use. The oral approach emphasize the use of speech, hearing and speech reading to communicate, the manual method utilizes a form of signs and total communication which involves the use of speech, hearing speech reading and manual communication in combination.

Various school placement options are-residential school, day schools, day classes resource rooms and itinerant programmes. Some amount of controversy exist for preferred system of education as well as option on placement as child factors, family factors and community factors plays an important role in making decision.

There has been remarkable progress in academic achievement among school age children who are hearting disabled over the past two decades, but overall performance is still dramatically below that of the school age population of children with normal hearing as a whole.

Educational Approaches

Studies assessing the academic achievement of students with hearing loss have routinely found lag behind their hearing peers. National surveys

conducted by Centre for Assessment and Demographic Studies (CADS) at Gallaudet University (Di, Gent Francesca, 1972; Gentile & Di Francesca, 1969; Trybus & Karchmer, 1977) reported that students with severe and profound hearing loss were reading at about a fourth-grade level or lower; and their mathematics performance was around the fifth-grade level or lower, and their mathematics performances was around the fifth-grade level. Growth in reading achievement was between 0.2 and 0.3 grade levels per year of schooling, for the oldest group of students (16 to 18 years). Most children who are deaf have normal intellectual capacity, and it has been demonstrated that their scores on nonverbal intelligence test are approximately the same as those of the general population. Deafness imposes no limitations on the cognitive capabilities of individuals (Moores, 1996). The problems that students who are deaf often experience in education and adjustment are largely attributable to a had fir between their perceptual abilities and the demands of spoken and written language.

Many special methods and materials have been developed for and used with hearing children. Regardless of instructional approach or method, the primary objective and focus of teachers of children with hearing loss in helping children develop and use language and communication skills. Three classroom methods used for these children are Oral/Aural approach, total communication, and bilingual-bicultural education.

Oral/Aural Approaches

Educational programmes with oral/aural emphasis view speech as essential for hearing impaired to function in the hearing world. A child who attends a programme with an oral emphasis typically uses several means to develop residual hearing and the ability as possible. Auditory, visual and tactile methods of input are frequently use of technological aids. A hearing aid is an amplification instrument it functions to make sounds louder. Auditory training programs help children make better use of residual hearing. It begins by teaching awareness of sounds. The first three levels of auditory training-detecting, discriminating, and identifying sounds are important but insufficient for developing the residual hearing. Auditory training emphasizes a fourth and highest level of listening skills-the comprehension of meaningful sounds. Speech reading is traditionally lip reading, but understanding speech from visual cues involves more than simply looking at the lips. Oral education tends to emphasize parent and family environment. Cued speech is a method of supplementing oral communication. It seeks to supply a visual representation of spoken language by adding cues, in the form of hand signals near the chin.

Total Communication

Educational programmes with an emphasis on total communication advocate the use of a variety of forms of communication to teach language to students with hearing impairment. Practitioners of total communication maintain that simultaneous presentation of manual communication by signs and finger spelling and speech through speech reading and residual hearing

makes it possible for hearing children to use either one or both types of communication. Sign language uses gestures to represent words ideas, and concepts. Those who practice total communication generally speak as they sign and make a special effort to follow the form and structure of spoken language as closely as possible. Several sign language systems have been designed primarily for educational purposes, with the intention of facilitating the development of reading writing, and other language skills in students with hearing loss. Finger spelling is also used y many people who are both deaf and visually impaired. The manual alphabet can be used at close distance of felt with the hand if the person is totally blind. It is often used in conjunction with other methods of communication. It consists of 26 distinct hand positions, one for each letter. Many educators believe that total communication facilitates parent-child and teacher-child communication and enhances children's self-esteem.

Bilingual-Bicultural Approach

This model views deafness as a cultural and linguistic difference, not a disability and recognize American Sign Language (ASL) as the deaf child's natural language. ASL provides a natural pathway to linguistic competence and English is better learned in the context of bilingual-bicultural education after the child has mastered his first language. The goal of the bilingual-bicultural education approach is to help the hearing impaired child become a bilingual adult who is competent in his first language; ASL and can read and write with competence in English.

Interpreters

The role of educational interpreter is signing the speech of a teacher or other speaker for a person who is deaf. The role of the educational translator has made it possible for many students with hearing loss to enroll in and successfully complete postsecondary programs. Duties of interpreters vary across schools; they are likely to perform tasks such as tutoring, assisting regular and special education teachers, keeping records, and supervision students with hearing loss (Zawolkow & Defiore, 1986).

Text Telephones

The telephone served as a barrier to deaf people in employment and social interaction for many years, but acoustic couplers now make it possible to send immediate messages over conventional telephone lines in typed or digital form. Text telephones (TT) (originally called TTY or TDD systems) enable the user to send a typed message over telephone line to anyone else who has a TT. As a result of the Americans with Disabilities Act, TTs are now available in most public places such as airports and libraries, and every state has a relay service that enables TT users to communicate with a person on a conventional telephone via an operator who relays the messages. Relay numbers are published in every phone directory.

Television Captioning

Today most regular programming on commercial and public network television, as well as many live news casting and sporting events, is captioned

(printed text appears at the bottom of the screen, similar to watching a film with subtitles), providing access to televised news and entertainment for deaf people. Since 1993, a federal law has required that all new television sets sold in the United Stated be equipped with an internal device that allows the user to position captions anywhere on the screen. Accessing captions on older television sets requires an external decoder.

Alerting Devices

Some individuals who are deaf or hard of hearing use special devices to alert them to certain sounds or events. For example, to signal the doorbell, a fire alarm, or alarm clock a sound-sensitive switch can be connected to a flashing light or to a vibrator. Hearing ear dogs alert a deaf person to important sounds in the environment.

Technological advances are already having a significant impact on the lives of many individuals with hearing loss. In addition to the sophisticated techniques that detect hearing losses and make use of even slight amounts of residual hearing a number of devices known as speech production aids help person hearing, a number of device known as speech production aids help person who are deaf monitor and improve their speech (Calvert, 1986).

Prevalence and incidence of hearing disability

The NSSO (1983) reported the prevalence rate of hearing disability amongst the rural population of the country to be 553 per 1,00,000 population as against 390 for the urban population. The rates for males and females were 595 and 510 respectively for all-India rural, sector. The highest rate for the rural population was reported from Mizoram (nearly 900) and the same for urban population was from Tamil Nadu (nearly 728). The lowest rare was reported from Madhya Pradesh both for the rural population (314) and also for the urban population (205). The survey reported a large variation in the prevalence of hearing disability over the States in both rural and urban areas.

The number of persons disabled from birth amongst the rural population of the country was estimated to be 188 per 1,00,000 persons as against 108 for the urban population of the country. The prevalence rates of *hearing disability since birth* varied from 87 to 526 amongst the rural population of the States and the Union Territories, while the variation was between 70 and 225 amongst the urban population of the States and Union Territories.

Nearly 187 males per 1,00,000 males in the rural areas of the country and nearly 120 males in the urban areas were reported to have hearing disability from birth. The prevalence of disability from birth amongst females was estimated at 146 for the rural sector and at 96 for the urban sector. The rate for the disability since birth was highest in Mizoram for both males (536) and females (510) for the rural sector; while the rate was lowest in Gujarat for males (93) and in Tripura for females (48). For the urban sector, the highest rate of the disability since birth was reported in Tamil Nadu for both males (268) and females (181); while the rate was lowest in Haryana for males (49) and in Madhya Pradesh for females (56).

Nearly 304 persons per 1,00,000 rural population of the country and nearly 279 persons per 1,00,000 urban population were estimated to have speech disability. The highest rate for the rural population reported was from Mizoram (640) and the same for the urban population from Haryana (625). The lowest prevalence rate for the rural and urban population were reported to

be 174 and 161 respectively in Madhya Pradesh. There is a marked variation in prevalence of speech disability across States for both rural and urban areas.

The number of persons having speech disability from birth amongst the rural population of the country was estimated to be 23 per 1,00,000 population and same amongst urban population was found to be 186. Such rates for the rural population for most of the individual States varied between 150 and 435; the corresponding range for the urban population in different States was reported to be from 100 to 380.

The prevalence rates of hearing disability rise with increasing age after the age-group '15-39 years', in both the sectors and for both males and females. The rates are reported to be very high (over 2,000 per 1,00,000 population) for the '60 years and above' group. The rates for age groups of 5-14, 15-39, 40-59 and 60 years and above were found to be 343, 386, 647, 21, 650 respectively fro rural males; similarly for rural females, the corresponding numbers reported were at 285, 250, 579 and2, 597. The rates for age groups of 5-14, 15-39, 40-59 and 60 years and above were estimated to be 266, 216, 386, 2,432 respectively fro urban males, and while for urban females the same were 220, 196, 468 and 2,305 respectively. The prevalence of hearing disability amongst rural males and females was found to be higher than amongst urban males and females was found to be higher than amongst urban males and females of the corresponding age group. The prevalence of speech disability amongst both males and females of the country in both the sectors were found to decline steadily over the age groups of 5-14 years, 15-

39 years and 40-59 years, and then rising to some extent at ages *'60 years and above'*. The prevalence of speech disability amongst male children in the age group of 5-14 years, of both rural and urban sectors was reported to be of the same order. A similar trend was also found to hold for the female children as well.

For the country as a whole, the incidence rates of hearing disability was estimated to be 19 per 1,00,000 population for the rural sector, and 15 for the urban sector. The incidence rates for males and females were reported to be same in both rural and urban areas of the country. For the country as a whole, the incidence rate of speech disability was about four or five per 1,00,000 population for both rural and urban sectors. The incidence rate for males was about six or seven in both the sectors, while the corresponding rate for females was about two or three.

The incidence rates are found to be strikingly higher for the age-group *'60 years and above'* than for other age-group in both the sectors and for both males and females. The rates for males in the age group of 5-10, 40-59 years and *'60 years and above'* were absorbed to be much higher than amongst females.

The age patterns of the onset of disability for rural and urban areas of the country were found to be similar in nature. The age pattern of the onset of disability was also reported to be broadly similar for the individual States. Nearly 60 percent of the disabilities were reported to have started at '60 years and above' and nearly 25 percent of the disabilities were reported to have

started at ages 40-59 years. The proportion on onset of disability at ages 50-54 years was estimated to be bout eight percent, while the same for each of the age groups of 0-4, 5-10, 15-29 was found to be below five percent. Nearly 50 percent of the disabilities were reported to have started at age of '60 years and above' and over 20 percent of the disabilities at ages between 40-59 years. For the lower age-group, the proportions reported were about face percent or a little higher with the exception of the urban figure for the age group of 15-29 years.

In both rural and urban areas of the country, for nearly 50 percent of hearing disabilities, the causes were either not known or were other than those specified. Among the specified cases of the disability, ear discharge and illness were reported in the highest proportions of cases in both rural and urban areas of the country. Against this, not more than one percent of the disabilities were attributed to German measles in both rural and urban areas of the country. At the All-India level, the cause of disability was either not known, or other than those specified, for 84 percent of the cases of disability in the rural areas and for 75 percent of the disabilities in the urban areas. Illness was reported to be the cause of speech disability for 11 percent of the disabilities in the urban areas. In both rural and urban areas of the country, voice disorder in the form of speech disability comprised three to four per cent of the disabilities. Cleft palate constituted for about one to two percent of the disabilities, in either sector.

At all-India level, nearly six out of 10 disabled persons in the rural areas, and nearly four out of 10 disabled persons in the urban areas, were reported to have taken non treatment. About half of the disabled persons in the urban areas reported to have taken allopathic treatment. About half of the disabled persons in the urban areas reported to have taken allopathic treatment. No appreciable variation was noted in respect of degree of severity in percentage of persons reported to have no treatment and those reported to have allopathic treatment.

For the rural areas of the country, nearly one per cent the disabled persons having different degrees of hearing disability reported to have undergone surgical operation. For the urban areas of the country, the proportion of disabled persons who underwent surgical operation was estimated to be five percent for persons who cannot hear at all, and three per cent for persons having profound degree of disability, and bout two percent for persons having severe or moderate degree of disability. The distribution of 1,000 persons *having speech disability* only type of treatment taken for the rural areas and for the urban areas was also reported in this survey. At the country level, nearly 65 per cent of the person with speech disability in the rural areas, reported to have taken no treatment at all as against nearly 50 per cent in the urban sector. The percentage of cases reporting allopathic treatment other than surgical operation was reported to be 29 for rural India and 38 for urban India. The corresponding percentages for surgical operations were two and five for rural and urban sectors respectively.

The proportion of disabled person' who reported to have taken no treatment, because treatment was expensive was found to be 37, and at 31at 31 percents for the rural and urban sectors respectively in the cases, persons having hearing disability: while the corresponding figures in case of persons having *speech disability only,* was found to be 29 percent for the rural sector and 18 percent for the urban sector. Fourteen out of twenty five disabled persons in the rural areas and thirteen out of twenty five disabled persons in the urban areas reported to have not acquired the hearing and because this was either expensive or not available. Two out of 25 disabled persons in the rural areas and one out of 10 disabled persons in the urban areas did not acquire any hearing aid as its use was not necessary for their economic independence.

The Census Report of India (1981) reported the distribution of the population of the totally dumb among the states an union territories and also the corresponding proportions of the general population, is widely varying with West Bengal leading (5.40) followed by Andhra Pradesh (2.98) Tamil Nadu (2.84) Orissa (0.99) Jammu & Kashmir (0.88) to Lakshadweep (0.01)

It was also observed that Sikkim recorded the maximum number of the totally dumb per 1,000 population, of above six, followed by Arunachal Pradesh and Nagaland with 2.00 to 2.50 totally dumb per 1,000 population. Mizoram was found to be in the range of having 1.50 to 2.00 totally dumb per 1,000 populations, wherein Lakshadweep was in the range of 1.00 to 1.50 totally dumb per 1,000 populations. The States and union Territories having 0.50 to 1.00 totally dumb per 1.000 population are Himachal Pradesh, Jammu

& Kashmir, Dardra and Nagar Haveli, West Bengal, Meghalaya, Manipur, Tamil Nadu, Andhra Pradesh, Tripura and Orissa. All the other States and Union Territories reported less number of the totally dumb per 1,000 populations than that was observed at National level.

Self-Concept

Self concept may be defined as the totality of a couple's organized and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence. Self concept is different from self-esteem ie., feelings of personal worth and level of satisfaction regarding one's self) or self-report. From described self concept as "Life being aware of itself."

The self-concept is the accumulation of knowledge about the self, such as beliefs regarding personality Physical characteristics abilities, values, goals, and roles. Beginning in infancy, children acquire and organize information about themselves as a way of enable them to understand the relation between the self and their social world. This developmental process is a direct consequence of children's emerging cognitive skills and their social relationships with family and peers. During early childhood, children's self concepts are less differentiated and are centered on concrete characteristics, such as physical attributes, possessions, and skills. During middle childhood the self concept becomes more integrated and differentiated as the child engages in social comparison and more clearly perceives the self as consisting of internal, psychological characteristics. Throughout later childhood and

adolescence, the self concept becomes more abstract, complex and heir archaically organized into cognitive mental representations or self-schemes which direct the processing of relevant information.

Self concept in Deaf children

The development of self-concept is closely tied to the feedback children receive from parents, peers teachers, and other significant persons. Such feedback may occur as verbal responses, actions, or changes in contingencies. This feedback helps children formulate perceptions about their success and failures. Overtime, these perceptions become internalized and are the foundation for the child's image of self (Leigh and Stinson, 1991; Piess, 1984).

Difference between students with positive self concepts and those with negative self-concepts are apparent in a number of areas. Numerous studies have demonstrated a correlation between self-concept and school achievement. Students with poorer self-concepts are more likely to drop out of school, be employed in lower paying jobs, additional social-emotional problems. In addition, poor self concept is correlated with identity constriction ie., withdrawal from questions concerning the person's identity; and social constriction ie., withdrawal from social experiences (Chembers, 1987). Children's self-concepts tend to remain stable overtime. (Daqmon, 1983) Thus, young children with low self-esteem may experience considerable difficulty overcoming these perceptions as they nature.

Garrison and Tesch, (1978) conducted a study on self concept and compare the deaf and hand of hearing with that of hearing subjects have suggested that the former group of subjects has a lower self-concept.

Effect of Hearing Status on Early Language Development

The Factors that may lead to the development of a poor self-concept in the deaf and hard of hearing child are problem in early language development and association, and inadequate early educational services. Most hearing parents learn sign language after their deaf child does. Therefore deaf children usually teach their parents their own language if the parents learn sign at all (Warron & Hasenstab, 1986). Crcing (1965) suggested that communication, the control problem of the deaf and hard of hearing child, is also a central issue in the theoretical consideration Self-Concept. The development of a sense of self is strongly field to social interaction (Piers, 1984). Normal social interaction. Presuppose the existence of communication which in turn, largely emanates from a developing language base. For many congenitally deaf children, language base. For many congenitally deaf children, language development is significantly delayed, particularly for deaf and hard not hearing youngsters with hearing parents. Thus, one may reason that the development of self in the deaf and hard of hearing child occurs without the full benefit of the social intervention available to his her hearing counterpart.

Parental hearing status is a determining factor whom considering early language-development and self concept. (Qengleyd Kretchsmov, 1985). Deaf and hard hearing parents of deaf and hard of hearing children communicate

earlier and expect language from their children at a younger age than hearing parents these children. This earlier advent of language and communication between parent and child fosters the development of closer social-emotional.

In our present curriculum every attempt is oriented towards is oriented toward achieving educational excellence through the teaching of subject matter, Of course, almost no one disputes the legitimacy of the school's concern about educational achievement, but this should not be in anyway hinder the all-round development or personality of the child modern education must not content itself with developing more rote-learning, but also nurture the growth of those factors that contributes to the development of the personality of pupils especially at the threshold of their adolescence. Self concept is one of the major components of personality stability of self-concept plays an important role in the degree of organization of the personality pattern. Self concept has been considered as a key point in understanding of human behaviour. The self of an individual deeply affects adjustment to himself as well as other people of the society. Sensory disabled children have better self concept them their normal counter parts (Bhargava and Lavina 1981) Loeb and Saregiani (1986) revealed that the hearing impaired person have a poor self concept. Where as Jones (1984) found that no significant relationship exist between self-concept and hearing impairment.

Researchers in both educational psychology and developmental psychology have long been interested in self concept. Self -concept is usually defined as the perceptions people have of themselves, but self perceptions can

be described using terms such as self-concept, self-esteem, and self-efficacy. Despite a lack of clear destination among these self-related perceptions, current researchers agree that self-concept has a multidimensional nature (Bong and Skaalvik, 2003, marsh, Byrne and Shavelson 1987, shavelson, Hubner and Starton, 1976). Researchers also agree that self concept is not innate, but rather it is formed through an individual's experiences and interaction with the environment (Bong and clerk 1999).

In Shavelson, Hubner and Stanton (1976) model a general fact at the apex of the self - concept hierarchy is divided into academic and nonacademic components of self-concept. Academic self-concept is than divided into self concepts in particular subject areas (eg. mathematics, English) and nonacademic self-concept is divided into social, emotional and physical self-concept.

Definitions of Self-concept

"Self-concept is the nucleus around which the entire personality structure revolves in its homeostatic process of maintaining consistency and stability with the individual personality" Pandit (1969).

"Self-concept is "a set of implicit beliefs about the self and the relationships between those beliefs that may mediate behaviour in certain situations" Paik and Michael (2002).

"Self-concept is the key stone of personality" Cattell (1957). "Self-concept gives consistency to the personality" Lewin (1951).

"The Self-concept includes those parts of the phenomenal field that have differentiated the person having definite and stable characteristics of himself" Snygg and Combs (1958). " The self is something of which we are immediately aware we think of it as the warm, central private region of our life. As such it plays a crucial part in our consciousness (a concept broader than self), in our personality (a concept broader than consciousness) and in our organism (a concept broader than personality). Thus it is some kind od core in our being" Allport (1961).

"Self-concept is a person's view of self, in relation to their perception of feedback from others. This view occurs in both academic and non-academic areas" Fox (1993) in Rawlinson (1996).

Self-concept is the cognitive or thinking aspect of self and generally refers to "to totality of a complex, organised, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true his or her personal existence" Purkey (1988).

Social Comparison Theory

Great emphasis has been placed on the social underpinning of the Self-concept. It is accepted that one's Self-concept is vitally affected by self-comparison. One's self concept is based in part on how one compares to other individuals with regards to traits, opinions, and abilities Suls (1999). Conner (2003) defined social comparison as the assignment of value to serve as a joint function of own and other performance. Social comparison theory

therefore proposes that, in an attempt to reduce personal uncertaintly and conserve or improve self-esteem, individuals engage in comparisons Suls (1999).

Festinger's Social Comparison Theory

Festinger's social comparison theory suggested that the social environment is an important factor in determining individual's concept of the self and their behaviour Suls and Miller (1977). Festinger (1954) conducted an experiment, which showed that subjects lowered their aspiration level if they scored above the group average and raised their aspiration level if they scored below the group average. The fact that individuals tried to achieve conformity with their group and responded to discrepancies between their own performance and that of their reference group is important in social comparison theory.

"Self comparison theory stressed how individuals use groups to fulfill their informational needs to evaluate their opinions and abilities" Suls (1999). The basic tenet of Festinger's social comparison theory is that humans have a drive to evaluate their own opinions and abilities. Festinger assumed that this drive had survival value, that without an accurate appraisal and opinions, one could not survive effectively. Festinger's theory inferred that two types of motivation underlie how a person engages in social comparison, namely self-evaluation and self-enhancement.

The Life-Span Model

The assumption was that feedback provided by comparing with objective standards is preferred over other forms of evaluative feedback. However, when these obejective standards are not available, the individual must resort to social feedback. This model posits that the individual's position in the life cycle determines which mode of evaluation has the greatest influence on self-evaluation.

As the child grows older, social comparisons continue over temporal comparisons Suls (1982). As the child approaches adolescence, several changes facilitate the developing appreciation of social comparison with similar others. The individuals then begins to have the requisite abilities, to begin to compare with and prefer to compare with similar others. The child may also become discouraged making comparisons to older children or adults, and this can cause the child to feel outperformed. In contrast, with comparison to youner children, it would produce feelings of superiority, but comparisons to younger children are often discourged by parents and teachers Suls and Miler (1977).

Opinion Comparison Model

Slus, Martin and Wheeler (2000) propsed an opinion comparison model, which addresses how people use social comparisons to assess the appropriateness or accuracy of their opinions. The model is composed of three major types of opinion comparisons.

Preferennce Assessment: This is best met by comparing with others who are similar in related attributes.

Belief Assessment: This is addressed by comparison with people who have more expertise, but who also share basic underlying values.

Preference Prediction: This is best met by comparison with another person who has already experienced the stimulus and who has a consistent history of preference.

Basic assumptions regarding the self-concept

"Many of the successes and failures that people experience in diffierent areas are closely related to the ways that they have learned to view themselves and their relationship with others" Hormuth (1990). "Self-concept has atleast three major qualities of interest namely, it is learned, it is organised, and it is dynamic" Purkey (1988).

1. The self is learned: No one is born with a self-concept. it emerges gradually in the early months of life and is shaped and reshaped repeatedly when experiences have been perceived, particularly with significant others.

Self-concept is a social product developed through experience and possesses relatively boundless potential for development and actualisation Purkely (1988).

2. The self is organised: Waibel (1994) agrees that the self has a generally stable quality, which is characterised by harmony an orderliness. Self is well organised and united. it consists of many subpartsm which are fairly well organised. Subparts includes both categories and attributes. The smaller parts of the self have their own values either negative or positive or both. Another organisational quality of self is hos failure and success are generalized throughout the system. Self-evaluation is raised by the success of an important and highly rated ability and vice-versa. Another organisation quality of self is its unique quality which helps to explain communication problems.

3. The Self is dynamic: The motive behind all behaviour is the maintenance and enhancement of the perceived self Baumeister (1999). All are striving to maintain, protect and enhance the self. "The self is the individual's basic frame of reference, the central core around which the remainder of the perceptual field is organized" Kobal and Musek (2001). There is only personal, internal motivation that each and every human being has at all times and in all places and when engaged in any activity.

Theories of self-concept

As a determinant of behaviour self-concept is not a recent theoretical formulation. Most pre-twentieth century discussion of self was embedded in a morass of philosophy and religious dogma, with self-regarded as some non-physical incumbent of a physical body. Paik and Micheal (2002) ascribe to the self-concept a key role as a factor in the integration of personality, in motivating behaviour and in achieving mental health.

It is not possible to use one single theory or theorist to describe the self. There are many theories on the area 'self'.

Theory of William James

Labenne and Greene (1969) suggested that it would be proper to say that much of the contemporary theorizing about self-concept derives from William James. The chapter on self in Jame's work. "The principles of psychology (1890) was one of the largest in that two volume book and its contributions to theorizing about the self-concept cannot be over estimated.

James considered the global self as simultaneously 'me' and 'I'. They were discriminated aspects of the same entity namely, discrimation between pure experience (1) and the contents of that experience (me) Baumeister (1999). James identified four components of the objective self, which he classed in descending order of importance namely: spiritual, material, social bodily self.

- The spiritual self: James meant thinking and feeling, i.e. what we most truly seen to be.

- The material self: It consists of the clothing and material possessions we see as part of ourselves.
- The social self: It is concerned with enhancing self-esteem and serving social ends, involved as they are with obtaining admiration, notice of others and power.
- The bodily self: This self is concerned with body image. The more bodily self awareness one has, the more 'alive' one is.

Symbolic Interactionism of Cooley and Mead

Cooley's belief is that self and society are twin born and the notion to separate an independent ego is an illusion. Cooley suggested that it could be demonstrated experimentally that a major persepective of the self-concept is the "other self", or how we think others think of us. He pointed out the importance of subjectively interpreted feedback from others as a main source of data about the self. In 1912 Cooley introduced the theory of the "looking glass self", reasoning that one's self-concept is significantly influenced by what the individual believes others think of him Baumeister (1999). The "looking glass" reflects the imagined evaluation of thers about oneself. Mead greed this conception and suggested that the self was essentially a social process within the individual involving analytically distinguishable phase. "Mead by recognizing and sharing themeanings and values others have of one, the definition of oneself as a specific role-player in a given relationship is accomplished" Burns (1982).

Erikson's Psychological view of identity

Instead of 'Self' Erikson used the concept of identity in his writings and provided and extension of Freudian theory emphasizing ego development in the cultural context Hergenhahn Olson (1999).

Erikson indicated that identity comes from achievement that has meaning in culture Meyer, et al. (1997). He described eight stages of identity growth and claimed that an optimal sense of identity means knowing where one is going and having inner assuredness.

Phenomenology of Carl Rogers

"Rogers presented a system of 'psychotherapy' called 'non directive' which was built around the importance of the self in human adjustment" Purkey (1970). The self is the central aspect of Roger's theory. He considered self to be a phenomenological concept which has an important role in the individual's adjustments and behaviours.

Central Points Roger' Theory are:

- The self-concept becomes differentiated as part of the actualizing tendency, from the environment particularly to the social world.
- The self-concept is of significance in personality and behaviour and the self-concept is the organisation of self-perception.
- The response to the environment is determined by the self-concept.

- The person's self-concept develops with the positive regard from others.
- A need for positive self-regared is learned through internalisation of being positively regarded by others.

Snygg and Combs of Self

Snygg and Combs learn very heavily on a "perceptual approach" of explaining human behaviour. According to their view, behaviour occures in terms of how an individual perceives himself and his surrounding. The individual's view of himself is his 'self-concept' "who is he". The part of the environment in which the individual is more or less personally involved is called the 'phenomenal self,' which includes the self-concept and those aspects of life which are not a part of the "real self", but are in some way related to it. The environment that the individual perceives is termed as the phenomenal environment.

Snygg and Combs pointed out that this phenomenal field or private world is reality for each individual. Because of difference in perception two individuals behave differently in the same situation.

Self theory by Epstein

"Self-concept is a theory that an individual has unwillingly constructed about himself as an experiencing, functioning individual and it is part of a broader theory which the holds with respect to his entire range of significant experience" Epstein (1972). Accordingly, there are major postulate system for

the nature of the world, for the nature of the self and for their interactions. The most basic purpose of the self theory is to optimise the pleasure or pain balance of the individual over the course of a life time. Other basic functions of self-concept are to facilitate the maintenance of self-esteem and to organize the date of experience in a manner that can be coped with effectively.

Epstein has clearly differentiated between self and objective world of non-self. This has many advantages.

- The act within a world of shared reality; the distinction is necessary.
- It is useful for the individual to exercise control of his behaviour.
- It is necessary to live harmoniously in social communitis and to have a concept of responsibility.

Development of self-concept

The development of the self-concept does not occur in all or-none fashion, which permits us to say that it is not possible that the child does not at a certain period in time, possess a self-concept, and then suddenly he does have a self-concept. "The self-concept is learned; it is not innate" Burns (1982). Kobal and Musek content that the process of self-concept development never really ends, and is active from birth to death.

Neonatal capacities and 'self-development'

Purky stated that a newborn baby is unaware of his experiences as unique and separate entity. However, the baby's experiences continue to change in his internal and external environment with every passing day. Through sensory experiences, the baby begins to organize, a coherent mental organisation of his world and starts to adapt to the external environment.

All infants tend to seek closeness to particular people. This tendency from which security is obtained, is termed attachment. Hence the perceptual and the social interaction required for self-concept development are present in rudimentary form soon after birth.

Erikson's views on 'self' development

Erikson put forward eight stages of growth and development. The first five stages are important in the development of self-concept.

(a) The development of basic trust: Erikson locates the foundation of all later personality development in the first phase of his developmental stage theory. The infant needs to overcomes a sense of mistrust and acquire a sense of trust as basis of positive self-feeling. A sense of basic trust enables the child to move on to new experiences. Basic mistrust will hamper his development, since he will not willingly or easily move on to other activities. A trusting environment enables the infant to feel he is accepted and loved and forms a firm basis for future interaction with others and for developing positive feelings about himself.

(b) The development of autonomy: This second stage refers to the period from 18 months to the end of 3 years. As the child becomes conscious of his own action, he begins to recognise his own individuality and himself as agent. Performance is not always perfect and failure and perhaps criticism can occur, due to lack of support and encouragement, which in its turn can result in low self-esteem. During this period, the child grows rapidly.

An important component of self-concept is the ability to cope with the world in a purely physical sense, and in the process, the young child develops a sense of personal agency King (1997). The child who is more eager to assume control of himself as manifested in attempts to feed or dress himself and who is more eager to strike out and explore his environment, might attributed with greater self-esteem.

(c) Initiative versus Guilt: The period commences around four years of age and concerns the child learning what kind of a person he can become and defining the limits of what is permissible. With curiosity dominating his explorations, the child can become vigorous and intrusive in his learning. This leads him away from limitations of infancy to greater possibilities.

According to Erikson the danger is that a child may develop guild over his curiosity and goals. This may then blunt his sense of initiative. An immature, harsh, self-derogatory conscience must be avoided at all costs if positive esteem is to continue to develop.

(d) Industry versus inferiority: This stage encompasses the school years and corresponds to the latency period. During this latency period a child learns to seek recognition and praise by producing things. By adjusting himself to the interpersonal laws of tools craftsmanship, a child develops a sense of industry. He may lose confidence in his ability to take part in the working world. Thus one's self-image as a productive and capable worker is closely tied to the our come of the school years.

By late adolescence, people have a greater range of choice in their behaviour and activity, selecting events and situations they can cope with, and avoiding those in which they would be shown up with the minimum loss of self-esteem. But in childhood most tass and behaviours are obligatory, being

vital to physical, social and intellectual development. The child then has to reveal of ten very publicly, his incompetencies.

(e) Sense of identity: Erikson claimed that the major task confronting the adolescent is to develop a sense of identity, to find answers to the questions 'who am I?' and 'where am I going?' The search for personality identity involves deciding what is important or worth doing and formulating standards of conduct for evaluating one's own behaviour as well as the behaviour others. It also involves feelings of one's own worth and competence.

Adolescent's sense of identity and develops gradually out of the various identification of childhood. "Young children's values and moral standards are largely those of their parents; their feelings of self-esteem stem from the parent's view of them" Franken (1994).

The concept of identity itself requires careful consideration. A person's identity can no longer be thought of in terms of the person is isolation, but must be seen in the social context of his relation to others. According to Erikson, in order to achieve a sense of identity, "the young individual must learn to be most himself where he means most to others-those, to be sure, who have come to mean most to him" Burns (1982).

Feedback from significant others

"Another major source of 'self' development is feedback from significant others. Cooley introduced the "looking class" concept to describe

how others perceive the self. "Significant" others refers to all people who are significant to the child and who could increase or decrease the child's helplessness or sense of self-worth" summerfeld and Watson (2001).

Self-concept can be improved by altering the interpersonal environment in order for the person to have more opportunity to associate and communicate with people who are potential significant others and whose abilities, backgrounds and interests are similar to his.

Sarva Shiksha Abhiyanm is an effort to universalize elementary education by community ownership of the school system. It is in response to the demand for quality based education all over the country. The SS programme is also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community owned quality education in a mission mode. The SSA has been launched as the shared responsibility of the central and state governments in partnership with the local governments and the community. The Sarva Shiksha Abhiyan will not disturb existing structures in states and districts but would only try to bring convergence in all these efforts. Efforts will be made down to the school in order to improve community participation. There will be a forces on the educational participation of children from SC/ST, religious and linguistic minorities, disadvantaged groups and the children with disabilities.

Dimension of Self

Self has various dimensions like physical, moral, educational, social and temperamental dimensions.

1. Physical Self

Aristotle claimed that different facial characteristics, such as the colour and texture of the skin and hair, the quality of the voice; and the build of the body were related to certain personality characteristics.

The body build of the person affected his self-concept favourably if it permits him to do things that are as prestigious or better than others. It affects his self-concept unfavourably if what he can do has little prestige in the eyes of his social group. If he consumes his energy on useful, prestigious activities, the effect on his self-concept will be favourable than if he utilizes it in useless and meaningless activities that are annoying to others.

Awareness of his physical superiority, interiority of equality influences the way a person evaluates himself. He knows as to how others evaluate him. Thompson (1954) has pointed out that children may suffer emotionally from being a 'Shrimp', 'Tubby', 'Red head' or 'Back tooth'. The taunt, "Brown eyes turn around and tell a lie" can leave permanent psychological scars.

2. Social Self

Social judgements serve as the basis for self-evaluation. The social group clearly influence the self-concept of the individual. The social concept is based on the way the individual believes, others perceive him. It is usually referred to as 'mirror image'. If a child is constantly tole that he is 'naughty' he

soon develops a concepts of himself as a naughty child. The child whose parents are always telling him how bright he is, develops a self-concept that contains false pride.

Social self is derived from social interactions. Therefore, whether the concept will be favourable or not depends on how the social group treats the individual. A person is discriminated against because of his colour, race or class will usually have a far less favourable concept of himself than the person who is not.

3. Temperamental Self

The predominance of a particular kind of emotional reaction, the person's "prevailing emotional state" determines his temperament. Hilgard (1962) explains that temperament is that aspect of personality which is revealed in the tendency to experience moods or mood changes in characteristic way.

Individual's emotions colour the self-image and perception of his environment. Emotions also affect one's behavioural pattern. Not only do emotionally toned experiences affect the person's self-concept at the mark. The greater the discrepancy between the real and ideal self-concepts, the more likely the person is to try to repress memories of unpleasant experiences. This he does in the hope of eliminating the damage they do to this concept of self.

4. Educational Self

Schools play an important role in the formation of self-concept. The school's influence comes early in life when the self-concept is being formed. Children spend more time in school than in any other place out side the home. Adolescents spend more of their waking time in schools, than in the homes. School provides real opportunity children have for getting ahead in life and, if this matters to them and their family, the school will influence personality by offering them a chance to become a 'success' which is ego inflating.

School provides, the person's first real opportunity to appraise himself and his ability realistically, free from parental help or bias. In school he is judged on his merits, he learns how he stands in relation to his age mates and how people feel about him and judge his acts as compared with those of his peers. Just as the young child's self-concept is a mirror image of what he believes, his parents think of him, so is the older child's self-concept a mirror image of what he believes his teacher and class-mates think of him.

The child's personality determines his adjustment to school and this influences his self-concept. The relationship that exists between teacher and student and the way the student perceives that relationship have a direct effect on the student's self-concept.

5. Moral Self

The individual's intellectual capacities affect his response to the group's moral standards. The moral behaviour of the individual, in turn, is closely related to his adjustment to life, to the judgements others make of him,

and to his judgement of himself. The more closely his behaviour conforms to the moral standards of the group with which he is identified, the more favourable will be the effects on his personal and social adjustments. Conformity to the group's mores will lead to group approval and personal satisfaction.

As the individual grows older and his social contacts broaden, he learns new moral concepts and generalise old moral concepts to apply to new situations. If the person realises that his behaviour falls short of group expectations or personal standards, he will have feelings of guilt and his reaction to these feelings will affect his self-concept.

The influence of moral expectations on the self-concept will depend on a number of conditions; whether the person is forced, by fear of punishment, to conform or whether he wants to conform because of the personal benefit he will derive from doing so the attitude of the person who requires him conform and the method used to enforce conformity; and whether he feels secure in his mural beliefs and in his ability to translate these into actions.

6. Intellectual Self

As an important personality component intelligence is necessary to deal effectively, act purposefully and to think rationally. It ensures problem solving and adjustment to the environment. How well the individual's likes come up to social expectations, will have marked effect on his self-concept.

Mehta and Saraswat (1986) found that boys with superior scholastic ability tend to have a more positive real self-concept as compared to average boys.

The person's awareness of his adjustive ability is also likely to influence his self-concept. If a child recognises that he is superior in school work, he will have a favourable self-attitude unless he discovers that his superiority has little prestige value or is actually regarded with contempt by his age mates. Similarly, if an elderly person recognizes that he is "slipping" mentally, he will develop an unfavourable self-attitude.

Bayley (1968), Butcher and Dye (1968) while reporting separately wrote that for adolescence, the pattern of intellectual growth is fairly consistent. Fluctuations in rate of growth are less marked than in the earlier years and predictions of what the mature level will be are more accurate. If the social group expects the person to learn some developmental task, such as regarding or controlling his aggressiveness, before he has developed the intellectual capacities essential for the task, his self-concept will be unfavourably affected because (1) he will think of himself as a "failure" and (2) the social group will judge him negatively.

The attitude of significant people, especially family members have more influence on the self-concept of the person of deviant intelligence than do the attitudes of members of the social group as a whole. The closer the social relationship between the person and others, the more their attitude towards him will effect his self-concept.

Disabilities Act 1995: In India 'disability' classification is laid out in persons with disabilities Act 1995, which outlines seven kinds of 'disabilities' namely blindness, low vision, hearing impairment, locomotors leprosy cured, mental illness and mental retardation. In this paper, the category of mental retardation has been expanded to include learning disabilities (F81) Attention Deficit Hyper activity Disorder (F84-4) Asperser's syndrome (F84,5), Language and Communication Disorder (F80) and slow Learner (F70) are considered (The figures in the brackets indicate the ICD-10 codes). This is according to the international classification of diseases (ICD10) for mental Retardation classifications of World Health Organizations and the fact that children with these special needs are categorized as 'disabled' and have the choice of either inclusive schools, regular schools or schools exclusively for children with disabilities. Children with disabilities comprise a heterogeneous group and the disabilities included in the research paper are not exhaustive. There is however a need to clarify our position.

Disability-Public Policy Initiatives in India

The Kothari commission (1956) which highlighted the importance of education in children with disabilities during the past independence period. It expressed that the education of children with disabilities must be a part of the general educational system suggesting that educational facilities must be extended to the blind, deaf, orthopaedically challenged and mentally challenged (Panday 2006). The Rehabilitation council of India Act 1992 initiated a training programme for the development of professional to respond

to the needs of students with disabilities. The enactment of the people with disability action in 1996 provided legislative support. This act made it mandatory to provide free education to children with disabilities in an appropriate environment until the age of 18 years (UNICEF 2003). Even though the legislation (The person with Disability Act 1995) made access to regular schools easier, it was still not guaranteed as aqn equal right for all students.

Sarva Shiksha Abhiyanm is an effort to universalize elementary education by community ownership of the school system. It is in response to the demand for quality based education all over the country. The SS programme is also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community owned quality education in a mission mode. The SSA has been launched as the shared responsibility of the central and state governments in partnership with the local governments and the community. The Sarva Shiksha Abhiyan will not disturb existing structures in states and districts but would only try to bring convergence in all these efforts. Efforts will be made down to the school in order to improve community participation. There will be a forces on the educational participation of children from SC/ST, religious and linguistic minorities, disadvantaged groups and the children with disabilities.

The National Policy for Persons with Disability, 2006

Which attempts to clarify the framework under which the state, civil society and private sector must operate in order to ensure a dignified life for

persons with disability and support for their caregivers. It includes extending rehabilitation services to rural areas, increasing trained personal to meet needs, reads, emphasizing education and training, increasing employment opportunities, focusing on gender equality, improving access to public services encouraging state governments to develop a comprehensive social security policy, ensuring equal opportunities in sports, recreation and cultural activities increasing the role of civil society organizations as service providers to persons with disability and their families.

Right to Free and compulsory Education

Most recent advancement is the Right of children for free and compulsory education (2009) Which guarantees right to free and compulsory education to all children between ages sex to fourteen. PWD Act ensures that every child with disability in entitled to a free education up to the age of 18 years.

Most of the definitions are related with amount of residual hearing and its function. Earliest term used was stone deaf. ‘Stone Deaf’ indicated person with no residual hearing, Technological advancement in measurement of hearing indicated that all hearing impaired has some amount of residual hearing. ‘Deaf’ was used to indicate a person with residual hearing which is non-functional for ordinary purpose of life even with hearing which is non-functional for ordinary purpose of life even with hearing aid. ‘Hard of Hearing’ term was used for person who has residual hearing which is functioning with or without hearing aid, Rehabilitation Council of India. Act

defined 'Hearing Handicapped' as on WHO has 70dB or more hearing loss in better ear (1992). Hearing impairment and Hearing disability was used synonymously in persons with Disability Act (1995) and defined hearing disabled as one who has hearing impairment of 60dB at conversational frequencies range in better ear. Hearing disability should not be defined merely based on assessment of hearing threshold at different frequencies. We must make clear distinction between hearing impairment and hearing disability. Only when hearing impairment blocks development of speech and language or retards already learn speech and language, person should be considered as hearing disabled. Therefore, hearing disabled should be defined as hearing impairment sufficient to hinder natural development of speech and language in a child or inability to sustain already learn speech and language due to hearing impairment in adult. Thus certification should be based on hearing test results and speech and language test results.

This approach will filter vast population of hearing impaired who can be medically/surgically treated or very well fitted with amplification device and can include cases with central auditory disorders and hearing disabilities.

Psychological and Social Perspectives of Hearing Impairment

Hearing impairment may influence and individual's behaviour and induce inferiority feeling or complex or lack of self-confidence. In children, hearing loss can lead to social isolation, particularly if no one takes time to explicitly teach them social skills that other children acquire independently by virtue of having normal hearing.

The type inferiority experienced by the individual and loss of confidence may have far reaching effect on the personality of the individual. Hearing impaired children evoke conflicting reactions among their parents. Hearing impairment often causes stress within relationships with families, friends and colleagues. Parents of hearing impaired children experience difficulty in accepting their children and may unsciously tend to reject or punish them and ultimately loss of confidence eventually results in loss of self-esteem. Delay in social behaviour is one of the most debilitating outcomes of hearing impairment.

Lack of communication between the child and the parents also results in overprotection which can cause the development of negative self-esteem and feeling of shame and doubt. Instead of supporting their kids of express themselves, the parents tend to control them. As the child grows, their surroundings change from family to school and neighborhood settings. They start interacting with peers and begin to realize the differences they possess. Then they start to compare themselves with the normal people and become aware of their weaknesses, which causes the development of a sense of inferiority. In the school setting, towards achievement, expectations for the hearing impaired are less than that of their potential. This puts the hearing impaired at a major disadvantage in competition for professional jobs since they are not given opportunities. Another problem of the hearing impaired students is the inability to receive the special education programmes they might need (Hallahan & Kauffman, 1997).

The family, school and society generally show disproportionate love or rejection to the hearing impaired children on the basis of wide generalization. Hearing impaired children can become socially and emotionally competent if given opportunities as normal children to develop self awareness, independent thinking and problem solving skills over the course their development. Hearing impairment leads to problems only when the individual accepts it as a condition of inadequacy. If hearing impaired students are considered as normal individuals in all re specks except in that realm where the auditory channels place some limitations on the capability of the individual then hearing impairment is not a barrier for realizing the potentialities of the individual.

Psychological and Social Impact Hearing Impairment

Family and society are the most important agencies in the personality development of the hearing impaired children. They are expected to provide opportunities which include teaching social and emotional skills and promoting social competence through peer groups, parents and processionals. When families, schools and hearing impaired community become more connected, a sense of togetherness and recognition can develop which may bring the optimal development of hearing impaired children.

Unlike normal adolescents, hearing impaired adolescents have a harder time in finding independence because they have to depend more on others. The handicap of the hearing impaired affects their lives and significantly reduces their opportunities for social integration in various settings. This lack

of integration not only results in worsened opportunities in general, but also causes deterioration of the mental fitness and well-being of the hearing impaired. The problems of the hearing impairment in relation to the surroundings have significant consequences for the individual. Impaired hearing can influence a child's behaviour and socio emotional development. The extent to which a hearing impaired child successfully interests with family, friends and people in the community depends largely on other's attitudes and the child's ability to communicate in some mutually acceptable way (Hewitt & Forness, 1984).

Usually the hearing impaired children tend to be maladjusted because they live in two worlds, one of the disabled and the other of the normal. They are expected to come up to the level of the normal and feel internally frustrated as they cannot possibly reach the level of the normal people in their attainments. Gradually they develop negative self-concept.

To be successful member of the society and gain full access to its richness and opportunities, they have to learn and live at least to some extent in both the worlds that of normal and the hearing impaired. Thus family and community, both play important roles in promoting healthy social and emotional development with hearing impaired children.

Adjustment Problems and Potentials of Hearing Impaired Children

The hearing impaired carry the burden of many social disadvantages such as feelings of inferiority, fear of social ridicule and embarrassment,

inability to complete with normal people, lack of will and self confidence. The social, personal, familial and psychological problems vary with time, place and individual as well as with economic condition and social attitudes. Persons with hearing loss frequently express feeling of depression, withdrawal, and isolation, particularly those who experience adventitious loss of hearing (Meadows & Orlans 1985). A study of more than 1000 deaf adolescents who were considered disruptive in the classroom (Kulwin, 1985) found that the most frequently related factor was reading ability: that is, students who were poorer readers were more likely to exhibit problem behaviours in schools. Hearing impaired, display a large number of personality problems, frustrations, and difficulties in their attempts to solve their problems and encounter many situations of non-acceptance and misunderstandings. Life adjustment of the hearing impaired is complicated as they feel they are unequipped when compared to normal children.

To a great extent, psychological growths are dependent upon environmental condition, cultural taboos, social norms and family structure. Researches in the field have emphasized that parental status and attitude may be more significant factors in the development and performance of the hearing impaired children because they are more likely to spend more time in the home and are more dependent on the family for social contacts.

Handling the problems of the hearing impaired is a challenging task. The importance of a central role of families, teachers and professionals in demonstrated by a number of studies ‘that indicate parents’ attitude, social

support, expectation and problem solving skills are related to the academic and social development of the hearing impaired children. Similar to normal children, hearing impaired children with parents who are involved in the child's early formal education program show higher levels of academic success and social and emotional functioning a measured by early reading assessment and teacher and parental ratings of externalizing symptom logy. Intimate attachment on one's social group can be valuable resource for coping with stress by providing a variety of functions including emotional support, validation, information, advice, feeling of solidarity and actual financial or physical assistance.

In recent years many steps have been taken by the government and various organizations to bring the hearing impaired or main stream of society through school programmes recreational programmes, organized activities, training and rehabilitation.

school in turn, expects the adolescent to fulfill a number of 'roles' and thereby satisfy the significant others which is the faculty. In the role of student he is expected to keep abreast with the progress made in class, maintain a proper study observe certain rules and maintain proper code of conduct like regularity in attendance. In his 'academic role' he is expected to be acquainted properly with his field of study and with the development of his subject.

To the parental pressure for achievement must be added the pressure of the school itself. Every percent first classes in examinations and the weeding

out process of the doubtful is ruthlessly followed. Also the affluent class school is proud of its record of getting its students into prestigious institutions of higher learning. It wants to maintain and if possible to constantly improve its records. With enthusiastic support from parents, this pressure starts early. Peer group also exerts pressure on them. There is a positive relationship between peer group membership and educational aspirations. Specific course-bound students exert pressure on one another maintain scholastic records, consistent with admissions to such institutions. Thus achievement gets built into the fabric the peer group. The psychological impact of these three achievement socializations causes the adolescent to be anxious to succeed and this anxiety itself generates further motivation.

School being the main domain of activity of an adolescent, intensive research has been done on school, its activities and the agencies there in. Examining academic achievement, skolansky et.al., (1963) state the following as causal factors like grade placement and retardation in relation to chronological age and the basic skills lower than IQ expectation. To these they add classroom problems: namely hostile social approach, attention inadequacy distraction, poor concentration and day dreaming, hyper activity, self over-estimation, dependency and helplessness and social withdrawal. The secondary school also demands more maturity and independence than an average adolescent possesses. Thus the school has an unconscious and specific psychodynamic meaning for quite a large number of students. Considering personality traits, high achievers are found to have an

achievement oriented tendency and a better integrated personality. They exhibit better self esteem, better self concept, and inner locus of control, set themselves realistic goals and approach each difficult task as a challenge. They are less hostile, less antisocial and better adjusted than low achievers.

Impact of Hearing impairment on Academic Achievement

Hearing impaired children, due to their inability to pick up auditory social clues, experiences delayed social development that is in large part tied to delayed language acquisition and can lead to social isolation. Research conducted by hearing review in late 2007 found that there are a number of the life issues faced by hearing impaired. Researchers have found that hearing impaired children had issues in a number of areas like social interaction, language and communication, education, behavioural problem, mental health and safety. Language and communication develop within the first two years of life. Hearing impaired children often have delays in as well as poor, speech and language development hindering their ability to communicate effectively. They have poor mental acuity due to poor speech and language development. They do not have the skills to ask the questions to get help because they do not know what they do not hear.

Hearing impaired children need others to repeat themselves or may need sign language for communication. If a child is to attend a main stream school then oral and written communication are necessary. However a hearing impaired child may not have the skills to allow them to keep up with their peers. Hearing loss of any degree appeared to affect psycho educational

development adversely, leading to the conclusion that even minimal hearing loss places children at risk for language and learning problems. Hearing impaired children had difficulty in maintaining attention and is behind in educational achievements and their grades lower than their hearing peers (Furth, 1973).

Reading developments in hearing impaired children are delayed and need help in the class room to interpret the teacher's instruction. Children need to learn copying mechanisms, such as sitting in the front of the class or positioning themselves on the best hearing side or learning lip reading.

Academic achievements are affected due to delayed speech and language development, delayed reading development, difficulty in maintaining attention and not having the skills to ask questions. Many drop out early because they cannot cope with normal classroom resulting in a poor education and this means of fewer job opportunities.

Academic Achievement

Academic achievement refers to the levels of students aggregate performance in examination in school subject i.e., mark assigned by teachers are taken as the index of achievement. Academic achievement is related to the objectives of the syllabus content to be covered during a full term. Examining academic achievement of pupils various subjects, examination also helps to assess the capacity for argumentation, ability to analyse and interpret and to present a balanced viewpoint offer necessary discussion. Academic

achievement also assigned by oral tests and assignment given for practical. Among school factors educational level and experience of teachers availability of instructional materials, books and reading room facilities have influence on reading attainment which is one of the primary factor of achievement.

Schooling is the major task of an adolescent just as earning a livelihood is that of the adult. Many middle class parents think that a first rate secondary school is more important than a good college. In the present culture, achieving schools tic, success is a generally recognized adolescent task. It is recognized as important by parents, teachers and students. One misfortune in the educational experience of many adolescent is that the school does not fit them well. This can result in adolescent who are not interested, attending school, who perhaps bring to the school a wide variety of personal problems with which the school system is poorly equipped to deal and who use the school as the battle ground so settle problems from other areas of their lives.

The school in turn, expects the adolescent to fulfill a number of ‘roles’ and thereby satisfy the significant others which is the faculty. In the role of student he is expected to keep abreast with the progress made in class, maintain a proper study observe certain rules and maintain proper code of conduct like regularity in attendance. In his ‘academic role’ he is expected to be acquainted properly with his field of study and with the development of his subject.

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CHAPTER III

REVIEW OF RELATED LITERATURE

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"Self-concept of our perceptions of ourselves. They defined self-concept as a psychological entity, which includes our feelings, evaluations and attitudes, as well as descriptive categories of ourselves. Self-concept regulates social cognition, academic achievement and attitudes to schools. Self-concept is a cognitive generalisation about the self, which mostly includes self-descriptions of neutral values" Kobal and Musek (2000).

Self-concept is an individual's attitude towards his physical self and his own behaviour. The perceptual component is the image the person has regarding the appearance of his body and the impression he makes on others. The conceptual component is the person's conception of his distinctive characteristics, abilities, disabilities, his background and origins and his future. Self-concept is the dominant element in the personality pattern and it governs the individual's reaction to people and situations.

"Self-concept consists of (1) Individual's perception of self (2) Individual's perception of self in relation to others and (3) Individual's perception of the various aspects of the environment" Rogers (1951).

Physical self and body image

The terms 'body image' and 'body schemas' are used to convey the concept of the physical body each individual possesses. In the early childhood and adolescence, emphasis on the physical qualities of the individual is strongly marked and at these periods physical attributes and deficiencies can have considerable effects on the development of the person's overall self-concept King (1997).

A person's height, weight and body proportions become closely associated with his attitudes of himself and feelings of personal adequacy and acceptability. Like all other elements of self-conception, the body image is subjective, but no other element is more open to private and public evaluation.

Language and 'self' development

"The concept of 'self' receives further elaboration and refinement as pre-school children achieve mastery of language" Burns (1982). "Language symbols also form the basis of conceptions and evaluations about the self" Purkey (1970). "The self-concept is conceived in terms of language and its development is facilitated by language" Weibel (1994). "Body language or non-verbal communication also conveys information to others about the self and reflects what others think of one" King (1997).

Self Concept and Under Achievement

A negative self-concept can effect the achievement of gifted students. Many academically gifted children under achieve in school classrooms as a result of the fact that they do not know how to achieve higher or they feel they cannot achieve a task that they are expected to be able to but find it too difficult. Under achievement is a pervasive problem which results in a tremendous waste of human potential among our most able students. Negative self concept leads to under achievement and even dropout mentality. There are two areas of self-concept view, academic and non-academic Fox (1993) in Rawlinson (1996). Academic self-concept is relatively stable set of attitudes, and feelings reflecting self evaluation of ones ability to successfully performs basic school related tasks such as reading, writing, spelling and maths Boersma and Chapman (1992).

Wellington and Wellington (1965) suggest that under achievers have a low level of aspiration. Under achievement simply means unfulfilled potential. Davis and Rimm (1994) define under achievement as a discrepancy between the child's school performance and some index of his or her actual ability such as intelligence, achievement, creative score or observational data.

It is important to acknowledge that as self-concept is learnt is can be changed. Children receive many opportunities to evaluate their skills and abilities and this evaluative information contributes to the formation and modification of their self-concept.

There have been efforts internationally to include children with disabilities in the educational mainstream. Geoff Lindsay (2007) suggests that inclusive education/mainstreaming is the key policy objective for education of children and young people with disabilities. Inclusive education entails 'increasing the participation of students in, and reducing their exclusion from, the cultures, curricula and communities of local school' (Booth and Ainscow, 1998)

The Salamanca statement and Frame work for Action on Special Needs Education (1994) adopted by the world conference on special needs education paved the way for inclusive education. It upheld the aim of education for all "by suggest in some foundational changes in programmes and policies of notions. The statement solicits governments to give him highest priority to making education systems inclusive and adopt the principle of inclusive education as a matter of lawyer policy. It emphasizes that every child has a basic right to education and very child has unique characteristics, interest, abilities and learning needs. Saravanabhavan & Saravanabhavan, (2001) in their research study found that inadequate knowledge about disabilities leads to negative attitudes toward persons with disabilities (Negative self-concept) the appointment of special teachers, the provision for resources rooms, and the removal of architectural barriers in schools. The special education component was added to the teacher-training programme provided by district Institute of education and training (MHRD, 2009) Paper is 'children with disabilities' and not the unique nature of their disability. We believe that

though the nature and severity of disability could cause specific experiences and challenges, it must not overshadow the philosophy of inclusion in order to provide equal opportunities to all learners. The Act mandated free education to person with disabilities up to the age of 18 years, reservation of 3% of vacancies in the public sector for individuals with disabilities and accessibility to buildings, transportation, and other public services. The Act prohibited discrimination on the grounds of disability in every sphere (Rao, 2008) The 86th Amendment of the Indian constitution passed in 2002, mandated free and compulsory full-time education as a fundamental right of all children between 6 and 14 years of age including children with disabilities (Madhavan & Manghnani, 2005). With all these directives laid out by the Indian government, it is evident that the education of children with disabilities is an important priority.

Inclusive and Integrated Education: A major shift took place in 1992 with the adoption of the Integrated Education for Disabled children scheme. The goal of the scheme was to provide educational opportunities for children with disabilities in general schools, and to facilitate their retention in the school system. It provided facilities to students with disabilities including expenses for books, stationery, hostel accommodation and the cost of equipment. The scheme also supported of students with disabilities in regular schools, as well as promoting setting up of special schools in order to make them accessible to children living in any part of the country lies with local authorities. Alur (2003) observed that in India there is a dichotomy between

policy and practice, the government promotes the inclusionist philosophy through its schemes and extends a parallel support to the 'segregationist' policy by promoting the idea of special schools through their assistance to voluntary organization scheme.

Studies Related to Adjustment

Adjustment is a widely used concept having to do with equality of human life and must be evaluated relative to an individual. What constitutes a good adjustment is matter on which opinions differ. The relative importance of genetic Vs environment at factors in determining the adjustment level remains a controversial question.

As psychologists use, in general, adjustment means accommodation of oneself to fit in with certain demands of the environment. Thus it is a life time process which involves stimulus-response behaviour. Eysenck, et al (1972) are of the opinion that adjustment is a state in which the needs of the individual on one hand and the claims of the environment on the other are fully satisfied.

A hearing loss is assumed to have especially crucial implications for personal, social and emotional adjustment because if affects communication, because communication is so distinctly a social process. Normative studies of deaf, such as Gessell's (1956), purport to show that deaf are retarded in all the areas of development especially so in social and emotional adjustment.

A hearing impaired child encounters many problems. The child gets the knowledge of the external world through the sense organs which are the gate ways of knowledge. When one of these senses organs is impair, learning becomes difficult and is likely have major repercussions in development. As a result, he may perceive himself as an incomplete person, and may develop adjustment problems.

Adjustment is a process by which a living organism maintains its balance in the environment by fulfilling its needs that arise from time to time (Vasanthal, 1993).

Adjustment problems may occur in the normal development process of any individual who is simultaneously striving for expansion and maintenance of the self concept already developed. These problems ensure from the fact that physical handicap interpolates the goal, and the self desire to achieve such a goal (Cruickshant, 1968).

Many educationist stated that research in special education is very limited. Especially there has been research on the hearing impaired. The available previous researches on the adjustment of hearing impaired are divided in to four areas, namely, 1. Home Adjustment, 2. Social Adjustment, 3. Emotional Adjustment and 4. Health Adjustment.

Barsch (1968) studied the families with deaf children. It was found that the child raring practices of those families were found to be good as their children were found to be well adjusted. As a result, Barsch rejected the

stigmatization of parents of the handicapped as guilt laden, anxious, over protective and rejecting.

Colson (1973) made a study on the influence of positive acceptance of deafness of deaf children by their parents. He studied the hearing parents and the deaf parents, who were using oral and manual methods of communication with their children, respectively. He concluded that it was more positive acceptance of deafness and of deaf children, exhibited by the deaf parents that were responsible for the gains rather than exposure to manual communication.

Drotar, Baskiewicz, Irvin, Kennell and KKus (1975) made a study on the parental attitude toward a handicapped child. In this study, interview with these parents revealed that at first they were shocked, sadness occurred next, and they felt angry at themselves, the infant, or the doctor or other members of the hospital staff.

Meadow (1980) found that children of deaf parents appear to do quite well in a residential placement where as deaf children of hearing parents to not.

Bishop and Gregory (1984) suggested that both type of interaction as evidenced in mother and teachers style, could be useful for promoting literacy: mothers can learn from teachers how to enrich dialogues without sacrificing child’s interest and participation; and teachers might tam from mothers how to actively involve children conversations around text.

White, Barbera (1990) studied the effect of perceptions of social support and perceptions of entitlement on family functioning in deaf parented adoptive families. The result shows that social support is a significant predictor of family functioning. The study provides a number of recommendations for adoption agencies to begin to develop model accessibility for deaf prospective adoptive parents.

Esting, Carol J. (1992) concluded that deafness is a human condition and not a deficiency. The results show that the family of a deaf child plays an important role in language acquisition than the school.

Rence Heineman, Gosschalk (2003) focused on the involvement of parents in the reading development of their deaf children and gathered evidence on parental experiences of reading with their child at home. Of particular interest is the relationship between teachers and parents working as partners in establishing a literacy environment for deaf children. It is concluded that the uncertainty in professional practice about methods of developing literacy in deaf children could be one of the reasons, when confident support is not always offered to parents.

Social Adjustment

The hearing disability impairs not only hearing function but alos intellectual, behaviournal, social and emotional functions. Thus effect of a handicap penetrates all aspects of the individual growth, development and adjustment. Whether and individual is a handicap or not, he has to face one or

other problems of adjustment in home, school, society in addition to problem in the areas of emotion and sex. (Pohekar, 1970).

This finding leads to age as a second possible explanation for the discrepancy. However when Cole and Shade (1985) examined the social adjustment of deaf adolescents, they found similar patterns of well-being for deaf and hearing adolescents.

Hurt and Gonzalez (1988) found that deaf children often feel apprehensive about communication with hearing peers, and this apprehension both in tributes them and makes then feel that the interaction is less than satisfactory. This finding was echoed in a study by Maxon, et al (1991). The deaf children in this study reported themselves as less able to express their emotions verbally and less, verbally aggressive than their hearing peers, though actual language abilities were almost on level with their hearing peers.

Mayer (1990) examined the nature and intensity of positive experiences among deaf adolescents form the perspective at their own memories. The deaf adolescents reported positive experience that were similar in intensity to those reported by hearing adolescents, and these experiences revolved around inter-personal experience rather than solitary experiences.

Stewort and Whitmire (1992) reported that deaf student who are mainstreamed in public schools programmes differ in low connected they feel toward their peers. Students who spend the highest amount of time in the self confined class with other deaf students show a highest need, for closer

relationship with peers in general. Students who spend the highest amount of time in regular classes show a high need or closer relationship with deaf peers.

Weasel and Berlev (1992) suggested that the deaf child's social ability is strongly related to language ability, when language ability is weak, social ability will suffer. Another group of researches found that delayed language has no obvious effect on the social skills of young deaf children, but early language difficulty appears to impute long-tem social development and adjustment.

In a study of the social adjustment of oral deaf children integrated into first through sixth grade general education classroom, the researches found that the deaf and hard of hearing children were more likely to be rejected by peers than the hearing children, and they were quite aware of their low social status. (Cappelli etal, 1995).

Finn (1995) found that sense of self and identity could only be developed successfully through the outgoing process of social interactions with people surrounding the child, either hearing or deaf. The key to this interaction is communication. The most effective communication for hearing children is through their sense of hearing, but for deaf children through their sense of vision.

Cartledge, et al (1996) asked deaf adolescents to self evaluate their social skills, the ratings of the students in mainstreamed setting were significantly higher than the students in residential school settings.

Adjustment to hearing impairment is process where in the individual makes cognitive and behavioural changes to minimize the problems experienced secondary to hearing impairment. Clinical observations have long suggested and studies have confirmed that disability and handicap cannot be predicted from audiometric data alone. (Erdman and Demorest, 1998).

Emotional Adjustment

Rogers (1951) argues that a permissive atmosphere which permits free expression of ideas and does not resort to harsh or frequent evaluative comparisons, enables the individual to know and accept himself. Conflicts can be averted if parents and significant others accept the views and values of the child, although, they need not necessarily agree with him.

Sullivan (1953) asserts that the self develops in social interaction, and that significant others, such as parents, play a role in this process. Behaviours of significant others are perceived by the child as symbols of his her worth.

Simpson and Boyle (1975) identified three specific types of self-esteem. Global self-esteem resulting from a general evaluation. Specific self-esteem (related to a situation or role such as work) and task specific self-esteem (related to competence in a particular activity).

Franks and Marolla (1976) conceive self-esteem as having two interacting dimensions: outer self-esteem (which gives rise to feelings of self-worth), and inner self-esteem (which gives rise to feelings of power and competence). “Inner self-esteem refers to the self-esteem which is acquired one’s own and outer self-esteem is acquired by other’s appraisal of one’s success” Gecas and Schwallbe (1983).

Rosenberg (1979) defines self-esteem as a positive or negative orientation towards oneself. Self-esteem is the overall attitude that a person

maintains with regard to his own worth and importance. He conceptualizes self-esteem as a unitary personal disposition.

Flemings and Watts (1980) have reported three factors of self esteem: social confidence, school abilities and self-regard.

Capelli et al (1995) administered the self-perception profile for children to 23 mainstreamed deaf or hard of hearing children and 23 hearing children matched for gender and classroom. The deaf children perceived themselves to be less socially accepted by their classmates than the hearing children.

Ita and Friedman (1999) noted that the majority of the children across the studies reported having difficulties with peer relationship and emotional adjustment in general.

Tobey et al (2003) reported in at good psycho-social adjustment after cochlear implantation of deaf. Their good emotional adjustment and good conversational fluency are allowing to be full communication with their parents and siblings.

Leeb and Sarigini (1986) showed that school age deaf children who are mainstreamed in public schools edmostrated lower scores on measures of perceived emotional adjustment.

Neylus (1984) assessed deaf with Rorschach test, make a picture story test, Rotter incomplete sentence blank test and draw a person test. The Rorschach test findings indicated that the deaf had restricted personalities,

limited ability to integrate experiences, rigidity and confusion in thought process. The result of the picture story test revealed a difficulty on the part of the deaf in forming and maintaining a number or interpersonal relationships.

Responses to the Rotter incomplete sentence Blank indicated a substantial degree of maladjustment more pronounced in adults with better language skills. Distorted perception was noted on the draw a person test.

Samuel (1989) reported that children with congenital deafness were examined to reveal an unusual defect of the emotional and personality sphere. Certain epileptoid characteristic traits were coupled with the under development of emotional memory and productive imagination.

A study conducted by Leigh (1990) et, al and the finding were they compared the prevalence of depressive symptoms among deaf and hearing college students and examined the relationship among depressive symptoms, personality characteristic and perceived parental attitudes and behaviours in these two groups. Mild levels of depressive symptoms were more prevalent in the def than the hearing students, but more sever depression was not. Depressive symptoms were associated with socially dependent personality characteristics in the hearing sample only.

Self-esteem is a generalized evaluative attitude towards to self influence both moods and behaviour. Interestingly the belief in the impact of self esteem on performance across many situations has led to a congressional appropriation in California (1987) to establish a self-esteem commission. Its

taks is to discover ways in which self-esteem can be enhanced to benefit both individuals and society.

When asked to define self-esteem, almost very one answered in one of the three ways. 1. Self-esteem is how we feel about ourselves, 2. Self-esteem is how much we like ourselves and 3. Self-esteem is the mount of confidence we have in ourselves Podesta (2001).

"Self-Esteem is appreciating, my own worth and importance and having the character to be accountable for myself and to act responsibly towards others" Podesta (2001).

"An individual internalize the ideas and attitudes expressed by key figures in his life and this holds true for attitudes and actions expressed towards himself as well as towards external objects" Mead (1934). He develops self-attitudes consistent with those expressed by the significant others his world. From Mead's formulation, one can conclude that self-esteem is largely derived from the reflected appraisal of others. If he places high value on himself, there have been key persons in his life who have treated him with respect.

Self-esteem and academic achievement

Self-esteem has an outstanding influential relationship with academic achievement. Coppersmith (1967) has found that the grade point average of pre-adolescent children positively and significantly related to their self-esteem.

Covington (1989) reported that as the level of self-esteem increases, so do achievement, as it decreases, achievement scores also decline. Specifically, students perceived efficacy to achieve, combined with personal goal setting, has been found to have a major impact on academic achievement.

Holly (1987) acknowledged that a certain level of self-esteem is required in order for a student to achieve academic success and that self-esteem and achievement go hand in hand.

Conrath (1986) found that self-confidence will emerge with success in skill development and learning.

An adolescent's school environment can have a significant influence on self-esteem development. Junior high school has been shown to be and important transition time for an adolescent in terms of healthy self-esteem development Eccles. et al. (1984) It was found that adolescent self-esteem development may be disrupted by transition to a new school Wig field. et al. (1991). This finding could be related to the interruption of student's social networks at a time when friends and peers are important to adolescent development. Another study found that adolescents who remained in a stable school environment had a greater increase in level of self-esteem over an 18-month period than did adolescents who changed school environments Cairns. et al. (1990). Reilly and Reilly (1983) noted that non-mainstream programmes, specifically alternative school programmes, have been associated, in some instances, with increases in student self-esteem.

In the study of Dugger and Dugger (1998), it had been found that non-mainstream students had considerably low self-esteem. In short school environment and attachment to the school and its surroundings definitely influence the self esteem of students.

Self-esteem is the affective or emotional aspect of self and generally refers to how we feel about or how we value ourselves. Self- concept can also refer to the general idea we have of ourselves and self-esteem can refers to particular measures about components of self-concept.

Franken (1994) suggests that self-concept is related to self-esteem in that "people who have good self-esteem have a clearly differentiated self-concept. When people know themselves they can maximize outcomes because they know what they can and cannot do.'' It would seem, then, that one way to impact self-esteem is to obey the somewhat outworn cliché of "know thyself."

Studies Related to Education of Hearing Impaired

Jayawant and Phatak (1995) conducted an exploratory study of deaf children in integrated units of normal schools and found that the deaf children from integrated units of the normal school under study were emotionally adjusted to the school work supporting their educational integration.

Allen (1998) revealed that bilingual education challenges the traditional approaches in educating deaf children and foster young deaf and hard of hearing children's language, literacy and cultural development.

Bebkom et al. (1998) revealed that atomization language skills are an important and necessary contribution to to relation between language proficiency and rehearsal use in children who are deaf.

Bird (1998) found that orally raised deaf hearing twin pairs are uniquely different linguistic expression than typical home signers and their siblings.

Calderon (1998) indicated that deaf children whose father is present have significantly better academic and language outcomes than those without father.

Caprice, et al. (1998) suggested that learning a sign language may improve attention abilities, visual discrimination and spatial memory in hearing children than deaf.

Carol, et al. (1998) revealed that adolescents with severe and profound hearing losses showed generally low levels of performance in written language skills.

D'Avanzo and Sarah (1998) indicated that accurate perception of final consonant voicing was not impaired by changes in the temporal structure of speech that accompanied the inexperienced signer's simultaneous communication.

Dinner (1998) proposed a sign language test battery for use in the differential diagnosis of language disability in deaf children.

Hickok, et al. (1998) reported that the right hemisphere plays a role in processing sign language and the use of functional magnetic resonance imaging revealed that both right and left hemispheres showed activation in deaf signers where as in hearing signers, only the left hemisphere was activated.

Igi et ai. (1998) described a preliminary dialogue system that supports communication between people with hearing impairment and people with normal hearing. The system converts sign language to voice and voice to sign language.

Kelly (1998) tested whether the instructional strategy by using silent motion pictures can foster the comprehension of relative clause and passive voice sentence during reading in deaf and revealed that syntactic structures are chronically difficult for some deaf readers.

Koester (1998) indicated that deaf mothers depended upon visual strategies to regain their infant attention and hearing mothers depended on vocalizations.

Kuntz (1998) reported that American Sign Language may be valuable for quality communication and interaction between the adult and the child.

Lang, et al. (1998) suggested that the collaborative, dependant, participative learning style is desirable for deaf college students.

Lasasso, et al. (1998) reported that Manually Coded English System and cued speech are very effective for conveying English and developing deaf children's reading abilities.

Lederberg et al. (1996) suggested that intervention efforts should be focused on increasing the quantity of perceived linguistic input by deaf children because the deaf children were severely language delayed than hearing children.

Leutke, et al. (1998) reported the improved reading comprehension when the components of text structure are realized by students who are deaf and hard hearing.

Leybaert (1998) investigated phonological and morph-phonological abilities of profoundly deaf children early exposed to cued speech. This study concluded with some speculations about the effect of early exposure to cued speech on the development of language specific processes housed on the left hemisphere.

Lichtenstein (1998) reported that working memory processes and recording strategies influence grammatical processes, and the acquisition of English Skills of deaf college students.

Lillo (1998) found that Universal Grammar involved in the acquisition American Sign Language and English by deaf people.

Lupton (1998) investigated the perception of fluency of deaf signers in American Sign Language and found that rate of signing was not found to be a crucial criterion for fluency.

Marschark, et al. (1998) reported that either spoken language or sign language can serve as a natural mode of communication for young deaf children, leading ot normal language social and cognitive development.

Masataka (1998) reported that hearing infants showed greater attention and affective responsiveness to infant directed signing than to adult directed signing.

Mauk and Mauk (1998) found that a significant portion of the school age population children and adolescents who are deaf and hard of hearing have concomitant learning disability.

Mayer (1998) concluded that deaf singing participants were using both speech and sign based codes for processing information and the strategy used depended on task requirements.

Mckenize (1998) reported that the level of education attained by adult who are deaf was correlated with their performance on the Going Along, Taking Charge and Being cautious Scales.

Meier, et al. (1998) investigated how language modality may influence acquisition of deaf children by considering two factors 1) Fine motor control over small muscles lags behind gross motor control over large muscle groups, and 2) Development of motor control generally proceeds from proximal

articulators to distal ones and revealed that they strongly favoured proximal articulators over distal ones.

Mousley, et al. (1998) showed that instructional strategies using analytical process can enhance the problem solving performance of deaf and hard of hearing college students.

Nelson (1998) proved that American Sign Language (ASL) bilingual approaches are shown to support substantial progress by deaf children in English text skills.

Neville, et al. (1998) suggested that the early acquisition of a native language is important in the processing of ASL by the left hemisphere to mediate language, independently of the form of the language in deaf children.

Never, et al. (1998) suggested a frame work for the development of professional sign language pathologists, while differentiating between disorders related to sign language acquisition and bilingual language pedagogy for learners who are deaf.

Padden, et al. (1998) proposed that knowledge of American Sign Language (ASL) facilitates reading development in deaf children.

Pagliaro (1998) reported that problem solving skills and use of concrete materials have been incorporated into the deaf education mathematics curriculum along with traditional methods.

Patricia (1998) found that the deaf community has little accurate knowledge of the structure of American Sign Language and believed that ASL was inferior to English.

Powers, et al. (1998) reported parents of deaf children observed their children in the classroom more than parents of hearing children; Parents of hearing children volunteered in their child's classroom more than parents of deaf children.

Ramsey, et al. (1998) found that students more experienced with English and ASL were relatively more capable of integrating the two in literacy acquisition.

Ronnberg (1998) revealed that training efficacy of deaf is directly dependent on the cognitive prerequisite of the individual speech reader.

Sarvada, et al. (1998) proposed that a gesture recognition algorithm based on motion primitives and hand figure primitives extracted from acceleration sensors, position sensors and data gloves is applied to a sign language recognition system for the realization of a new human machine interface through gestures.

Scott, et al. (1998) reported that sign language discourse consists of grammatically structured arrangements of signs and meaningful gestures.

West (1998) revealed that language may not be a crucial factor in the onset of autobiographical memory in deaf.

Barnett (1999) introduced the socio-cultural experience of deafness and language proficiency and the prediction of spontaneous rehearsal in deaf children.

Leigh, et al. (1999) studied the relationship between inclusive education and personal development and reported that development of sell confidence and comfort with identity may be enhanced through opportunities for contact with deaf adults and positive relationship with both deaf and hearing peers.

Barneet and Franks (1999) investigated that pre-lingually deafened adults were less apt than members of the general population to own a telephone, whereas those who lost their hearing after age three were as likely as members of the general population to own a telephone.

Bosworth and Dobking (1999) suggested that perceptual processes required for the acquisition and comprehension of language and motion processing in the case of ASL is captured by the left, language dominant hemisphere.

Foster (1999) indicated that deaf students viewed classroom communication and engagements in a similar manner as their hearing peers.

Parvaz (1999) demonstrated that there is a genuine, historical, linguistic and strong correlation between monastic sign systems and sign languages used by the deaf.

Samar (1999) discovered reliable diagnostic markers for assessing English Language Learning disabilities in deaf individuals.

Berent, et al. (2000) revealed that a typical English-language behaviour is potential diagnostic marker for learning disability in deaf individuals.

Moeller (2000) suggested that success in language development is achievement when early identification is paired with early interventions that actively involve families.

Briscoe, et al. (2001) suggested major problems in non-word repetition and phonological impairment in children with mild to moderate sensory-neural hearing loss occurred without clinically significant deficits in wider language and literacy abilities.

Pivic, Maccomas and Laflamme (2002) identified four types of barries to inclusive education such as environmental barriers, intentional attitudinal barriers, unintentional attitudinal barriers, and limitations inherent to the physical disability.

Evans and Lunt (2002) suggested that there are considerable obstacles in the way of inclusive education and is difficult to meet the wide range of individual needs.

Porter (2002) found that children greater incidence of Otitis Media Effusion (OME) and hearing loss during the first four years of life scored lower in verbal math problems between kindergarten and second grade, even after partialling out important background factors. But there was no evidence

of a significant relationship between OME or hearing loss and children's academic skills in reading or word recognition during the early elementary school years.

The number of children who have received cochlear implants (Cls) has increased dramatically in the past two decades. In view of potential concerns about their psychosocial adjustment, our aim was to assess the effect of implants on the adolescents psychosocial functioning among a group of 57 deaf adolescents with and without CIs, using published and validated measures completed by the adolescents themselves, their parents, and teachers. Adolescents with CI tended to be more hearing acculturated, whereas those without CI tended to be more Deaf acculturated. Despite some differences in background characteristics between the two groups, there were no differences between them on the psychosocial variables assessed in this study, regardless of the reporting sources. Rather than having a direct effect on the psychosocial outcomes assessed in this study, it is through the mediating effect of acculturation and school setting that CI status exerts an influence over many of this studies outcomes. Recommendations for future research are made in light of our findings.

A adolescence is characterized by rapid physiological, psychological, and social development (e.g. Harter, 2003: Kroger, 1996: Noller, Feeney, & Peterson, 2001).Deaf adolescents undergoing these changes also typically confront the challenges of being deaf in a sound-dominated environment not always attuned to their auditory and visual needs, particularly in the school

setting. Some authors believe that the academic and psychosocial adjustment of a adolescents with cochlear implants (CIs) could be adversely effected because of efforts to “normalize” their status and deny their visual needs (e.g. Ladd 2003: Lane, Hoffmeister & Bahan, 1996; Preisler, 2007). Other authors argue that the CI can serve as a vehicle for positive academic achievement and psychosocial adjustment because of greater access to spoken language (Fagan, Piosni, Horn & Dillon, 2007: Geers, 2006; Spencer & Marschark, 2003; Wheeler, Archbold, Gregory, & Skipp, 2007).

Adolescence is characterized by rapid physiological, psychological and social development (e.g.Harter, 2003; Kroger, 1996; Noller, Feeney & Peterson, 2001). Deaf adolescents undergoing these changes also typically confront the challenges of beings deaf in a sound-dominated environment not always attuned to their auditory and visual needs, particularly in the school setting. Some authors believe that the academic and psychosocial adjustment of adolescents with cochlear implants (Cls) could be adversely affected because of efforts “normalize” their status and deny their visual needs (eg.Ladd, 2003: Lane Hoffmeister, & Bahan, 1996: Preisler, 2007). Other authors argue that the CI can serve as a vehicle for positive academic achievement and psychosocial adjustment because of greater access to spoken language (Fagan, Pioni, Horn & Skipp, 2007).

The importance of exploring academic and psychosocial adjustment in adolescents with CI is underscored by the dramatic increase in the number of children who have received CI over the past 15 years. According to the three

major CI companies, more than 50,000 children worldwide have received a CI to date I. Currently approximately 12.6% of students in data reported to the Annual Survey of Deaf and Hard of Hearing Children and Youth for the 2006-2007 academic year are reported to have CI (Gallaudet Research Institute, 2006). This is likely an underestimation, considering these data represent approximately 60% of all schools and programs enrolling deaf and hard of hearing students. In addition the most recent information available from the Annual Survey shows that among both cochlear-implanted and no implanted children in the United States. 26.5% are in “special schools or centers” (primarily residential or day schools for deaf children).

Although increasing numbers of deaf children have the potential to hear and use spoken communication after being implanted they typically require intensive communication therapy in order to maximize their expressive and receptive spoken communication (e.g. Christiansen & Leigh, 2005: Nicholas & Geers, 2006). There is a small but growing number of studies investigating the linguistic and academic achievement of these children which demonstrate that students with CI Geers, 2006: Marschark, Rhoten & Fabich, 2007). Whether this superior academic achievement persists over time is not yet established.

A growing body of literature also demonstrates the effects of CIs on auditory perception, speech and oral language development (e.g. Geers 2004: Waltzman, 2006). These benefits are moderated by several variables, including age of implantation, duration of implant use, and mode of

communication. If implantation results in improved auditory perception and more advanced speech and oral language skills in deaf children and adolescents, this may result in better psychosocial adjustment, especially in the areas of academic achievement and per relationships.

Studies Related to Psychosocial Adjustment of Hearing Impaired

Linkowski and Dunn (1974) and Heinemann and Shontz (1982) documented a positive relationship between self-esteem and adjustment to disability.

Knutson and Charissa (1990) investigated communication strategies, accommodations to deafness, and perceptions of the communication environment by profoundly deaf subjects were correlated with indices of psychosocial adjustment to determine whether accommodations to deafness could play a role in the presence of psychological difficulties among deaf persons. Result revealed that inadequate communication strategies and poor accommodations to deafness were associated with depression, social introversion, loneliness, and social anxiety. Limited communication performance at home and with friends was related to both social introversion and the experience of loneliness; perceived attitudes and behaviors of others correlated with depression as well as loneliness.

Koester (1990) revealed that denial of a hearing loss and designation of a handicap may lead to problems in under or over involvement of parents and

peers that have implications for the emotional and social functioning of the deaf child.

Turner and Beiser (1990) found in the United States that the risk for clinically significant emotional distress was two to four times higher among persons with chronic diseases or disabilities than among persons with on disability.

Belgrave (1991) reported that perception of severity of disability, self-esteem and social support were statistically significant predictors of adjustment to disability, Higher levels of self-esteem and social support were correlated with a favourable adjustment to disability.

Sahoo (1991) found that the normal children showed much better behavioural functioning as compared to the blind, the deaf and the dumb.

Luey, Glass, and Elliot (1995) found that those who lost their hearing at three years of age or more may experience a more reduced quality of life than those who have had hearing loss since the early months of life. They suggest that the former group may feel a sorrow that follows the loss of hearing the spoken language.

Jyothi and Reddy (1996) compared the adjustment and self-concept of hearing impaired and normal children and found that hearing impaired and normal children differed significantly in three areas, viz. health, emotionality and masculinity-femininity, where hearing impaired children exhibited a

better quality of adjustment than the normal children. Hearing impaired children had low self-concept compared to normal children.

Pathak (1996) studied the mental ability of deaf children and their educational problems and reported that normal scored higher on mental ability test than the deaf subjects.

Jarvelin, et al. (1997) discovered that there is a need for training within the correctional system to provide service to deaf and hard to hearing individual because they experience communication and emotional difficulties from the arresting process to their release to the parol of probation agent.

Annie, et al. (1998) revealed that mistrust, communication difficulty, profound concern with communication in therapy and widespread ignorance about how to obtain services, are the barriers to mental health service to deaf.

Bess, et al. (1998) revealed that there is significant association between minimal sensory-neural hearing loss and school behaviour and performance. The children with minimal sensory-neural hearing loss experienced more difficulty than normally hearing children on a series of educational and functional test measures.

Burk and Karon (1998) suggested that intervention and prevention efforts for children with hearing impairment should focus on increasing their functional independence, problem-focused coping abilities and psychosocial resources, and attention should be devoted to multiple predictors in order to have a clinically significant impact on the children's functioning.

Hindley and Kroll (1998) analyzed that attention deficit and hyperactivity disorders are higher in children with acquired deafness or additional impairments than in children with inherited deafness and share the features of attention deficit hyperactivity disorder seen in hearing children.

Hogon (1998) indicated that deafened people fall within normal limits on the depression scale and the proportion of respondents falling within the depressed range was lower than that in the broader community.

Linda, et al. (1998) indicated that the timing of developmental changes in visual selective attention was similar to hearing children, deaf children with cochlear implants and deaf children without implants.

Marschark (1998) suggested that Universal Screening be implemented for all infants within the first there months of life for the early identification of hearing loss.

Middleton, et al. (1998) assessed the attitude of deaf adult towards, testing in pregnancy for hereditary deafness and reported that deaf adults have a predominantly negative attitude towards genetics and its impact.

Nybo, et al. (1998) reported that grandparents were willing to provide diverse support services to their children and grandchildren to the extent permitted by their resources and nature of their existing relationship with the deaf child’s parent.

Prout (1998) revealed that deafness was a key aspect of self understanding during the adolescent years.

Koester, et al. (1998) reported that there are no differences in the amount of positive or negative vocalizations emitted by deaf infants and hearing infants and their deaf or hearing mothers during normal face-to-face interactions when the infants were nine months old.

Barbara (1999) revealed that deaf adopted parents perceive much stronger social support from natural social networks within the deaf community than from formal service provides, primarily because of inaccessible communication and social workers lack of awareness of the needs of deaf clients.

Briffa (199) found that deaf people experiencing psychosis may have auditory hallucinations, such as hearing voices. This is noted to be possible even if they have been deaf from birth. Research conducted in a mental health setting revealed that 59 percent of deaf patients were able to give accounts of verbal auditory hallucinations.

Leigh, et al. (1999) assessed the relationship between parent communication variables and the parent bonding factors of care and over protection, indicated that paternal care and over protection were negatively correlated, as were maternal care and over protection.

Mathur and Arora (1999) revealed that self-esteem, independence, achievement, and family environment are highly related to the psychological development of children.

Ronnberg, et al. (1999) revealed that speech reading expertise is associated with cognitive functions such as high working memory capacity and phonological skills.

Taylor (200) reported that alienation is a useful construct for understanding the mechanisms associated with undesirable learner outcomes and in developing strategies to circumvent student academic failure.

Toth (2000) concluded that issues of frustrations and shame that erupt when the child cannot receive to produce the language of the parent and the majority population but must communicate through a gesture or visual language, such as sign language, were perceived as obstacles to effective communication between parent and child.

Huffman (2001) stated that the causes of student alienation are multifaceted including curricular, institutional, and Scio-cultural factors. Alienated students feel incongruent with curricula and devoid of opportunities to establish meaningful connections and such disconnections results in apathy in the learning process.

Biji (2002) concluded that the mental health status was poorer among hard of hearing and deaf individuals than in the general population.

Critchfied (2002) revealed that deaf children and adolescents exhibit levels of behaviournal and attention-deficit hyperactivity disorders than the general population.

Eide and Roysamb (2002) analyzed the interrelation between psychological problems, social activity, and social network on the one hand and self-reported level of disability or activity limitations on the other. They concluded that an individual's activity limitations are predictive of the level of psychosocial problems they experience.

Graff and Biji (2002) concluded that mental health status differs between the hearing impaired and the general population. For both categories, the risk of mental distress was higher in those with more communication problems, lower levels of self-esteem, and poorer acceptance of the hearing loss.

Redden (2002) reported that alienation is a useful construct for understanding the mechanisms associated with undesirable learner outcomes and in developing strategies to circumvent student academic failure.

Tambs (2002) concluded that hearing loss is associated with substantially reduced mental health ratings among some young and middle aged persons, but usually does not affect mental health among older persons.

Henrick, et al. (2003) concluded that the handicap of the hearing impaired affects their lives and significantly reduces their opportunities for social integration.

Kramer, et el. (2003) revealed that hearing impaired elderly report significantly more depressive symptoms, lower self-efficacy and mastery,

more feelings of loneliness, and a smaller network than normally hearing peers.

Polat (2003) revealed that, parental-school and teacher related factors play relatively important roles in the psycho-social adjustment of deaf students, as do student-related factors.

Thorpe (2003) reported that alienation is a useful construct for understanding the mechanisms associated with undesirable learner outcomes and in developing strategies to circumvent student academic failure.

Wake and Poulakis, (2004), reported that children with minimal sensor neural hearing loss exhibited significantly greater dysfunction than children with normal hearing on self-reported variables such as behaviour, energy, stress, social support and self esteem.

Michael, et al. (2005) described quantitative and qualitative data regarding the use of Vermont Interdependent Team Approach and its impact on the students with deaf-blindness.

Black and Glickman (2006) conducted a study in a specially deaf inpatient psychiatric unit and found that 75 percent of deaf individuals were non-fluent in American Sign Language. This finding may result from the fact that 90 percent of deaf children are born to hearing parents and these children may not have received any usable language input during critical language acquisition periods of brain development.

The study of Kava and Leob (2006) revealed that the deaf students show more symptoms of mental health problems than the hearing students. The results point to the need for focusing more attention on the mental health of deaf children.

Kushalnagar (2006) assessed whether adaptive behaviour in deaf children was associated with nonverbal intelligence and parental depression and found and regardless of age or neurological status, the deaf child adaptive behaviour consistently showed a strong relationship with intelligence. Moderate correlation between parental depression and the child's adaptive behavior was observed only in the younger group. The relationship between parental depression and communication subscale was moderated by intelligence for deaf children without neurological complications.

Tobin, et al. (2006) found no differences between children with slight/ mild sensor neural hearing loss compared with children with normal hearing, in terms of language, reading, behavior, and health related 'quality of life variable.

Dammeyer (2007) evaluated the prevalence of psychosocial difficulties in a Danish population in relation to different explanatory variables and showed that the prevalence of psychosocial difficulties was 37 times greater compared with group of hearing children. If sign language and/oral language abilities are good, the children do not have a substantially higher level of psychosocial difficulties than do hearing children. This study documents the

importance of communication-no matter the modality or degree of hearing loss- for the psychosocial well-being of hearing-impaired children.

Dhingra (2007) indicated that impairment in hearing had little or no influence on developmental milestones during the early years of life.

Hintermair (2007) examined the interrelations between acculturations, psychosocial resources, and self-esteem as well as the satisfaction with life of deaf and hard-of-hearing people and found that bicultural acculturation seems to be secure option for psychosocial wellbeing. The availability of psychological resources (optimism, self-efficacy) seems to e of special importance for the quality of self-esteem and satisfaction with life.

Lukomski (2007) examined differences between deaf and hearing students perceptions of their social emotional adjustment as they transition to college. The results showed that deaf students rated themselves as experiencing significantly higher home life difficulties than bearing students, and deaf students rated themselves as having fewer coping difficulties than hearing students. Results also revealed that deaf females rated themselves significantly higher on worry than deaf males, hearing females, and hearing males. These findings suggest that there are differences between deaf and hearing students who are transitioning to college with regards to their social-emotional adjustment.

Brunnberg and Bostrom (2008) concluded that combination of a hearing loss and some other disability strongly increases the risk for mental symptoms, school problems and substance uses.

Hintermair (2008) examined the correlation between parental resources, socio-demographic variables, parental stress experience, and child Scio emotional problems in the children, thus emphasizing the importance of a resource-oriented consulting and support strategy in early intervention, because parental access to personal and social resources is associated with significantly lower stress experience.

Satapathy (2008) investigated psychosocial and demographic correlates of academic performance of hearing-impaired adolescents and showed that stress had a significant inverse correlation with academic performance of non-impaired students, whereas the relationship was low positive in case of hearing-impaired students. While social-emotional adjustment enhanced academic performance of both groups, self-esteem did not relate significantly in either case. However, many socio-demographic variables like number of siblings, socio-economic status, and age were found to have significant correlation with academic performance of hearing impaired students. The differences were analyzed in relation to the impairment specific academic problems, educational system and the vital role played by the family.

Polat (2009) investigated student-related background and experiential characteristics, parent-related variables, school-related factors, and teacher-

related variables on deaf student's psychosocial adjustment in Turkey and revealed that degree of hearing loss, additional handicap, and age at onset of deafness were negatively related to psychosocial adjustment of deaf students. However, there was a positive relationship between psychosocial variables and some of the independent variables, such as use of hearing aids, speech intelligibility, academic achievement, parental hearing status, and communication method used at school. The findings of the study do not support "pathological'' view of deafness, suggesting that it was not deafness per se but that some environmental factors were also influential on the psychosocial adjustment of deaf students.

Leigh and Caw (2009) assessed the effect of cochlear implants on the adolescents' psychosocial functioning among a group of 57 deaf adolescents with and without Cls, using published and validated measures completed by the adolescents themselves, their parents, and teachers. Despite some differences in background characteristics between the two groups, there were no differences between them on the psychosocial variables assessed in this study.

To be successful member of the society and gain full access to its richness and opportunities, they have to learn and live at least to some extent in both the worlds that of normal and the hearing impaired. Thus family and community, both play important roles in promoting healthy social and emotional development with hearing impaired children.

Self Concept and Academic Achievement

Symonds (1960) indicated many ways, in which academic achievement influenced the self concept. He reported that marks secured in the examination make a tremendous difference to a student. It influences his estimate of himself, serves as a sign to him that he is liked or disliked and determine whether he has to adjust with classmates or instead become a caste out and be forced to selection of group of strange students in another class.

Loni (2004) in his study 'self concept and academic achievement of grade nine pupils' revealed that there is no significant correlation between self-concept and academic achievement, and also no significant relationship between intelligence and academic achievement.

Bhatnagar et al. (1966) opined that considerable initial time and effort should be spent in trying to increase the self-concept of children in educational system.

The study of Goswami (1975) reported that there existed positive relationship between self-concept and acheivement, and adolescents with good self-concept and achievement, and adolescents with good self-concepts were likely to achieve more that those with poor self-concept.

Saraswat (1982) examined the relationship of self-concept measures with adjustment, values, academic achievement and socio-economic status of boys and girls. It was found that the boy's self-concept was positevely and significantly related to home health, and socio-economic status.

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Aggarwal (1985) revealed that the self-concept was not related with moral development and moral under development. Most of the researchers highlight that the relationship between self-concept and academic achievement is partically reciprocal.

Putta (1990) identified that self-concept of college going girls was higher than that of uneducated girls of both Hindu and Muslim group.

Hazeena (1998) conducted a study on orphans and found that there exist a positive correlation between self-concept and academic achievement.

Pandit (1995) studied that correlation of achievement indicators on the matching area of academic self-concept should be substantial and positive, where as the correlation of achievement indicators on non-matching areas of academic self-concept should be less substantial.

Marsh (1992) showed that the relationship of self-concept to school achievement is very specific. General academic achievement measures are related moderately to academic success. Spcific measures of subject-related self-concepts are highly related to success in that content area.

Rickards et al. (2001) in their study 'cognition, academic progress, behaviour and self concept at 14 years of very low birth weight children'

revealed that very low birth weight children had lower intelligence, achievement, and low self-concept.

Hama Chek (1995) asserts that self-concept and school achievement are related.

Cornell's (1995) study shows that the minority students in gifted programmes scored significantly higher on achievement measures than did minority students in regular classrooms but lower than white gifted programme students. There were no minority group differences in academic or social self-concepts.

Self-Concept and Adjustment

Adjustment ensures the balanced mental set and integrated personality it has proper relationship with the image of self.

Pandit (1985) studied that the need inter differences of the adolescents were significant in psychological needs. There were significant differences between the ideal self and perceived self, and between the ideal self and social self of adolescents.

Gupta (1984) revealed that there was some relationship between self-concepts and adjustment. Bharathy (1984) identified no age differences in self-concept with respect to adjustment.

Kakkar's (1967) study on self-acceptance and adjustment showed that male students generally appear to be well adjusted and consequently capable to less self-acceptance than female students.

Self-Concept and Anxiety

Anxiety is one of the affecting factors of personality. It is always negative one. Gupta (1984) revealed the negative correlation between self-concept and anxiety. In his study Psychiatric patients shows significantly greater discrepancy than normal ones.

Deo and Sharma (1971) studied the relationship between self-concepts and anxiety. They found that self-concept and anxiety are negatively correlated; an increase in self-concept being accompanied by a decrease in anxiety. It was found that as the ideal self-discrepancy increases, anxiety also increases.

Vankataraman (1965) conducted a study on the influence of anxiety on the congruence between the perceived self and the ideal self, Subjects covered normal, neurotics and psychotic patients. The results indicated that normal subjects have obtained low scores on anxiety and high have high correlation between the self and ideal self, suggesting the congruence between the perceived self and the ideal self. The study showed that the ideal self is more associated with anxiety and pathological states.

Academic Achievement is conceptualized as that encompasses the student's ability and performance it is multidimensioned, it is intricately

related to human growth and cognitive, emotional, social and physical development, it reflect the while child, it is not related to single instance, but occurs across time and levels, through a students life in public school and on to post secondary years and working life (steinberger 1993).

Richardson etal (1999) compared students in higher education with and without hearing loss in terms of their approaches to studying students include 382 students with hearing loss taking courses by distance learning with the open university and comparison group at 190 students taking the same course with no deglared form of disablement. Students with post vocational hearing loss obtained higher scores than the comparison group of deep approach, and these with post vocational deafness also obtained higher scores on the use of evidence and logic. Students with pre-vocational deafness obtained higher scors on reproducing orientation them the comparison group, and in particular on improvidence. The authors conclude that the impact of hearing loss on congnitive aspects of studying appers to be relatively slight.

Calderson and Low (1998) investigated the effect of paternal presence or absence on the socio-emotional language and academic outcomes of 22 deaf and hard of hearing children. Results indicate that children whose father are present have significantly better academic and language outcomes than those without a father present.

Paul etal (1998) examined the correlations between academic achievement and 2 tests of non-verbal intelligence. The wechstler Adult Intelligence scale-revised performance scale and the Hiskey Nebraska Test of

Learning Aptitude 35 deaf students (aged 16-18) completed the WAIS-R performance scale and the HNTLA in seperate testing sessions. Both tests correlated significantly positively with measures of reading comprehension and mathmatical computation. Results support the use of either the HNTLA or the WAIS-R performance scale as a predictor of academic problems in high school aged-deaf students.

Sikora and Plapinger (1997) compared the parent and teacher perceptions at the academic performance and cognitive deficits of 19 students (aged 7-13) with mild to moderate h hearing losses. Parents and education were equally skilled in prediction academic performance but both groups had greater difficulty predicting specific cognitive deficit. It appears that while parents and teacher input provides accurate information evalution may be necessary to define processing deficits under lying poor academic performance.

Cosh (1995) studied to determine the factors which best predict students with hearing impairments academic success and to determine how students with hearing impairments perform on traditional measures of psycho-educational assessment when compared to their hearing peers. A stepwise multiple regression analysis indicated that performance scale IQ scores and age are significant predictors of the academic achievement of student with hearing impairments. It was determined that students who are hearing impaired perform equally to their hearing peers on a mesure of non verbal

intelligence, while their performance on a measure of visual motor integration was significantly below that of their hearing peers.

Robert etal (1994) developed a questionnaire to assess perceptions of academic achievement, use of support services, and friendship patterns among the 100 graduates of an Austration Integrated auditery/oral preschool. Students attended integrated (ness). Unit (n=37) or segregated (n=8) settings. 83% at students percieved their overall academic progress to be average or above average compared with class peers.

Geers and mooq (1989) studied 100 profoundly hearing impaired 16 and 17 years old enrolled in oral and mainstream high school programs across the US and in Canada participated in extensive testing. Each students current abilities in reading, writing, spoken and signed language. Speech perception and production and cognition were evaluated. Background and demoz raphic information's were collected from student's parents result indicate that hearing impaired students have a much higher potential for literacy and that the primary predictions of achievement is English language competence.

Srinivasn (1988) investigated the divergent thinking ability and scholastic achievement of 20 deaf and mute students and 20 normal controls. Students were given cicle drawn on a piece of paper and were asked to add a minimum of lines to make a meaningful abject. Findings show that deaf and mute and control groups diffored significantly from one another on academic ability and on the consequence test of divergent thinking.

Davis etal (1986) administrated an axtreme psycho-educational evaluation to no hearing impaired children (5-18 years old) to ivestigate the effects of degree of hearing impairment age and other factors on intellectual, social, academic and language behaviour. Although students varied greatly in performance results show that hearing loss of any degree affected pshycho-educational development adversely; leading to the conclusion that even minimal hearing loss places children at risk for language hearing problems. However, the assumption that greater hearing loss in associated with more severe language and educational dificits is not supported by the present date.

Kretschmer and Quigley (1982) in their study, used reading comprehension as a development variable to determine which factors related to academic achievement were important in making decisions about educational placement for hearing impaired students. He found the other factors, which are important to academic source are social maturity, positive attitude towards hearing, highly developed oral skills and teacher's competency. Welberg supported that these identified factors are free for hearing students also.

Messerly and Aram (1980) compaired the academic achievement in marched groups of high school level hearing impaired students of hearing impaired parents. Hearing impaired students of hearing impaired parents. Hearing impaired students of hearing parents were found to perform above the hearing impaired students of hearing impaired parents on the standard achievement test of vocabulary. Reaching comprehension and mathematical

application approached significant in favour of the hearing impaired students of hearing parents.

Roberson etal (2000) examined the instructional the instructional effectiveness of hearing and deaf teachers with deaf and hard of hearing students and students performances concerning teachers hearing status. Sixty one deaf and twentynine hard to hearing student (aged 13-21 years) completed quesionaires concerning demographic characteristics, hearing status and whether students ever had a deaf teacher. Scores on the stanford Achievement test, measured academic achievement. Research show that deaf students generally preferred deaf teachers more than did hard of hearing students. No significant difference were found in the achievement levels of students based on difference in teachin hearing status.

Sebenius (2000) investigated the relationship between auditory perception skills and levels of academic achievement in a sample of elementary school students with history of early ear infection as reported by parents. The subjects were administered individual tests of cognition, academic achievement and auditory perceptional skill deficits and lowered academic achievement scores.

Remya (2006) conducted on Academic achievement and adjustment level of students with hearing impairment at secondary level found that academic achievement is not a significant factor influencing the adjustment level of hearing impaired students.

Oss (1992) presented an excellent review of the relationship between academic achievement and degree of hearing loss. The bulk of evidence cited by Ross supports a strong relationship between severity of hearing loss and academic performance including the other variables. Personality adjustment may impact positively or negatively impaired child's academic success. Like wise Bess and Mc cowbell (1985) review variables in addition to degree of loss that may influence academic achievement, including age at intervention and communication model.

Davis etal (1991) suggested that children with mild and moderate hearing loss do not exhibit significant academic problems. Children with losses greater than 50 decibel however were found to exhibit deficits in educational performance that increased in severity overtime.

Jermone (1996) found that degree of hearing loss is generally considered a major determinant in the successfulness of integration because of its impact on communication skills other factors are also critical. Farrugia and Austin (1980) in a comparison of three different educational setting found that the hearing impaired public school students have the poorest psychosocial development. Social isolation and rejection in mainstreamed public school setting were speculated to be the cause.

Academic achievement and self-concept

A study on academic achievement and self concept of made and female hearing-impaired students in Niseria conducted by Akin Pelu (1998) with a

sample of 566 (364 males and 204 females) hearing impaired secondary school students identical in various parts of the country and the findings revealed that male hearing-impaired students did not achieve better than their female counter parts. It was also found that the self-concept of male hearing impaired students was not significantly different from that of female hearing impaired students.

Barbara S Coken (1990) conducted study on comparison of self concept scores in secondary aged hearing impaired students enrolled in mainstreamed and self contained classes with 79 hearing impaired students and found that there were no significant differences in the mean total and subscale self-concept scores between hearing impaired students in mainstreamed and self contained classes. There were no significant difference found between grade levels (Junior and high school), gender and self concept with the exception that high school level students had significantly higher mean scores. There was also no significant correlation found between self-concept scores performance IQ and academic achievement scores, except for one significant positive correlation between performance IQ. and the satisfaction subscale scores.

Zuglion etal conducted study on hearing impaired adolescents self-concept and their relations to hearing aids of 30 adolescents aged 12-16 years. For adolescents who have hearing impairment, the identity formation process has its own subtlets. Besides the conflicts which are a past of being a teenager, he/she has to from his/her identity as someone who has factors

influencing the use of the resource. The results showed that most of the subjects involved in the study actually use their hearing aids and have positive self concept. It was concluded that the constant use of this resource is associated with the good conditions of the self-concept and to the psycho-social support of the multi interdisciplinary team.

Akinpelu (1998) A study of the Academic achievement and self concept of male and female hearing impaired students in Nigeria, Nigerian Journal of Guidance and counsellingm Barbaras Cohen (1991) A comparison of self concept scores in secondary aged hearing self-contained classes. ETD collection for pace university paper AA 19239166 Zugliai, Anapaula, Motti (Telma Flores Genaro and castanho Rosteler Moreho (2007) Hearing impaired adolescents self concept and their relations to hearing aids. Revista Brasileria dc Educacao Especial, Vol.13.

Regitha (2004) conducted study on adjustment level of hearing impaired adolescent students found that maladjustment has for reaching consequences in home adjustment level, health adjustment level, social adjustment level, emotional adjustment level and educational adjustment level. Poor family relations and unhealthy family situations lead to unsatisfactory home adjustment. Since home adjustment has correlation with health, social emotional adjustment better opportunities provided in the home act as boating agent in the child overall adjustment.

Cunningham (1999) examined the specific factors believed to be related to academic achievement in deaf children. The research sought to

determine whether there was a significant difference in achievement between those whose parents use some type of sign language and to determine if there was a significant difference in academic achievement with those deaf students who used amplification devices early in life. The study also sought to determine whether providing early intervention programme which emphasizes and enables parents to develop a language rich environment had a significant impact on the academic achievement of deaf children and whether the age at which initial services are received influence deaf students subsequent academic achievement in the areas of reading and mathematics was significantly related to parental mode of communication and the mode of communication used in schools. Academic achievement in the area of reaching was also significantly related to intellectual ability and degree of hearing loss.

Self-concept

Sandhya (2003) conducted a study on self concept and achievement motivation of hearing impaired students in high school, formed that the self-concept of hearing impaired students were above the average and the dimensions of self-concept also formed above average and there exist relationship between self-concept and achievement motivation of hearing impaired students and also there was relationship between dimensions of self-concept and achievement motivation.

Relatively a few studies have examined self concept in hearing-impaired children and adolescents. Early studies such as that of Crcig (1965)

suggested that deaf children display 'poorer' self concept than their hearing peers, even when age, gender, intelligence degree of hearing loss and parental occupation are taken into account.

Cates (1991) examined the self-concept of 68 pre-lingual profoundly deaf 8-19 years olds attending a residential school for the Deaf, compared with that of an equal number of hearing children in the same age range cates found no differences in overall self-concept between the groups.

The self concept of young deaf children has received almost no attention, most probably because of the difficulties assessing self-concept when language skills are very poorly developed. One of the factors frequently hypothesized to be influential in determining the self-concept of deaf children is their school setting in particular the extent to which they are educated with other deaf children. Where they are isolated from deaf peers and therefore it is assumed that they will compare themselves with their hearing peers, it is usually predicted that self-concept will suffer. Van Gurp (2001) studied about self concept in secondary school age deaf children using a self-concept measure that had been modified linguistically and validated for deaf students. The questionnaire had scales assessing appearance parental relations, peer relations reading, maths, general school and general self. Results suggested that children in 'units' or 'resource' provision (ie educated part of the time just with other) deaf children but in the mainstream classroom for the remainder of lessons) have better overall self-concept scores and scores relating to perception of maths ability.

The formation of a healthy positive self-image may pose significant challenges for a child when family, peers, community or societal evaluations of the individual are perceived by the individual as being negative particularly if inacurate. If such negative evaluations are experienced on a regular basis and especially. If the person making the evaluation is valued or influential this is likely to result in anxiety, depressions or poor self-esteem. On the basis it is easy to conceive how deaf children growing up in an environment where communication is restricted, and where they do not have access to positive so Deaf role models may suffer poor self-esteem or other psychological difficulties.

The concept of self-esteem or self-worth is closely related to that of self-concept. self esteem can be defined as the subjective appraisal of oneself as intrinsically positive or negative to some degree. Self esteem concerns the attributes we believe we hold and the value we place on them. It is constructed as either state or trait, that is as a temporary psychological positions or enduring personality characteristic. It derives from perceptions of competence, mastery and acceptance. Deaf children are at increased risk of having poor self-esteem as a result of their experiences of isolation, difficulty communicating, learning to read and write and interacting with hearing peers.

Dessdle (1994) postulates that poor self-esteem is more likely to be present if the child's parents are not also deaf. she also points out that deafness does not directly cause poor self-esteem, but rather the degree to which the child is able to communicate contributes to the development of self-work. If

parents view deafness as a defect or disability and this is conveyed to the child overtime. might expect negative consequences for the child's development of self esteem.

Rams Polt and Parento (2006) assessed conversational skills and self-concept in the content of different school settings with the sample 56 moderately to profoundly deaf 6-18 years olds who all had hearing parents. The children attended integrated school using oral communication methods. It was reported that a significant relationship between a positive self-concept and conversational competence, suggesting that conversational skills could be one area usefully targeted for explicit teaching among deaf children.

A small number studies have been examined the self-esteem of deaf children or adults-Bat-Chave (1993) carried out a meta-analysis of the studies available at that time, suggested the communication mode used in the classroom was not related to self-esteem bat that use of sign language rather them oral communication by parents was associated with higher self-esteem. The studies, that examined parental hearing status as a variable indicated a significant positive effect on self-esteem of having deaf parents.

Crowe (2003) examined self esteem of college students found that amongst deaf college students, those who had two deaf parents had higher self-esteem scores than those who had two hearing parents or one deaf and one hearing parents, regardless of use of sign by the parents. The explanation for this finding is linked to the degree to which parents belong to the Deaf community and are able to convey the positive attitudes, towards deafness,

and the cultural perspective of deafness, to their children. Also the high status of 'native' members of the deaf culture is likely to have a positive influence on the self-esteem of their children.

Woolfe (2001) examined the role of deaf verses hearing siblings in determining self-esteem in deaf children aged 10-14 years, but found no significant effect of sibling hearing status. However, there was a significant main effect of parental hearing status such that those children with deaf parents had higher self-esteem them those with hearings parents. He concluded that the hearing status of the parents is the more powerful influence on self-esteem, possibly because their more powerful status and the significant role they play in making choices for their deaf child and the need for effective communication with the child regarding all aspects of the child's life.

Jambor and Elliot (2005) studied the contribution of communication in the home to deaf young adult self-esteem but did not find a significant relationship between them. They argue that membership of a minority group such as the Deaf community despite often being of lower status in society, may protect self-esteem as it enables the individual to disregard the opinion of 'outsiders' to the group and place greater value on the opinions and appraisals of members of the group.

CHAPTER IV

RESEARCH METHODOLOGY

- Method adopted
- Population and the sample
- Description of tools
- Procedure for data collection
- Processing of data
- Statistical techniques used for analysis

CHAPTER IV
METHODOLOGY

INTRODUCTION

Methodology used in a research occupies a significant place as the success of any investigation depends upon the suitability of the tools and techniques used for data collection. The validity and reliability of the findings also depend upon the methods adopted. A suitable method helps the researcher to explore the diverse standards of the study and adequately measure them so as to satisfy the requirements. Thus methodology is the means to an end. The vehicle of research cannot perform its function without it. Since it is methodology which lays out the way in which formed research is to be carried out and outline the detailed description of research variables and procedures (Barr, 1960).

Methods in research are sequential steps adopted in studying a problem with certain objectives. They describe the various steps of the plan of the approach to be adopted in solving a research problem such as the manner in which the problems are formulated, the definitions of terms, the choice of subject for investigation, the validation of data gathering tools, the collection, analysis and interpretation of data and generalizations. The decision about the method to be employed depends upon the nature of the problem selected and kind of data necessary for its selection. Here a suitable method helps the researcher to explore the diverse stands of the study and adequately measure

them so as to satisfy the requirements and thus it is the means to an end. This chapter provides brief descriptions of the following aspects.

1. Method adopted for the study
2. Population and sample selected for the study
3. Tools and techniques used for the collection of data
4. Procedure for data collection and
5. Treatment of data

METHOD ADOPTED

In order to fulfill the objectives of the study, the investigator selected normative survey method. A normative method is that method of investigation which attempts to describe and interpret what exists at present in the form of conditions, practices, processes, effects, attitudes and beliefs. It is concerned with some phenomena that are typical or normal.

In the present study to ascertain the self-concept, psychosocial adjustment and its relationship with academic achievement of students with hearing impairment at secondary schools. "A survey is an attempt to collect data from members of a population, in order to determine the current status of that population with respect to one or more variable (Gay, 1996, P. 251). It is concerned with the generalized statistics that results when data are abstracted from a number of individual cases. It is essentially cross-sectional.

In survey research, the investigator selects a sample of respondents and administers questionnaires or scales or conduct interviews to collect information on the variables of interest. The investigator collects detailed description of existing phenomena with the intention of employing the data to assess the current conditions and practices or to make more intelligent plan for improving socio-economic or educational conditions or processes. In addition to being descriptive, surveys can also be used to explore relationships between variables in an explanatory way. Survey requires an expert and imaginative planning, careful analysis and interpretation of the data and logical and skillful reporting of the findings. In the present study, the investigator attempted to collect the data regarding the self concept and psychological characteristics and academic achievements of students with hearing impairment at secondary level in Kerala.

POPULATION FOR THE STUDY

Since the study analyses the self-concept psychosocial adjustment and academic achievement of students with hearing impairment at secondary school in Kerala, the population for the study constitutes all the students studying at secondary levels in various special schools for the hearing impaired in Kerala. There are twenty three special schools exclusively for the hearing impaired in the state of Kerala, admitting students at secondary level.

SAMPLES FOR THE STUDY

Selection of the sample is very crucial for any study. The quality of sample is an important determinant of the quality of the data collected and the reliability of the data and the interferences ultimately. Simple random sampling techniques were used in the selection of sample. All the hearing impaired students in classes IX and X, present on the day of the visit of the investigator have been selected for the study. The schools were earlier informed about the day and time of visit of the researcher. 248 hearing impaired students participated in the study. The sample was selected from eight districts of Kerala, viz., Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam, Ernakulam, Thrissur, Malappuram and Palakkad. The selected sample represented all most all the sections prevailing in the society, high, middle and low income groups, urban and rural, both genders. Severity of hearing loss and age group of the students also considered as independent variables. The break up of the samples of secondary schools included in the study and the number of hearing impaired students selected from each of the schools is given in Table 4.1

Table 4.1

Details of the secondary schools and
number of hearing impaired students for the study

Sl.No	Name of the school	Number of students
1	Govt. Vocational Higher Secondary School for the Deaf, Thiruvananthapuram	24
2.	CSI Vocational Higher Secondary School for the Deaf, Valakom, Thiruvananthapuram	17
3	CSI Vocational Higher Secondary School for the Deaf, Thiruvalla, Pathanamthitta	16
4	Assissi Mount Higher Secondary School for the Deaf, Vadakara P.O., Neerppara, Kottayam	40
5	Our Lady's School for the Deaf, Marangattupally, Kottayam	21
6	Assissi School for the Deaf, east Vazhappilly, Muvattupuzha P.O, Ernakulam	26
7	St. Clare Oral School for the Deaf, Manickamangalam P.O, Kalady, Ernakulam	12
8	Govt. High School for the Deaf, Kunnamkulam, Thrissur	32
9	Asha Bhavan High School for the Deaf, Ollur P.O, Thrissur	13
10.	Sravana Samsara School West Yakkara, Palakkad	12
11	Govt. High School for Deaf, Ottappalam, Kanniampuram (P.O) Palakkad	25
12.	Assissi School for the Deaf, Applachode, Malappuram	10

Graphical representation of the breakup of the samples

Breakup of the samples on the basis of gender

The sample selected for the present study included 125 boys and 123 girls. The district wise breakup of the sample on the basis of gender is given in table 4.2

Table 4.2

District wise breakup of the sample on the basis of gender

Sl. No	District	Number of students selected		
		Boys	**Girls**	**Total**
1	Thiruvananthapuram	12	12	24
2	Kollam	9	8	17
3	Pathanamthitta	8	8	16
4	Kottayam	30	31	61
5	Ernakulam	19	19	38
6	Thrissur	24	21	45
7	Palakkad	18	19	37
8	Malappuram	5	5	10
	Total	125	123	248

Table 4.3

Breakup of the sample on the basis of domicile

Sl. No	District	Number of students selected		
		Rural	Urban	Total
1	Thiruvananthapuram	16	8	24
2	Kollam	12	5	17
3	Pathanamthitta	10	6	16
4	Kottayam	42	19	61
5	Ernakulam	28	10	38
6	Thrissur	30	15	45
7	Palakkad	26	11	37
8	Malappuram	5	5	10
	Total	169	79	248

Design of the study

Sample

The sample for the study was selected in two stages. The selection of hearing impaired schools was done in the first instance and then students with hearing impairment were selected from the above schools for the hearing impaired.

Stage I: Selection of schools

. The study was conducted in secondary school for the hearing impaired of Kerala state. The selection of the school was made according to random quota sampling technique on the basis of the latest list of schools for the hearing impaired in Kerala.

Stage II: Selection of students

The sample taken into consideration for the purpose of this study consisted of hearing impaired students of class IX and X from 12 schools selected according to the above criteria. These 12 schools include 3 Govt. schools and 9 aided schools from 8 districts of Kerala.

Procedure: Rapport was established with all the hearing impaired students by giving self introduction and the purpose and objectives of the study in brief with the help of the teacher who is an expert in signing. The data were collected by administering tests in a group situation. The administration and scoring of the tests were done as per instructions given in the manuals. Information regarding academic achievement data was collected from the school examination records.

Description of tools

The following tools were used to collect the necessary data for the study

1. General data sheet
2. Self-concept inventory by R K. Saraswat
3. Psychosocial adjustment scale developed by the investigator
4. Academic achievement score [marks obtained by the students in their examinations

Before administering the self concept inventory and psychosocial adjustment scale to the respondent the English version at the self concept inventory and psychosocial adjustment scale were translated into Malayalam with post graduate degree in both Malayalam and English was called upon to translated version was checked by two other experts in the language. After translating into Malayalam the tools were submitted to few in the filed of their comments.

General data sheet

The general data was prepared to collect the general information about the students with hearing impairment. This includes information such as students sex, age group, severity of hearing loss, location of living, type of school, religion, income of fat her, father's occupation and fathers education. English and Malayalam version of the general data sheet are given in annexure.

The socio economic status scale was prepared by the investigator and used to measure the follow dimensions: viz. (i), education, (ii) occupation (iii) income level for the head of family.

1. **Education**: On the basis of education the people were classified into three categories. For people with professional or post graduate degree or above a score of 5 is given ie, mentioned as highly educated. In the case of people with bachelor's degree, pre-degree or plus two; a score right is given and named as educated categories; for people with SSLC

and below a score of 1 is given and named as under educated. People who are illiterate is given zero score.

2. **Occupation**: People were classified into three categories on occupational basis as business, government or private employed and agriculture or labopur work. The business group concists of individuals who are engaged all types of business, like shop, marketing , workshop, transportation etc. drawing high income. For this category a weightage of 5 score is given.

The government or private firm employed government consists of individual who are engaged in government service unemployment as well as private firms or company follows who are having maintain a standard life in their society. For this category a weightage of 3 score is given. The agriculture or labour workers consists of individuals wo are working in their own fields or working as labourers and making earning for this livelihood. A score of I is given to this category.

3. Income: On the basis of monthly income of family, people were classified into six categories. For the group having monthly income between Rs. 20000-25000 (High score group) a score of five is given. For the group having monthly income between Rs. 9000-15000 (medium income group) a score of three is given; and for the group having income between Rs. 3000-5000 (Low income group) a score one is given.

To compare the socio economic status of the families of students selected for the study, the following procedure was adopted. While calculating the score of a family full weightage was given to the head of the family especially in this study the father.

Self Concept Inventory

Self concept inventory was used to collect the necessary data for the first and most important objectives of the present investigation. It is a multi dimensional inventory in English developed by Saraswat (1984). The self-concept viz., physical social, intellectual, moral ,educational and temperamental self-concept. It also gives a total self concept score. The operational definition of self-concept dimensions measured by this inventory are :

1. Physical: Individual's view of their body, health, physical appearance and strength
2. Social: Individual sense of with in social interactions
3. Temperamental: Individual view of themselves in relation to school, teaches and extra curricular activities.
4. Educational: Individuals view of themselves in relation to school teachers, curricular and extra curricular activities.
5. Moral: Individuals estimation of their moral worth, right and wrong activities.

6. Intellectual: Individual's awareness of their intelligence and capacity of problem solving and judgment.

Table No. 4.4

Self-concept dimensions along with their item numbers

Self-concept dimensions	Code No	Item numbers
Physical	A	2,3,9,20,22,27,29,31
Social	B	1,8,21,37,40,43,46,48
Temperamental	C	4,10,14,16,19,23,24,28
Educational	D	5,13,15,17,25,26,30,32
Moral	E	6,34,35,41,42,44,48,47
Intellectual	F	7,11,12,18,33,36,38,39

The inventory contains 48 items. Each dimensions contains eight items. Each item is provided with five alternatives. Responses obtained on the test booklet itself through tick marks in the space provided corresponding to each alternatives. These was no time limit but generally, 20 to 25 minutes have been found adequate for responding all the items.

Scoring Method

The respondent is provided with five alternatives to give his responses ranging from most acceptable to least acceptable description of his self concept. The alternatives of responses are arranged in such a way that the scoring system for all the items will remain in the scheme i.e 5,4,3,2,1 whether the items are positive or negative. If the respondent put tick mark for first alternative the score is 5 for second alternative the score is 4, for third alternative scores is 3; for the fourth it is 2 and for the fifth and last alternate the score is one. The sum mated score of all the forty eight items provided the total self-concept, while a low score shows low self-concept. Transfer the score at each item on the front page against in that item. Add all the scores of eight items given in that column, this will give score for that particular dimensions of self-concept.

Reliability

Reliability of the inventory was found by test-retest method it was found to be 0.91 for the total self – concept measure. Reliability co-efficient

of its various dimensions varies from 0.67 to 0.88. The following table shows the test-retest reliability for each dimension.

Table No.4.5

Test –retest reliability of the self concept inventory

Code No	Self concept dimensions	No. of Items	Reliability co-efficient
A	Physical	8	0.77
B	Social	8	0.83
C	Temperamental	8	0.79
D	Educational	8	0.88
E	Moral	8	0.67
F	Intellectual	8	0.79
	Total self concept	48	0.91

Validity

Experts opinions were obtained to establish the validity of the inventory 100 items were given to 25 psychologists to classify the items to the category to which it belongs. Items of highest agreement and not less than 80% arrangements were selected. Thus the content and construct validity were established. English and Malayalam Versions of self-concept inventory are given in appendix and for the fifth and best alternative the score is one. The summated score of all the forty eight items provided that total self – concept, while a low score shows low self-concept. Transfer the score of each item on the front page against in that item. All the scores of eight items given in that column, this will give score for that particular dimensions of self-concept.

Table No. 4.6

Interpretation and classification of few scores for all dimensions of serf-concept

Self Concept Dimensions score	Interpretation (Category)
33-40	High self concept
25-32	Above average self concept
17-24	Average self-concept
9-16	Below average self concept
Upto 8	Low self concept

Table No. 4.7

Interpretation and classification of raw scores for total

Raw score	Interpretation
193-240	High Self Concept
145-192	Above average self concept
97-144	Average self concept
49-96	Below average self concept
1-48	Low self concept

Psycho Social Adjustment Scale

The psycho social adjustment scale for the hearing impaired secondary school was present and standarised by the investigator for the research purpose. Before preparing the scale, the investigator visited some schools for the hearing impaired, and observed the behaviour patterns and interactions of the students into classroom and outside the classroom. The investigator made discussions with the special school teachers faculties from psychology, and experts from other disciplines so as to get a clear picture about the hearing

impaired students. Various programs regarding curriculum, teaching methodology adopted, learning materials used, process of learning activities, group interactions and other academic and curricular activities conducted by the schools were observed. Also discussions were made about the psychological, sociological, educational, physiological and school environmental problem of the hearing impaired.

The scale had been developed with the following dimensions of psychosocial adjustment such as self-esteem, interaction, social adaptability, anxiety, alienation and depression. The investigator divided the variables as positive variables and negative variables. In the present study the psychosocial adjustment scale intends to assess the extend the possessions of the positive variable. The positive variables are self-esteem, interaction, social adaptability. The negative variables are anxiety, alienation and depression.

The positive variable self-esteem, means appreciating one's own worth and importance and having character to be accountable for his/her and it is to act responsibly towards others. It is a person's overall sense of worth; it generally refers to how one feels about or how one value himself/herself self conference, other appraisal, comparison to others and independence are selected as components for preparing the statement under the variables self-esteem. The hearing impaired individuals usually compare themselves inferior. When the deaf start interacting with peers and being to realize the differences they possess, they start comparing themselves with normal peers,

and become aware of their weakness causing them to gain a sense of inferiority. This will their self–confidence.

Adolescents evaluate their abilities at least by comparing with those of others. This social comparison can affect children's self-esteem by giving them information about how they are performing relating to other children. But children's self-image may affect their willingness to engage in social comparisons, depending on how pleasant or unpleasant they expect the resulting information to be.

Intervention is an event in which people attach meaning to a situation, interpret what others are meaning and respondent accordingly. It is the behavour directed towards or influenced by another person; the basic social process represented in mutual relationship between two or more individuals or groups. Through languages, symbols and gestures people exchange meanings, and have a reciprocal effect upon each other's behaviour expectations and thought. In this study, the investigator selected the aspects such as integration with peers, investigation with society, expression of ideas and understanding others for preparing the statements under interaction.

Peers can affect a child's behaviour and development in several ways. Peers provides many reinforcing consequences as a child develops attention, praise, sharing or refusing to share, criticism, and disapproval. At adolescence stage, self disclosure with parents drops abruptly while self disclosure with friends become dominant. Adolescents are likely to choose to associate with a group that shares their values, attitudes and behaviours (Helen, 2000).

The term social adaptability implies the method used by individuals while dealing with other in social situations. This is an important psychosocial variable and it contains several traits of individuals such as emotions, personal adjustment, and social adjustment. The emphasis has been given to emotions in that sense depending on the emotions, the behaviour of an individuals gets modified in a particular context. This is essentially trace in the case of hearing impaired children. Peer relationship, school related factors, relationship with parents, and self-identify were considered per preparing the statements related to emotions. Peer groups, family and self – identity were considered for preparing the statements related to emotions. Peer groups, family and self-identity are the most important domains that affect the emotional developments. De Hart, sroufe & Coopr (2000) stated that schools support adolescents emotional development. Students are given increasing responsibility homework, assignments and doing special projects on their own. There are opportunities in which young people can explore diverse opinions on social issues (Beck, 2000).

Schools also have some negative influences on adolescents. The peer culture at school records popularity and athletic performance far more than scholastic achievement. Many of the today teenagers see, to be caught in a blind. They experience strong pressure to succeed in what is portrayed as an increasingly competitive world. On the other hand, parents, teachers, and peers give them enough support for their emotional as well as far their academic achievement, and they lack the personal outlook needed to promote

their own success. There are close links between the quality of parent-child relationship, peer relationships and school functioning. Because of the peer relationships and school functioning. Because of the disability; the hearing impaired may find it different to adjust with their emotional problems.

Hearing impaired through their handicap, display different characteristics of emotions, that normally difficult to determine characteristics of emotions, that normally difficult to determine with certainty. The ten years provide developments in adolescents. Support from parents and peers help to cope with stress and give emotional supports. Self- identify depends on the knowledge that our own feelings and attitudes are similar to those of our peers. The inability of the deaf children to profit from language regarding their roles and interpersonal relationship may create serious problems in the area. The deaf may be somewhat self–centered because they lack communication through language. So deafness itself causes emotional problems.

Negative variables are adjustment hindering variables. The absence of lack of these variables in an individuals denotes high psychosocial adjustment. In the present study the psychosocial adjustment scale aims to assess the extend of freedom from the negative variables. The negative variables considered for the tool with their components are anxiety, alienation and depressions.

Anxiety is to uneasy, fearful feeling and it is the hallmark of many psychological disorders. It is often concealed and reduced by defensive

behaviour such as avoidance or ritualistic action (Morgans & King, 1993). In this study, feelings of rejection, failure to achieve, fear about future and problem in relationship were considered in preparing the statements. Anxieties about friendship with peers also peak at the adolescent stage. Thomas of anxiety and fear of rejection increased from 11 to 13 and them to 15 years, but declined by 17 years (Smith & Lowie, 1988). Individuals who are committed to goals and failure to achieve those goals are more susceptible to high level of anxiety. Disturbed relationship causes anxiety in humans. Suedfield (1998) pointed out that we should be sympathetic towards people with problems, rather in recent years, society seems to have taken the view that human beings are predominantly vulnerable creatures, who need protection from and intervention after almost any unpleasant experience anxiety provokes a grate deal of suffering among youth. This can influence their cognitive and social development and upset their integration into the school or family, expressed as poor performance at school which can lead to dropping out, low self-esteem loss of close friends and difficulty in integrating into the relationship.

Alienation is a feeling of separation from others or sense of a lack of warm relation with others. Mann (2001) defined alienation as the state or experience of being isolated from a group or an activity to which one should belong or in which one should be involved. There is every possibility of developing a sense of alienation in hearing impaired students as they are not alienation in hearing impaired students as they are not able to join with others

in all situations. So the child with hearing loss has a tendency to isolate from outside world. They may withdraw from peer interactions due to the alienated feelings of being different. The feeling of alienation arises because these adolescents feel they are being left out and this would lead to exclusion in social relations and purposelessness in life. Here isolation, exclusion in social relations, purposelessness and normlessness is being considered for preparing the statements. Purposelessness indicates the feelings that one's destiny is not under one's own control, but is determined by external agents, fate, luck, or institutional arrangements. Purposelessness refers either to the lack of comprehensibility or consistent meaning in any domain of action such as world affairs or interpersonal relations or to a generalized sense of meaninglessness in life. Normlessness reflects lack of appropriate rule – governed behaviour. Exclusion in social relations is the sense of loanliness or social isolation among minority group members.

Depression is a state characterized by a sense of inadequacy, a feeling of despondency, a decrease in activity or reactivity, pessimism, sadness, and related symptoms. Depression is more persistent and cause more damage of behaviour and personality development (Rebar & Reber 2001). The statement of depression includes the components such as problem in thinking, agitation, lack of concentration and disappointment. Depression is of serious concern in adolescence because it prevents young people from mastering critical developmental tasks. Adolescent depression is also hard to recognize because they manifest it is a wide variety of ways. Some translate it is a wide

variety of ways. Some translate their pessimistic outlook into excessive worries about the health of their bodies, difficulties in concentrating agitation and undirected thinking (Ratter & Garmezy, 1989).

The symptoms of depression includes agitation or greatly slowed down behaviour, inability to think clearly, difficulty in concentrating and feeling of disappointment. These symptoms represent a change from person's usual functioning. People who are depressed often seem to take a negative view of their interactions with others; there is considerable evidence that they also make a negative impression on other because of deficits in their social skills by Khan et al, 1991). A negative spiral results, in which real deficits in performance compound the effects of the negative self-views. Depressed people not only more likely to respond negatively because of the depressed people's lack of social skills. Depressed people tend to emphasize self-others comparisons which further lower their self –esteem. Every uncounted with another person becomes the opportunity for a negative self evaluation (Sarason & Sarason, 1996).

Preparation and Standardisation of Psychosocial Adjustment Scales

The investigator has gone through various studies and articles on various dimensions of psychosocial adjustment before going to prepare the scale.

Preparation of Draft Tool

At first the investigator prepared a draft scale of psychosocial adjustment for the hearing impaired. While constructing the scale the investigator was careful to avoid ambiguous and unnecessary statement. The prepared items were given to experts including special educationist, educationist, psychologists and some special teaches working in secondary schools for the hearing impaired. These experts constructively criticized and gave valuable suggestions. The wording ness of some of the statements were changed and modified and irrelevant statements were removed. Only the items which truly check the selected psychosocial adjustment variables were retained. Thus out of 112 items 10 were rejected and 102 were selected for draft scale; 17 items related to each variables. These statements were worded carefully inorder to obtain the free expression to the respondents. The respondents were requested to show their degree of acceptance to each item by indicating any one of the following responses. Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD).

Tryout of the Scale

A sample of 100 secondary school children with hearing impairment were selected from four schools for the hearing impaired of Kottayam and Pathanamthitta districts. The data obtained for the tryout were collected from secondary school students. All the students were belongs to the category of mild, moderate, severe and profound. The hearing impaired students were requested to choose any one of the five responses relating to each item as – Strongly Agree, Agree, Undecided, Disagree And Strongly Disagree. The

responses to the statement in the preliminary draft scale were scored by following the Like the method shown below.

Position in the Scale	Score values	
	Positive statement	**Negative statement**
Strongly Agree (SA)	5	1
Agree (A)	4	2
Undecided (U)	3	3
Disagree (D)	2	4
Strongly Disagree (SD)	1	5

Item Analysis

In the item analysis, the investigator arranged the answer sheets in the order of magnitude. Theme selected 27% of the answer sheets both from top and bottom. Thus 27 highest and 27 lowest scoring. Scoring subjects were selected as criterion groups. The mean scores of each statement was calculated separately for each criterion group. The 't' value for

Each statement was calculated using the formula

$$t = \frac{\bar{X} - \bar{X}L}{\sqrt{\left(X_H - \bar{X}_H\right)^2 + \Sigma\left(X_L - \bar{X}_L\right)^2}{n(n-1)}}$$

Where $= \Sigma\left(X_H - \bar{X}_H\right)^2 X_H^2 - \frac{\Sigma XH^2}{n}$

$$\sum\left(X_2 - \bar{X}_L\right)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

$\bar{X}_H$ = The mean score on a given statement for the high group

$\bar{X}_L$ = The mean score on the same statement for the low group

X_H = The score for an individual in the high group for the statement.

X_L = The score of an individual in the low group for the statement

N = Number of subjects in the criterion groups

The value of 't' is a measure of the extent to which a given statement differentiates between the high group and low group. Edwards (1957) points out that any 't' value equal to or greater than 1.75 indicates that the average response of the high and low groups to a statement differs significantly, provided that the number of subjects in the high group and low group is 25 or more.

Final Form of the Psychosocial Adjustment Scale

The final form of the psychosocial adjustment scale consisted of 72 statements out of which 36 were positive and 36 were negative, related to six variables were not mentioned in the scale. The positive and negative statements are randomly arranged within each group. The psychosocial adjustment scale was distributed along with a covering letter stating the purpose of the study and the directions for medicating the responses. Provisions were also made in the scale to write the details of the respondents.

The final form of psychosocial adjustment scale is given as Appendix III (Malayalam Version is given as Appendix IV).

Reliability of the psychosocial adjustment scale:

Test-Retest method:

In the present study, the rehabilitee of the psychosocial adjustment scale was established by the test-retest method. The scale was administrated twice to a simple of 50 hearing impaired students at secondary schools with an interval of two weeks between the first and second administrations. The total scores were found out for each individual for each administration. Thus two sets of score were obtained. The co-efficient of correlation between these two sets of total scores was found to be .78. Similarly the investigator calculated the rehabilitee of the subscales of psychosocial variable scale also.

Preparation of the final form of the psychosocial adjustment scale

In the present study out of 102 statements 70 statements having the highest t values were selected, for the find scale. Out of these 72 items 36 were positive and 36 were negative. ‘t’ values of the statements included in the final scale are given in the appendix II. The distribution of items in the psychosocial adjustment scale is presented in table 4.8.

Table 4.8

Distribution of items in the psychosocial adjustment scale

Sub-scale	Component	Subcomponent	Number of Items		Total
			Positive	Negative	
A	Self-esteem	Physical Self	1	2	12
		Self confidence	2	1	
		Comparison to others	1	2	
		Others appraisal	2	1	
B	InterAation	Interaction with peers	2	1	12
		Interaction with Society	2	1	
		Expression of ideas	1	2	
		Understanding others	1	2	
C	Social Adaptability	Peer Relationship	2	1	
		School related factors	2	1	12
		Family related factors	1	2	
		Self-identity	1	2	
D	Anxiety	Feeling or rejection	1	2	12
		Failure of achieve	1	2	
		Fear about Future	2	1	
		Problem solving	2	1	
E	Alienation	Isolation	1	2	12
		Exclusion in social relations	2	1	
		Purposelessness	1	2	
		Normlessness	2	1	
F	Depression	Problems in thinking	2	1	12
		Agitation	1	2	
		Lack of concentration	2	1	
		Disappointment	1	2	
	Total		36	36	72

The score for each of the variables for each individual were found out for each administration. Then the co efficient of correlation between each set

of scores were calculated. The co-efficient of correlation corresponding to each variable thus obtained are given in the table 4.9.

Table 4.9

Reliability co-efficient of the subscales of psychosocial adjustment scale

	Sub scales	Co-efficient of correlation
A	Self-esteem	.72
B	Interaction	.81
C	Social Adaptability	.77
D	Anxiety	.75
E	Alienation	.83
F	Depression	.76
Total	Psychosocial adjustment scale	.78

The high values of the correlation coefficients indicate the high reliability of the measuring tool.

Validity of the Psychosocial Adjustment scale.

The investigator established the content validity and face validity of the psychosocial adjustment scale. The term content validity indicates that the instrument fairly and comprehensively covers the domain or items that it purports to cover.

Content validity

The items included in the psychosocial adjustment scale have been prepared on the basis of review of literature, discussions with special

educators, teachers and experts in the field. Six dimensions of psychosocial adjustment were taken into consideration. In the final form the tool represented more or less equal content of all dimensions so the scale has proper content validity.

Face Validity:

For establishing face validity, the final form of the scale was shown to the experts. The reactions regarding the format and language of the scale were sought. All were satisfied with the language and format of the scale. So it was decided that the scale has proper face validity. To study the psychosocial adjustment of hearing impaired students at secondary schools, the investigator administered the psychosocial adjustment scale to a sample of 248 students randomly selected from 12 special schools in Kerala.. The psychosocial adjustment scale consisted of 72 items related to six variables. The maximum score that can be obtained by a respondent for the psychosocial adjustment scale is 360 (72x5) minimum score 72 (72.1) and the middle score is 216 (72x3).

Thirty six items were included in the psychosocial adjustment scale under three positive variables viz, self esteem, interaction, and social adaptability. The maximum score that can be obtained by a respondent for the total positive psychosocial scale is 180 (36x5), minimum score 36 (36x1), and middle score is 108 (36x3). Each subscale consisted of twelve items. The maximum score that can be obtained by a respondent for each of the subscale is 60 (12x5), minimum score 12 (12x1) and the middle score is 36 (12x3).

1. Reliability:

The reliability of the psychosocial adjustment scale was established through split-half method. A random sample of 100 response sheet was selected. The score obtained for each item of the 100 hearing impaired students for the odd and even items were grouped separately. Thus for every student, a pair of scores were obtained. The reliability of the tool was established by using split-half method followed by spearman-Brown Prophey formula. The reliability co-efficient obtained is 0.90 ($p<0.001$) which shows that the psychosocial adjustment scale has high reliability.

2. Academic Achievement Score

Here the investigator collected the achievement scores of the students with hearing impairment for the final examinations. To measure the achievement of the subjects, their aggregate score obtained in the terminal evaluations and continuing evaluation were taken from the concerned school records. These scores were taken because those were achieved by the sample from the common examination conducted by the district examination boards, it being a testing organization established by the ministry of education of Kerala. Being a state level examination the subjects included in the syllabus of the 8^{th} and 9^{th} classes care fully reflected in the examination papers which are set by experienced and trained educators and all efforts are made to ensure uniformity of making among various scores.

Procedure for Data Collection

The investigator personally contacted the school authorities for the hearing impaired. The scope of the study was explained to them and their permission was sought for collecting data from the students directly. After establishing rapport with the students and with the help of special teachers of the concerned class, the investigator briefly explained the purpose of this work and assured the data would be maintained under strict confidence and would be used only for the research purpose. The self concept inventory and the psychosocial adjustment scale, were distributed among the students one by one. Adequate instructions were given to mark the response. However, those who had difficulty in understanding the items or mode of responding to them were assisted by the investigator. Detailed explanation regarding the statements was given whenever necessary. Questions about several statements were clarified on the spot with the help of examples. The statements made appropriate marking against each statement.

Processing of Data

The collected data were entered in a master sheet of the SPSS version sixteen. Each subject of the sample was given an identification number serially, numbering from one two hundred and forty eight. against the identification number of each subject the data pertaining to that subject was entered. The data collected through the general data was entered first, followed by the data obtained through the self concept inventory and the psychosocial adjustment scale. Scores of academic achievement obtained from the school records were entered in a separate column corresponding to the row pertaining to the information of that particular student.

Statistical Techniques used for Data Analysis

The data were analysed based on the objectives and the hypotheses by employing appropriate statistical methods using SPSS. The following statistical techniques were used for this purpose.

a) Computation of frequencies, percentages, arithmetic mean, median, mode and standard deviation.

b) Coefficients of skewness and kurtosis

c) The student's t-test

d) One-way analysis of variance

e) The test of least significant difference for post-hoc comparisons.

f) Karl Persons product moment co-efficient of correlation.

g) Socio economic status scale.

CHAPTER V

ANALYSIS AND INTERPRETATIONS

An

CHAPTER V

ANALYSIS AND INTERPRETATIONS

Analysis means categorizing, ordering, manipulating and summarizing of date to obtain answers to research questions. The purpose of analysis is to reduce data to intelligible and interpretable form so that the relations of research problems can be studied and for a scientific conclusion and for ensuring that all relevant data are used for making contemplated comparisons and analysis. Processing of data implies editing, coding, classification and tabulation of collected data so that they amenable to analysis. The term analysis refers to the computation of certain measures along with searching for pattern of relationship among data groups. Without proper analysis, the collected data have no utility and importance.

Interpretation of data refers to that important past of the investigations which is associated with the drawing of inferences from the collected facts after an analytical study. It is interpretation that makes it possible for us to utilize collected data in various fields of activity. Interpretation is the process of establishing relationships between variables. The usefulness of collected data lies without interpretation. In fact analysis and interpretation are complementary to each other. The end product of analysis is the setting up of certain general conclusions really mean.

The purpose of the present study was to assess the self-concept,

psychological adjustment and academic achievement of children with hearing impairment at secondary schools. The data for the study were collected from 248 hearing impaired children from the special schools for the hearing impaired at secondary level. For the collection of the data, self –concept inventory and psychological adjustment scale were employed. The marks obtained by each student for the previous examinations were collected from the schools for analyze the academic achievement of hearing impaired children. The collected data were thus consolidated, analyzed and interpreted for the realization of the object of the study.

The analysis and interpretations of the results are presented under the following headings.

Table 5. 1.

Break up of the sample on the basis of gender

Sl. No	Gender	No. of children	Percentage
1.	Male	125	50.40
2.	Female	123	49.60
3.	Total	248	100

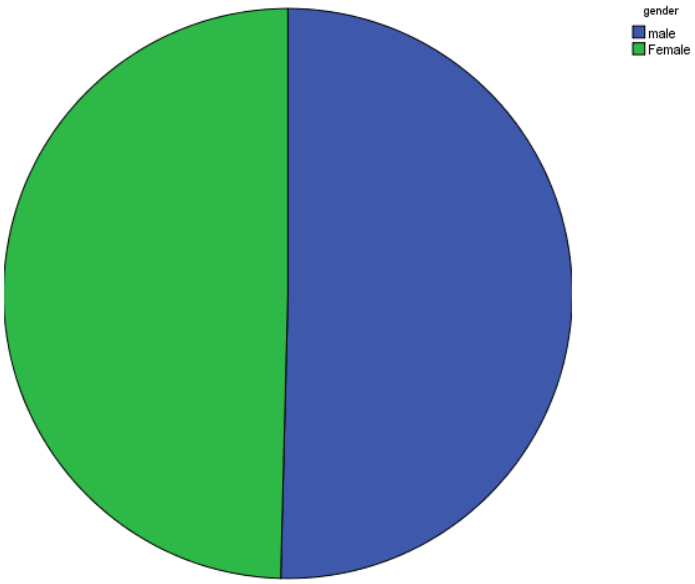

Figure 5. 1. Break up of the sample on the basis of gender

Table 5. 2.

Break up of the sample on the basis of domicile.

Sl. No	Domicile	No. of children	Percentage
1.	Rural	169	68.14
2.	Urban	79	31.86
3.	Total	248	100

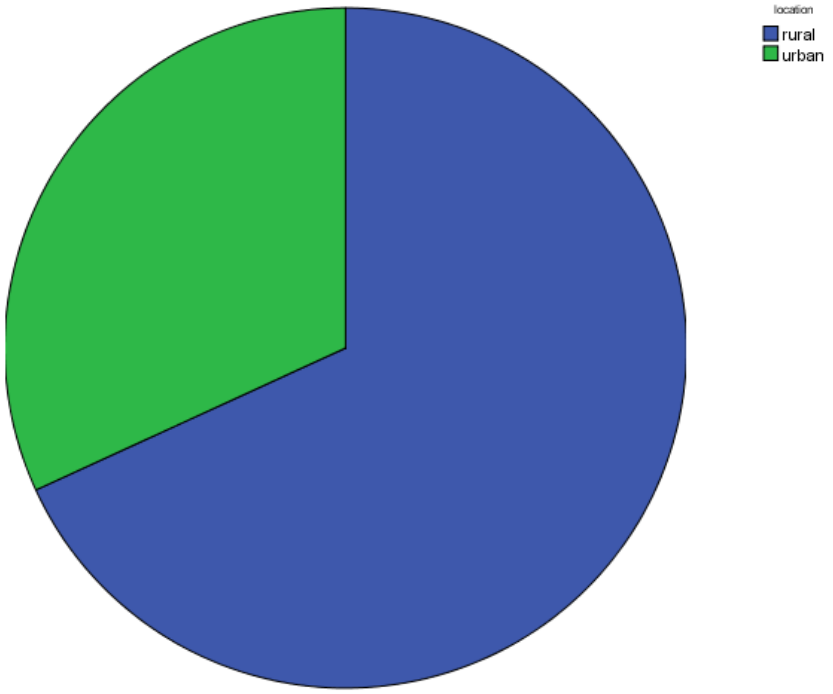

Figure 5. 2. Break up of the sample on the basis of domicile.

Table 5.3

Break up of the sample on the basis of type of school

Sl. No	Type of school	No. of children	Percentage
1	Aided school	167	67.3
2	Government	81	32.7
	Total	248	100.0

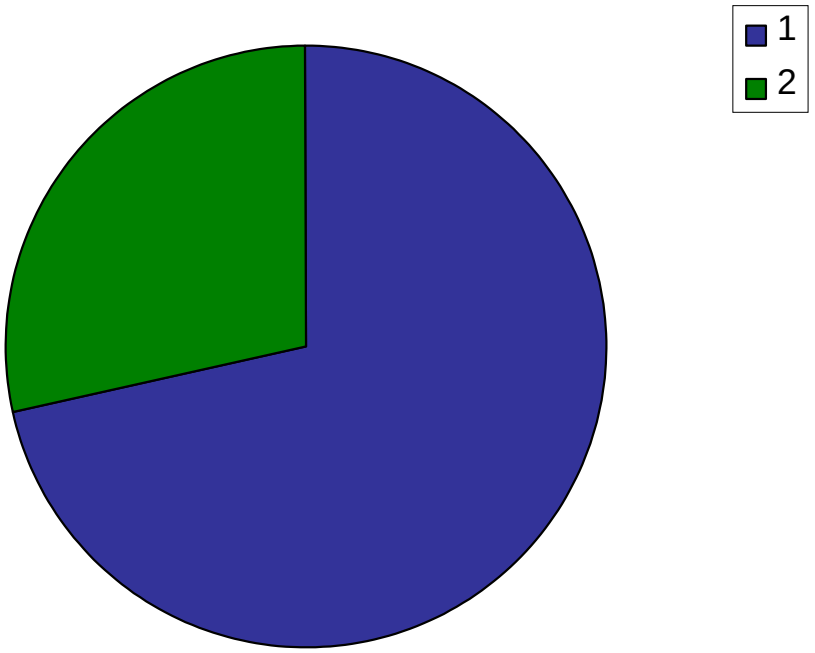

Figure 5. 3. Break up of the sample on the basis of domicile.

Table 5.4

Break up of the sample on the basis of age group

Sl. No	Age group	Frequency	Percentage
1	13-14	117	47.2
2	15-16	115	46.4
3	16-17	16	6.5
	Total	248	100.00

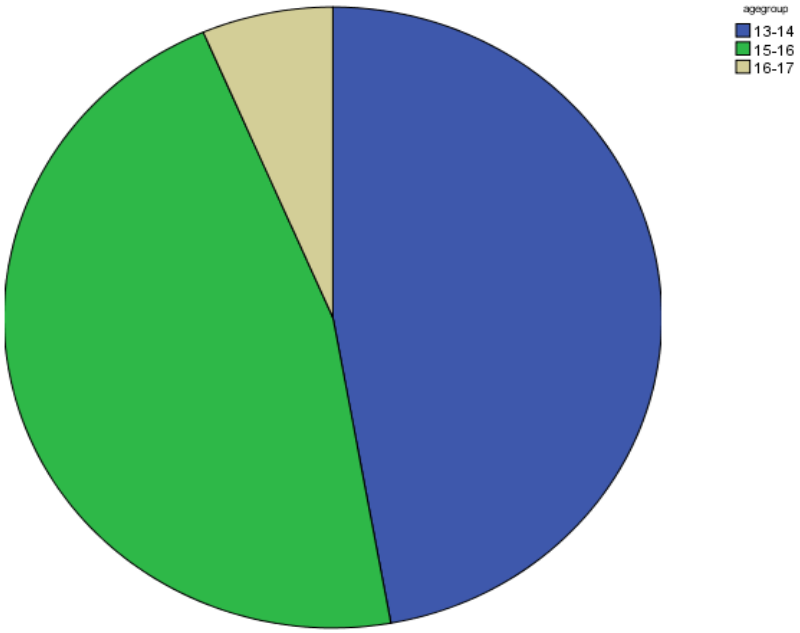

Figure 5.4. Break up of the sample on the basis of age group

Table 5. 5

Break up of the sample on the basis of severity

Sl. No	Severity	Frequency	Percentage
1	Mild	39	15.7
2	Moderate	121	48.8
3	Severe	83	33.5
4	Profound	5	2.0
	Total	248	100.00

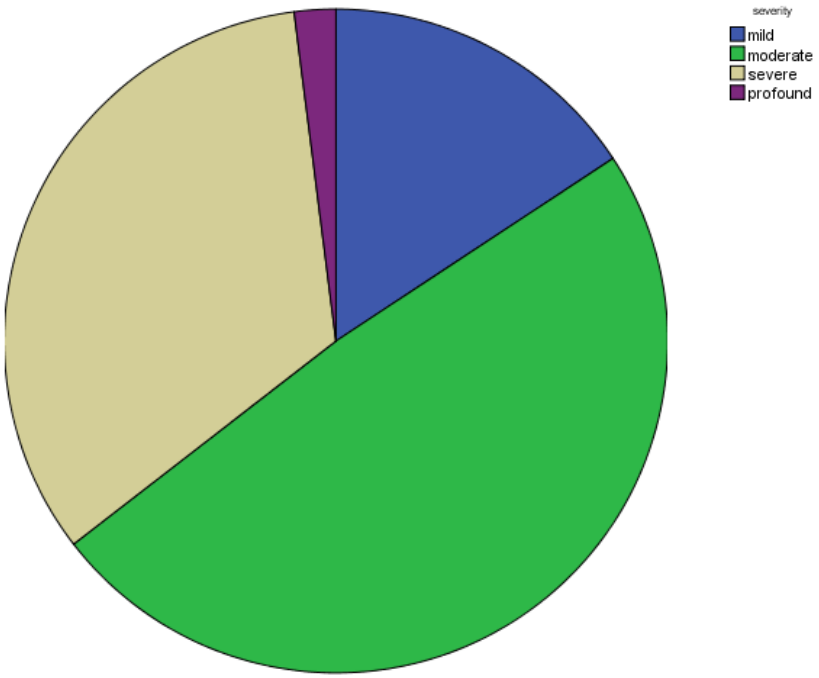

Figure 5. 5. Break up of the sample on the basis of severity

Table 5. 6

Break up of the sample on the basis of religion

Sl. No.	Religion	Number	Percentage
1	Hindu	123	49.6
2	Christian	92	37.1
3	Muslim	33	13.3
	Total	248	100.0

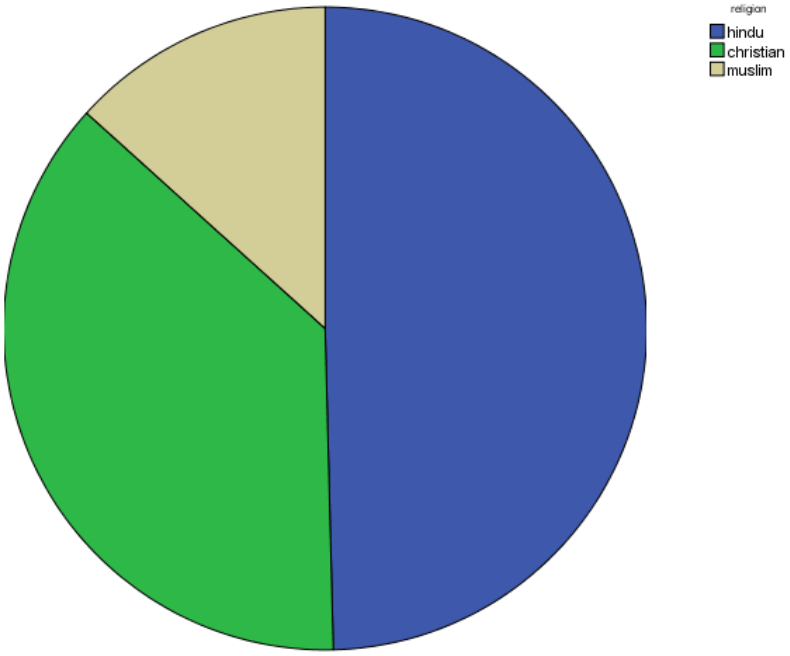

Figure 5. 6 Break up of the sample on the basis of religion

Table 5. 7

Break up of the sample on the basis of Education of Father

Sl.No.	Education of Father	Number	Percentage
1	Highly educated	35	14.1
2	Educated	164	66.1
3	Under-educated	49	19.8

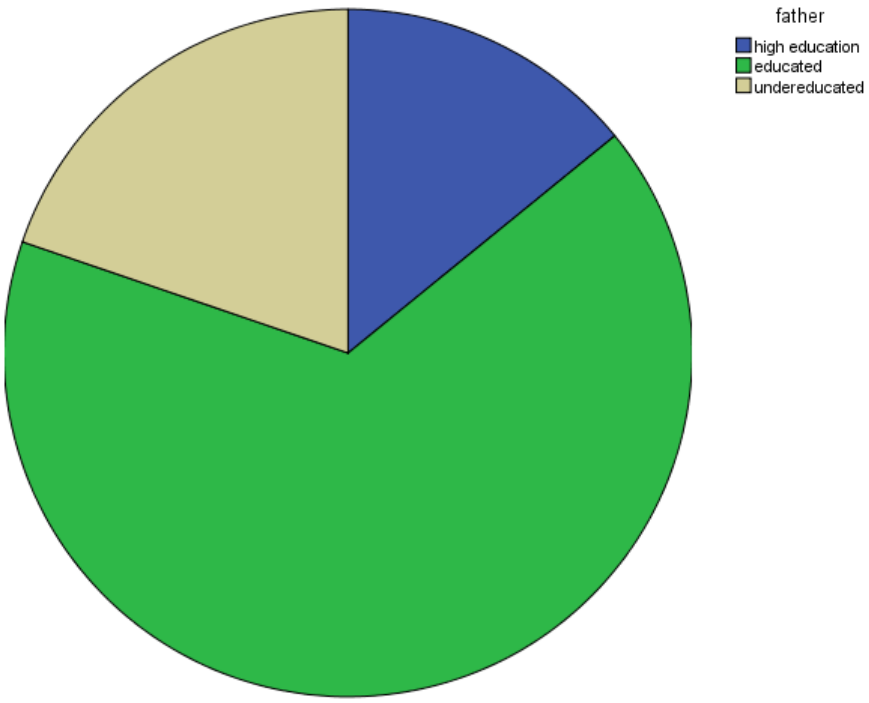

Figure 5. 7. Break up of the sample on the basis of Education of Father

Table 5. 8.
Break up of the sample on the basis of Occupation of Father

Sl.No	Occupation of Father	Number	Percentage
1	Business	35	14.1
2	Government/Private services	138	55.6
3	Agriculture/Labour work	75	30.2

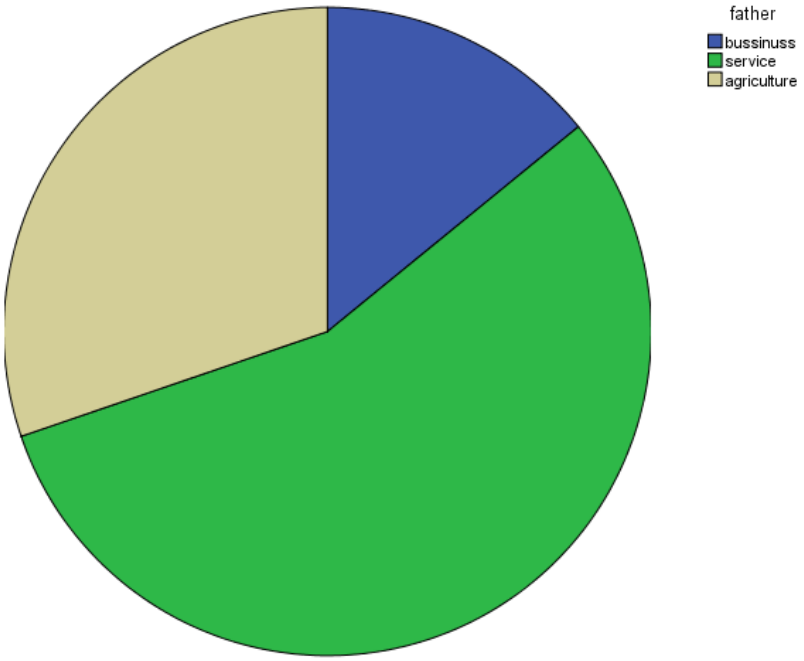

Figure 5. 8 Break up of the sample on the basis of Occupation of Father

Table 5. 9

Break up of the sample on the basis of Income of Father

Sl.No	Income of Father	Number	Percentage
1	High	54	21.8
2	Medium	142	57.2
3	Low	52	21

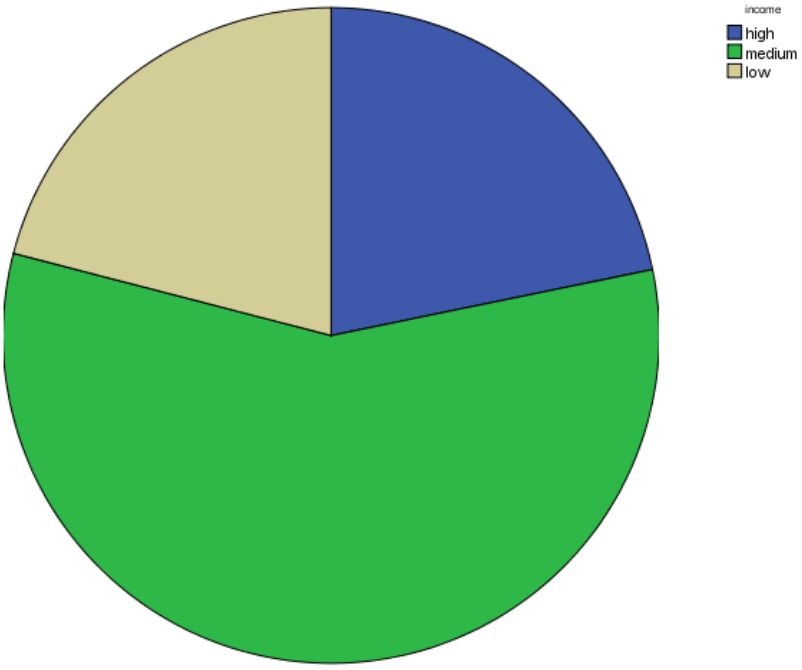

Figure 5.9. Break up of the sample on the basis of Income of Father

Table 5.10
Mean and Standard
Deviation of Total Self-concept score of
Hearing-impaired children at secondary school.

Variable	N	Mean	Standard Deviation
Self-Concept	248	175.16	23.56

From the table 5.10 it is seen that the mean and the standard deviation obtained for total self-concept scores of hearing-impaired children at secondary schools are 175.16 and 23.56 respectively. Thus it can be interpreted that the hearing-impaired children at secondary school posses above average self-concept, since the maximum score being 240.

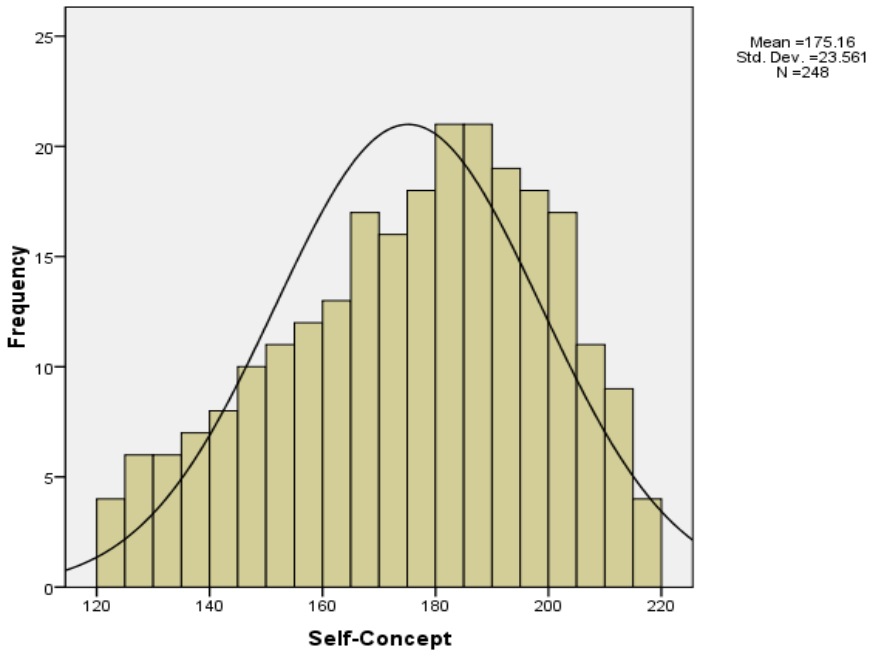

Figure 5.10. Graphical representation of total self-concept scores of children with hearing impairment at secondary school.

Table 5.11

Mean, standard deviation and 't' value of self-concept score of hearing-impaired children with respect to gender.

Gender	N	Mean	SD	't'
Male	125	181.42	22.47	4.37
Female	123	168.8	23.01	

Table 5.11 shows that the mean score of self-concept of hearing-impaired boys is 181.42 and female 168.80. The 't' value calculated exceeds the table value at 0.05level. It implies that the difference between the mean scores is significant at 0.05 level. Therefore it can be concluded that hearing impaired boys and girls differ significantly in their self-concept.

Table 5.12

Domicile	N	Mean	SD	't'
Urban	169	173.28	23.5	1.84
Rural	79	179.18	23.32	

The table 5.12 shows that the mean scores obtained for hearing-impaired rural and hearing-impaired urban children are 173.27 and 179.18 respectively. The obtained 't' value is below the table value(1.96) at 0.05 level of significance. Therefore it is concluded that there is no significant difference between the self-concept scores of hearing-impaired rural and urban children. The urban children (mean=179.18) show more self-concept than hearing-impaired rural children(173.28).

Table 5.13
Means, Standard deviation and 't' value of self concept scores of hearing-impaired children with respect to type of school

Type of school	N	Mean	SD	t
Aided School	167	200.27	32.92	0.25
Government school	81	199.28	28.12	

The table 5.13 shows the mean scores obtained for hearing-impaired aided and hearing-impaired government children at secondary schools are 200.27 and 199.28 respectively. The 't' value obtained (0.25) is less than the table value (1.96) at 0.05 level of significance. The mean scores of aided school children are higher than that of the government school children. Therefore it can be interpreted that there is no significant difference between aided and government school for the hearing-impaired. The study can be compared to the result of research conducted by Coleman's (1983) examinations with the relationship between academic achievement and school placements, results indicated that the self-concept scores of the hearing-impaired children were not influenced by the degree of the children segregation from the total school population.

Table 5.14

Means and Standard Deviation of Self-concept scores of Hearing-Impaired children with respect to Age Group.

Age Group	N	Mean	SD
13-14	117	177.79	23.36
15-16	115	176.35	21.76
17-18	16	147.44	20.69
Total	248	175.16	23.56

The table 5.14 shows that the mean scores obtained for hearing-impaired children's self-concept with respect to age group. The mean for 13-14 group is 177.79, 15-16 group is 176.35 and 17-18 group is 147.44 respectively.

Table 5.15
Summary of
ANOVA of total score of self-concept of hearing-impaired children with respect to age group.

Source of variation	Sum of Squares	df	Mean Squares	F
Between groups	13265.86	2	6632.93	13.12
Within groups	123851.68	245	505.51	
Total	137117.54	247		

*Significant at 0.05 level

The F-ratio obtained i the case of different age groups of the self-concept scores with regard to age group is 1exceed (3.12) the value at 0.0 level of significance. Therefore it is inferred that there exist significant differences among the three groups with respect to their self concept. To

ascertain the groups which show the difference in the mean self-concept scores, the data were subjected to a post hoc comparison – least significant difference is done.

Table 5.16
Test of least significant difference for pair wise comparison of mean scores of self concept of hearing impaired children with respect to Age group.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	177.79 176.35	1.44	8.18
2	13-14 17-18	177.79 147.44	30.35	**16.61
3	15-16 17-18	176.35 147.44	28.91	**16.62

** Significant at 0.01 level

In the above table the least significant difference test for paired comparisons yielded significant difference at 0.01 level and df=2 and 245. This indicates that among the three sets of paired groups compared , significant differences exist at 0.01level in the two categories such as 13-14 and 17-18, 15-16 and 17-18 is having significantly higher self-concept.

Table 5.17

Mean and Standard Deviations of the Self-concept scores of the hearing-impaired children with respect to Severity of hearing loss

Severity of hearing loss	N	Mean	SD
Mild	39	178.59	22.8
Moderate	121	174.82	23.29
Severe	83	175.07	23.76
Profound	5	158.2	31.67
Total	248	175.16	23.56

The table 5.17 shows that the mean scores obtained for mild category (128.59) shows higher self-concept. The moderate group (174.82) and severe group (175.07) and profound (158.2) shows a low self-concept with regard to severity of hearing loss

Table 5.18

Summary of ANOVA of self-concept scores of hearing-impaired children with respect to severity of hearing loss

Source of Variation	Sum of squares	df	Mean squares	F
Between groups	1911.11	3	637.24	1.15
Within groups	135205.8.0	244		
Total	137117.54			

* significant at 0.05 level

The F ratio (1.15) obtained is less than the table value at 0.05 level of significance. Therefore, it is inferred that there exists no significant differences between and among the three groups with respect to te severity of hearing loss.

Table 5.19

Means and standard

deviations of the self concept scores of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	174.33	22.39
Christian	92	178.55	23.92
Muslim	33	168.82	25.833
Total	248		23.56

Table 5.19 shows the means and standard deviations of the self-concept scores of hearing impaired children with respect to religion. Out of 248 children 138 belongs to Hindu religion, 92 belongs to Christian religion, and the rest 33 belongs to Muslim religion. The mean scores of Hindu is 174.33, Christian 178.55 and for the Muslim it is 168.87 respectively. Christian children having high self-concept the hindu children from the above table. Muslim children comparatively are having lower self-concept.

Table 5.20

Summary of ANOVA of self concept scores of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean square	F
Between groups	2472.91	2	1236.46	2.25
Within groups	134644.62	245	549.57	
Total	137117.54	247		

*significant at 0.05 level

Table 5.20 shows that the obtained 'F' value 2.25 is not significant at 0.05 level. hence it can be concluded that there is no statistically significant differences between and among the three groups with respect to religion of hearing impaired children at secondary schools.

Table 5.21
Means and standard deviations of self-concept scores of hearing impaired children with respect to father's education.

Father's education	N	Mean	SD
Highly educated	35	177.91	19.78
Educated	164	177.27	23.88
Under-educated	49	166.12	23.19

Table 5.21 shows the mean and standard deviation of self-concept scores of the hearing impaired children with respect to fathers education. The highest mean value is obtained by children with hearing-impairment who's fathers are highly educated categories. The lowest mean value obtained by children of fathers who are under-educated.

Table 5.22
Summary of ANOVA of self -concept scores of hearing impaired children with respect to father's occupation.

Source of variation	Sum of squares	df	Mean square	F
Between groups	5000.33	2	2500.44	4.64
Within groups	132116.66	245	539.25	
Total	137117.54	247		

*significant at 0.05 level

The F ratio obtained is greater than the table value at 0.05 level of significance. Therefore, it is inferred that there exists significant differences

between and among the three groups with respect to their fathers education. So further analysis was necessary to locate the exact groups which show the differences and the least significant differences was done for the purpose.

Table 5.23
Test of Least Significant Difference for
Pair-wise comparisons of mean scores of self-concept of hearing-impaired children with respect to father's education.

Sl.No	Pairs	Mean values	Mean difference	Critical difference
1	Highly educated Educated	177.91 177.27	0.64	11.98
2	Highly educated Under-educated	177.91 166.12	11.79	*11.24
3	Educated Under-educated	177.27 166.12	11.15	10.92*

*significant at 0.05 level

It can be seen from table 5.23 that the least significant difference test for paired comparisons showed that the significant difference at 0.05 level exists between highly educated and under-educated fathers of children with hearing-impairment at secondary schools.

Table 5.24

Means and standard deviations of self-concept scores of hearing impaired children with respect to father's occupation

Father's occupation	N	Mean	SD
Business	35	179.37	18.66
Employees of govt/private	138	176.33	23.76
Agriculture/ Labour work	75	171.04	24.88

Table 5.24 shows the mean and standard deviation of self-concept scores of the hearing impaired with respect to fathers occupation. The highest mean score is obtained by children with hearing impairment whose fathers are undergoing business. The lowest mean score is obtained by children of agricultural or labour work fathers.

Table 5.25

Summary of ANOVA of self -concept scores of hearing impaired children with respect to father's occupation.

Source of variation	Sum of squares	df	Mean square	F
Between groups	2083.83	2	1041.91	0.15
Within groups	135033.71	245	551.15	
Total	137117.54	247		

*significant at 0.05 level

Table 5.15 shows that the obtained F ratio(0.15) for self-concept with respect to occupation of father is not statistically significant at 0.05 level. Therefore, it is inferred that there exists o significant differences between and among the three groups with respect to father's occupation.

Table 5.26

Means and standard deviation of self-concept scores of hearing impaired children with respect to father's income level.

Father's Income	N	Mean	SD
High	54	177.83	22.72
Medium	142	174.99	22.81
Low	52	172.87	26.45
Total	248	175.16	23.56

Table 5.26 shows the mean and standard deviation of self-concept scores of hearing-impaired children with respect to income of their father. The mean scores of (177.83) high income groups show better self-concept than the other three groups.

Table 5.27
Summary of ANOVA of self -concept scores of hearing impaired children with respect to father's Income.

Source of variation	Sum of squares	df	Mean square	F
Between groups	664.01	2	332.oo	0.55
Within groups	136453.53	245	556.95	
Total	137117.54	247		

*significant at 0.05 level

The F ratio (0.55) obtained is less than the table value at 0.05 level of significance. Therefore, it is inferred that there exists no significant difference between and among three groups with respect to their parents income.

Table 5.28

Mean, standard deviation and 't' value of gender and physical self-concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	30.07	4.86	3.87
Female	123	27.79	4.39	

The table 5.28 shows the mean, standard deviation and 't' value of gender and physical self concept of children with hearing impairment. Statistical test of significance shows there is significant difference between physical scores of male female children at 0.05 levels. Hence hypothesis is accepted. Hearing impaired males were having better physical self concept than female children may due to their high self conscious awareness at this age group.

Table 5.29

Mean, standard deviation and 't' value of type of school and physical self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	28.30	4.25	3.08
Government	81	30.26	5.48	

The above table shows the means, standard deviations and 't' value of physical self concept scores of aided and government school children with hearing impairment. Statistical test of significance, shows there is significant difference between the physical self concept scores of aided and government school children at 0.05 levels. Hence, the hypothesis is accepted. Government school children were having better physical self concept then aided school children.

Table 5.30
Mean, standard deviation and 't' value of domicile and physical self-concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	28.75	4.77	0.937.08
Urban	79	29.35	4.76	

The above table shows the means, standard deviations and 't' value of locality physical self concept scores children with hearing impairment. The obtained value is not statistically significant. Thus the hypothesis there is significant difference in mean scores of locality and physical self concept is

not accepted.

Table 5.31

Mean, standard deviation of age group and physical self-concept scores of hearing impaired children at secondary school.

Age group	N	Mean	SD
13-14	117	29.56	4.789
15-16	115	29.05	4.403
17-18	16	23.62	4.064
Total	248	28.94	4.768

Table 5.31 shows the means and standard deviation of age group and physical self concept of children with hearing impairment. The mean of 13-14 age groups in their physical self concept is 29.56 and standard deviation is 4.789. Mean score of 15-16 age group is 29.05 and standard deviation 4.403. While the mean score of 16-17 age group is 23.62 and standard deviation is 4.064. The children between 17-18 are having better physical self concept than the other two age groups. The other two groups 13-14 and 15-16 years were having lower physical self concept. However, all the children were having mean score above average. This indicates that children with hearing impairment also have same awareness about their physical structure like other children when their age increases.

Table 5.32
Summary of ANOVA of
age group and physical self –concept scores of
hearing impaired children at secondary school

Source of Variation	Sum of squares	df	Mean square	F
Between group	497.76	2	248.88	
Within group	5118.32	245	20.89	11.91
Total	5616.09	247		

Table 5.32 Shows that the F value obtained 11.91 is statistically significant at 0.05 level. Thus the hypothesis there is significant difference between age and physical self concept is accepted. Hence it can be concluded that the physical self concept of the hearing impaired children is a significant factor in the development of their physical structure with respect to their age.

Table 5.33
Test of least significant difference for
pair wise comparison of mean scores of physical
self-concept of hearing impaired children with respect to age group.

Sl. No.	Pairs	Mean value	Mean Difference	Critical difference
1	13-14 15-16	29.05	0.51	1.66
2	13-14 17-18	29.56 23.67	5.94	3.37**
3	15-16 17-18	29.05 23-62	5.43	3.38**

**Significant at 0.01 level

The table 5.33 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level between the mean score of the above three age groups. The pairs 13-14 and 17-18 showed higher physical self - concept than the group 15-16 and 17-18. The pair 13-14 and 15-16 having the lowest physical self concept of children with hearing impairment.

Table 5.34

Mean and standard deviation of severity and physical self-concept scores of hearing impairment children at secondary school.

Severity	N	Mean	SD
Mild	39	29.72	5.15
Moderate	121	28.66	4.63
Severe	83	29.23	4.69
Profound	5	24.80	4.81
Total	248	28.94	4.76

Table 5.34 gives means and standard deviation of physical self concept with respect to severity of hearing impaired children. Hearing impaired children who were having mild loss and severe have better physical self concept and children whose hearing less with moderate less also posses higher physical self concept. The profound hearing loss were having low physical self concept.

Table 5.35

Summary of ANOVA of severity

of hearing loss and physical self-concept scores of hearing impaired children and secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between group	125.63	3	41.87	
Within group	5490.45	244	22.580	1.861
Total	5616.09	247		

Table 5.35 Shows that the F-ratio obtained is below the critical value of significant 0.05 level. So the hypothesis is not accepted. It can be concluded that the physical self concept of the children with hearing impairment does not differ significantly with respect their seven by of hearing loss.

Table 5.36

Means and standard deviations of religion and physical self-concept scores of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	29.04	4.663
Christian	92	29.43	4.91
Muslim	33	27.18	4.47
Total	248	28.94	4.768

Table 5.36 shows means and standard deviations of religion Physical self concept scores of children with hearing impairment. Hindu and Christian children’s are having better physical self concept than the Muslims.

Table 5.37

Summary of ANOVA for religion and physical self-concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	125.77	2	62.88	2.80
Within groups	5490.31	245	22.40	
Total	5616.09	247		

From the above table it reveals the F- ration obtained is not significant at 0.05 level. Thus the hypothesis is not accepted. Hence it can be concluded that the physical self-concept of the children with hearing impairment does not differ significantly with respect to their religion.

Table 5.38

Means and standard deviations of children with hearing impairment at secondary school.

Fathers Occupation	N	Mean	SD
Business	35	29 43	3.06
Govt/Private service	138	29.33	6.10
Agriculture/ Labour work	75	27.99	4.70
Total	248	28.94	4.76

Table 5.38 gives means and standard deviation of physical self concept scores of children with hearing impairment. With respect to occupation of

father. Hearing impaired children who were having business and employed fathers have better physical self concept and children whose parents were agriculture labour work were having low physical self concept. However all the children who participated were having mean score above average.

Table 5.39

Summary of ANOVA for father's occupation and physical self concept score of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	97.86	2	48.93	2.17
Within groups	5518.22	245	22.52	
Total	5616.09	247		

Significant at 0.05 level.

The 5.39 shows that the F- ration obtained is below the critical value of significance at 0.05 level. So the hypothesis is not accepted. It can be concluded that the physical self concept of the children with hearing impairment does not differ significantly with respect to their father's occupation.

Table 5.40

Mean and standard deviation of education of fathers and physical self-concept scores of hearing impaired children at secondary school

Education of Father	N	Mean	SD
Highly educated	35	29.23	3.21
Educated	164	29.39	5.06
Under educated	49	27.22	431
Total	248	28.94	4.76

Table 5.40 gives means and standard deviation of physical self concept scores and education of father of children with hearing impairment. Hearing impaired children who were having highly educated and children whose parents were under educated were having low physical self concept in this study.

Table 5.41

Summery of ANOVA for Education of fathers and physical self-concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	18.36	2	90.18	
Within groups	5435.72	245	22.18	4.06
Total	5616.09	247		

* Significant at 0.05 level

Table 5.41 shows that the F-ratio obtained is 4.06, which is statistically significant at 0.05 level. Thus, the hypothesis that there is significant difference between education of father and physical self-concept is accepted.

Hence it can be concluded that the education of father of children with hearing impairment is significant factor in the development of physical self concept. To find out the significantly different pairs of physical self concept post hoc-test of least significant difference is done.

Table 5.42

Test of Least significant difference for pair wise comparison of mean scores of physical self-concept scores of hearing impaired children with respect to education of father.

Sl. No.	Pairs	Mean value	Mean Difference	Critical difference
1.	Highly educated Educated	29.23 29.39	0.16	2.43
2.	Highly educated Under educated	29.23 27.22	2.01	2.88
3	Educated Under educated	29.39 27.22	2.17	1.08*

*Significant at 0.05 level.

The table 5.42 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level between the mean score of the educated and under educated parents. The pairs educated and under educated showed a higher physical self-concept than the other two groups.

Table 5.43

Means and standard deviation of income of father and physical self-concept scores of hearing impaired children at secondary school.

Income Father	N	Mean	SD
High Income	54	29.31	4.69
Medium Income	142	24.19	4.79
Low Income	52	27.87	4.69
Total	148	28.94	4.76

Table shows the means and standard deviation of income of father and physical self concept of hearing impaired children. Hearing impaired children who were having high and medium income have better physical self concept and children whose parents were low income having low physical self concept.

Table 5.44

Summary ANOVA for income of father and physical self-concept scores of children with the hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	76.52	2	38.25	
Within groups	5539.57	245	22.61	1.69
Total	5616.09	247		

* Significant 0.05 level.

The above table 5.44 shows that the F-ratio obtained is for below the critical value of Significance at 0.05 level. Thus, the hypothesis is not accepted. Hence, it can be concluded that the physical self concept of the children with hearing impairment does not differ significantly with respect to their father's income.

Table 5.45

Mean, standard deviation and 't' value of gender and social self-concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	29.73	4.00	4.38
Female	123	27.45	4.18	

From the table 5.45 the obtained 't' value is statistically significant. It concludes that there is significant difference between the social self concept scores of male and female student at 0.05 levels. Hence the hypothesis there is significant difference between gender and social self-concept is accepted. Hearing impaired males were having better physical self concept than female children. It may due to their high self conscious awareness at this age group.

Table 5.46

Means standard deviations and ‘t’ value of domicile and social self-concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	28.28	4.25	1.73
Urban	79	29.28	4.16	

The table 5.46 shows the mean standard deviations and t value locality and social self-concept scores of children with hearing impairment. The obtained’ value is not statistically significant. Thus the hypothesis there is significant difference in mean scores of locality and physical self concept is not accepted.

Table 5.47

Means, standard deviations and ‘t’ value of type of school and social self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	28.55	4.23	0.24
Government	81	28.69	4.27	

The above table 5.47 shows the means standard deviations and ‘t’ value of social self-concept scores of aided and government school children with hearing impairment. Statistical test of significance shows there is no significant difference between the social self concept scores of aided and government school children at 0.05 level. Hence, the hypothesis is rejected.

Aided school children and government school children have somewhat equal social self concept in this study.

Table 5.48

Means and standard deviations of age group and social self-concept scores of hearing impaired children at secondary school.

Age group	N	Mean	SD
13-14	117	29.02	4.08
15-16	115	28.79	4.16
17-18	16	24.12	3.53
Total	248	28-60	4.24

Table 5.48 shows the means and standard deviations of age group and social self concept of children with hearing impairment. The younger children with hearing impairment were having higher social self concept than the older children. The children who participated in the study were found having mean score above average.

Table 5.49

Summary of ANOVA For age group and social self-concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	344.97	2	172.48	
Within groups	4102.70	245	16.74	10.30
Total	4447.67	247		

*Significant 0.05 level

Table 5.49 shows that the F value obtained 10.30 which are statistically significant at 0.05 level. Thus the hypothesis that there is significant difference between age and social self concept scores of hearing impaired can be concluded that the age of the children with hearing impairment is a significant factor in the development of their social self-concept.

Table 5.50

Test of least significant difference for pair wise comparison of mean scores of social self-concept of hearing impaired children with respect to age group.

Sl. No.	Pairs	Mean value	Mean Difference	Critical difference
1	13-14	29.02		1.48
	15-16	28.79	0.23	
2	13-14	29.02		3.0
	17-18	24.12	4.9	
3	15-16	28.79		
	17-18	24.12	4.67	3.02

**significant at 0.01 level.

The table 5.50 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level at 0.01 levels between the mean score of the above three pairs of the age group. The pairs 13-14 and 17-18, 15-16 and 17-18 showed higher social self-concept than the first pair.

Table 5.51

Means and standard deviation of severity and social self-concept scores of hearing impaired children at secondary school.

Severity	N	Mean	SD
Mild	30	29.97	4.08
Moderate	121	28.50	4.28
Severe	83	28.77	4.17
Profound	5	25.20	5.26
Total	248	28.60	4.24

Table 5.51 gives means and standard deviations of social self concepts with respect to severity of hearing loss of children with hearing impairment. Hearing impaired children who were having mild hearing loss have better social self concept and children whose hearing loss with moderate and severe loss possess higher social self-concept. The children with profound hearing loss were having low physical self-concept.

Table 5.52

Summary of ANOVA of Severity of hearing loss and social self-concept scores of hearing impaired children at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	67.00	3	22.33	1.24
Within groups	4380.67	244	17.95	
Total	4447.67	247		

* Significant at 0.05 level.

Table 5.52 shows that the F-ratio obtained is below the critical values

of significant at 0.05 level. Hence the hypothesis there is significant difference between severity of hearing loss and social self-concept of hearing impaired children is not accepted. It can be concluded that the social self concept of the children with hearing impairment does not differ significantly with respect to their severity of hearing loss.

Table 5.53

Means and standard deviations of religion and social self-concept scores of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	28.41	3.92
Christian	92	29.16	4.32
Muslim	33	27.73	5.00
Total	248	28.60	4.24

Table 5.53 gives means and standard deviations of religion and social self-concept scores of children with hearing impairment. Christian children were having better social self-concept scores than Hindu children. Muslim children were having lower social self-concept mean scores in this study.

Table 5.54

Summary of ANOVA for religion and social self-concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	58.90	2	29.45	1.64
Within groups	4388.77	245	17.91	
Total	4447.67	247		

*Significant 0.05 level

From the table 5.54 it is clear that the F-ratio obtained is not significant at 0.05 level. Thus the hypothesis that there is significant difference between religion and social self concept is not accepted. So, it can be concluded that the social self-concept of the hearing impaired children does not differ significantly with respect to their religion.

Table 5.55

Means and standard deviation of occupation of father and social self-concept of children with hearing impairment at secondary school.

Occupation of Father	N	Mean	SD
Business	35	29.63	3.16
Govt/Private service	138	28.66	4.32
Agriculture/Labour work	75	28.00	4.48
Total	248	28.60	4.24

Table 5.55 gives means and standard deviations of social self-concept scores of hearing impairment children with respect to occupation of father. Children whose parents engaged in business were having better social self concept than children with government or private sector and agriculture or

labour work parents.

Table 5.56

Summary of ANOVA for occupation of father and social self-concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	64.51	2	32.25	1.60
Within groups	4383.16	245	17.89	
Total	4447.67	247		

*significant at 0.05 level.

Table 5.56 shows that the F-ratio is below the critical value at 0.05 level of significant. Hence the hypothesis is not accepted. It can be concluded that the social self concept of the children with hearing impairment does not differ significantly with respect to their occupation of father.

Table 5.57

Means and standard deviations of education of father and social self-concept scores of hearing impaired children at secondary school.

Education of Father	N	Mean	SD
Highly educated	35	29.17	3.54
Educated	164	28.93	4.36
Under educated	49	27.08	4.01
Total	248	28.60	4.24

Table 5.57 shows gives means and standard deviations of education

of father and social self-concept of hearing impaired children at secondary school. Hearing impaired children who were having highly educated parents have better social self-concept and children where parents were educated and under educated were having low social self-concept.

Table 5.58

Summary of ANOVA for education of father and social self concept scores of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	141.91	2	20.95	4.03
Within groups	4305.76	245	17.57	
Total	4447.67	247		

*significant at 0.05 level.

From the table 5.58 the obtained F value is statistically significant at 0.05 level. Thus, the hypothesis there is significance difference between father's education and social self-concept of hearing impaired children at secondary school is accepted. Hence, it can be concluded that the education of father of children with hearing impairment is a significant factor in the development of social self-concept.

Table 5.59

Test of least significant difference pair wise comparison of mean scores of social self-concept scores of hearing impaired children with respect to education of father.

Sl, No,	Pairs	Mean value	Mean Difference	Critical difference
1.	Highly educated	29.17	0.24	2.16
	Educated	28.93		
2.	Highly educated Under educated	20.17 27.8	6.91	2.57**
3.	Educated Under educated	28.93 27.8	1.85	1.82*

*Significant at 0.05 level.

The table 5.59 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level. The pair highly educated and under educated showed better social self concept, and the pair educated and under-educated possess high social self-concept than the first pair.

Table 5.60

Means and standard deviations of income of father and social self concept scores of hearing impaired children at secondary school.

Income of father	N	Mean	SD
High Income	54	29.00	4.23
Medium	142	28.48	4.10
Low	52	28.50	4.65
Total	248	28.60	4.24

Table 5.60 shows the means and standard deviations of income of father and social self-concept of hearing impaired children. Hearing impaired children who were having high income have better social self-concept and hearing impaired children. Whose parents income lies in the medium and low income were having low social self concept in this study.

Table 5.61

Summary of ANOVA for income of father and social self-concept scores of children with the hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	11.24	2	5.62	0.31
Within groups	4436.437	245	18.10	
Total	4447.67	247		

*significant at 0.05 level.

From the table 5.61 it is clear that the obtained F ratio is for below the critical value of significant at 0.05 level. Their, the hypothesis there is significant difference between income of father and social self-concept is rejected. Hence, it can be concluded that the social self concept of the children with hearing impairment does not differ significantly with respect to their father's income.

Temperamental Self-Concept

Table 5.62

Mean, standard deviations and 't' value of gender and temperamental self-concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	30.47	3.73	3.28
Female	123	28.84	4.10	

From the table 5.62 it is seen that the 't' value 3.28 is statistically significant. It indicates that there exist significant difference between temperamental self-concept and gender of hearing impaired children at secondary level. Hence the hypothesis is accepted. The table indicated higher mean value for girls than boys

Table 5.63

Means, standard deviations and t value of locality and temperamental self-concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	29.29	4.00	2.15
Urban	79	30.46	3.87	

From the table 5.63 it is seen that the 't' value 2.15 is statistically significant at 0.05 level. It indicates that there exist significant difference between temperamental self-concept and locality of hearing impaired children at secondary level. Hence the hypothesis is accepted. Urban children were having better temperamental self-concept than the rural children because their opportunity to compare themselves with other children will be high.

Table 5.64

Means standard deviations and 't' value type of school and temperamental self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	29.93	4.07	1.51
Government	81	29.11	3.78	

From the table 5.64 the obtained't' value 1.51 is not statistically significant. It indicates that there is no significant difference between temperamental self concept and type of schools. Hence the hypothesis is rejected. The children from aided school and government schools maintain

some what equal temperamental self concept in this study.

Table 5.65

Means and standard deviations of age group and temperamental self concept of hearing impaired children at secondary school.

Age group	N	Mean	SD
13-14	117	29.96	3.97
15-16	115	29.90	3.84
17-18	16	25.81	3.43
Total	248	29.66	3.99

Table 5.65 gives means and standard deviations of temperamental self-concept and age of hearing impaired children at secondary level. Hearing impaired children in the age group of 13-14 and 15-16 years were having better temperamental self concept.

Table 5.66
Summary of ANOVA for age and temperamental self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	253.57	2	126.78	8.14
Within groups	3691.97	245	15.06	
Total	3945.54	247		

* Significant at 0.05 level.

The table 5.66 shows that the obtained F-ratio with is statistically

significant. Thus the hypothesis is accepted. Hence, it can be concluded that the age of the hearing impaired children is a significant factor in the development of their temperamental self concept. To find out the significantly different pairs of temperamental self-concept with respect to age post hoc LSD is done.

Table 5.67

Test of least significant difference for pair wise comparison of mean scores of temperamental self-concept scores of hearing impaired children with respect to age.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	29.96 29.90	0.06	1.41
2	13-14 17-18	29.96 25.81	4.15	2.86**
3	15-16 17-18	29.90 25.81	4.09	2.14**

** Significant at 0.01 level

The table 5.67 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level, and 0.01 between mean score of the above two pairs of age group of children with hearing impairment. The Pairs 13-14 and 17-18, 15-16 and 17-18 age groups showed a better temperamental self-concept than the 13-14 and 15-16 pairs. Hence it can be concluded that the temperamental self concept of hearing impaired children is having significantly better in the two groups of pairs.

Table 5.68

Means and standard deviations of severing and temperamental self-concept

scores of hearing impaired children at secondary school.

Severity	N	Mean	SD
Mild	39	29.87	3.60
Moderate	121	29.74	4.23
Severe	83	29.59	3.77
Profound	5	27.40	5.03
Total	248	29.66	3.99

Table 5.68 gives means and standard deviations of temperamental concept with respect to severity of hearing loss of children with hearing impairment. Hearing impaired children who were having mild, moderate and severe hearing loss have better temperamental self concept and children whose hearing loss with profound loss were having low temperamental self concept.

Table 5.69

Summary of ANOVA for severity of hearing loss and temperamental self-concept scores of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	28.38	3	9.48	0.58
Within groups	3917.16	244	16.06	
Total	3945.54	247		

* Significant at 0.05 level.

Table 5.69 shows that the F-ratio obtained is far below the critical value of significant at 0.05 levels. Hence, the hypothesis is rejected. It can be

concluded that the temperamental self concept of the children with hearing impairment does not differ significantly with respect to their severity of hearing loss.

Table 5.70

Means and standard deviations of religion and temperamental self-concept scores of scores of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	29.43	3.664
Christian	92	30.24	4.023
Muslim	33	28.91	4.933
Total	248	29.66	3.997

Table 5.70 gives means and standard deviations of religion and temperamental self concept of children with hearing impairment. Christian children are having high temperamental self-concept than Hindu and Muslims. Muslim children are having low temperamental self concept in this study. However, all the children who participated in this study were having above average self concept.

Table 5.71

Summary of ANOVA for religion and temperamental self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	55.91	2	27.96	1.76
Within groups	3889.62	245	15.57	
Total	3945.54	247		

From the table 5.71 it is clear that the obtained 'F' ratio is not statistically significant. Thus the hypothesis is rejected. Hence it can be concluded that the temperamental self concept of the hearing impaired children does not differ significantly with respect to their religion.

Table 5.72

Means, and standard deviation of occupation of father and temperamental self-concept scores of children with hearing impairment at secondary school.

Occupation of Father	N	Mean	SD
Business	35	30.37	3.38
Government/private service	138	29.61	3.94
Agriculture/Labour work	75	29.43	4.35
Total	248	29.66	3.99

Table 5.72 gives means and standard deviations of temperamental self concept scores of hearing impaired with respect to occupation of father. Children whose parents engaged in business were having better temperamental self concept than children with government/private sector and

agriculture/labour work parents.

Table 5.73

Summary of ANOVA for occupation of father and temperamental self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	22.16	2	11.08	0.69
Within groups	3923.38	245	16.01	
Total	3945.54	247		

* Significant at 0.05 level.

Table 5.73 shows that the F ratio is for below the critical value at 0.05 level of significant. Hence the hypothesis is rejected it can be concluded that the temperamental self concept of the children with hearing impairment does not differ significantly with respect to their fathers occupation.

Table 5.74

Means and standard deviations of education of father temperamental self-concept scores of children with hearing impairment at secondary school.

Education of father	N	Mean	SD
Highly educated	351	30.23	3.255
Educated	164	29.91	4.058
Under educated	49	28.41	4.087
Total	248	29.66	3.997

Table 5.74 shows means and standard deviations of education of fathers and temperamental self concept of children with hearing impairment Hearing impaired children who were having highly educated have better temperamental self concept and children whose fathers were educated and under educated were having low temperamental self concept.

Table 5.75

Summary of ANOVA for education of father and temperamental self concept scores of children with hearing impairment secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	68.735	2	49.368	3.144
Within groups	3846.813	245	15.701	
Total	3945.548	247		

* Significant at 0.05 level.

The table 5.75 shows that the ‘F’ ratio obtained is 3.144 which is statistically significant at 0.05 level. Thus the hypothesis is accepted. Hence it can be concluded that the education of father of children with hearing impairment is a significant factor in the development of temperamental self concept. To find out the significantly different pairs of educational status of parents of hearing impaired, post hoc test of least significant difference is done.

Table 5.76

Test of least significant difference

of pair wise comparison of education of father with relation to temperamental self-concept scores

Sl.No.	Pairs	Mean value	Mean difference	Critical difference
1.	Highly educated Educated	30.23 29.91	0.32	2.04
2	Highly educated Under educated	30.23 28.41	1.82	2.43
3	Educated Under educated	28.41	1.5	1.26*

* significance at 0.05 level.

The table 5.76 reveals that test of LSD for paired comparisons yielded significant difference at 0.05 levels between mean scores of temperamental self concepts of educated and under educated parents. The pairs educated and under educated showed a better temperamental self concept than the other two groups.

Table 5.77

Means and standard deviations of income of father and temperamental self concept scores of hearing impaired children at secondary school.

Income of father	N	Mean	SD
High income group	54	29.46	4.18
Medium income group	142	29.62	3.71
Low income group	52	29.08	4.56
Total	248	29.66	3.99

Table 5.77 shows the means and standard deviation of income of father and temperamental self concept of hearing impaired children. Hearing impaired children who were having high income, medium income and low income have the same temperamental self concept in this study.

Table 5.78
Summary of ANOVA for income of father and temperamental self - concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	7.67	2	3.83	0.24
Within groups	3937.87	245	16.07	
Total	3945.54	247		

* Significance at 0.05 level.

The above table 5.78 shows that the ‘F’ –ratio obtained is far below the critical value of significance at 0.05 levels. Thus the hypothesis is rejected. Hence it can be concluded that the temperamental self concept of children with hearing impairment does not differ significantly with respect to their income of father.

Table 5.79

Mean and standard deviation and 't' value of gender and educational self-concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	29.83	4.136	3.868
Female	123	27.76	4.281	

The table 5.79 shows. The mean standard deviation and 't' value of gender and educational self concept scores of children with hearing impairment. The obtained 't' value is statistically significant. It concludes that there is significance between the educational self concept scores of male and female student at 0.05 levels. Hence the hypothesis is accepted the hearing impaired males were having better educational self concept than female children. It may due to their high educational awareness at their age group.

Table 5.80

Means standard deviation and 't' value of type of school and self educational self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	28.39	4.129	2.198
Government	81	29.67	4.615	

* Significant at 0.05 level

The above table 5.80 shows the mean standard deviation and 't' value of educational self concept scores of aided and government school children with hearing impairment. Statistical test of significance shows there is significant difference between the educational self concept scores of aided

and government school children at o.05 level. Hence the hypothesis accepted. Government school children were having higher educational self concept and aided school children. It may be due to the efficiency of trained teachers and facilities available in the government schools.

Table 5.81

Means, standard deviation and 't' value of domicile and educational self-concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	28.49	4.412	1.717
Urban	79	29.49	4.079	

The above table 5.81 shows the mean standard deviation and 't' value of locality and educational self concept scores of children with hearing impairment. The obtained 't' value is statically not significant. Thus the hypothesis there is significant difference in mean scores of locality and educational self concept is rejected.

Table 5.82

Means and standard deviations of age group and educational self-concept scores of children at secondary school.

Age group	N	Mean	SD
13-14	117	29.28	4.317
15-16	115	28.93	4.123
17-18	16	24.44	3.558
Total	248	28.81	4.326

Table 5.82 shows the means and standard deviations of age group and educational self concept of children with hearing impairment. The younger children with hearing impairment were having better educational self concept than the order children. Children with hearing impairment between the age group 17-18 years were having lower educational self concept in the study. However, all the children who participated in the study were having mean scores above average. This indicates that hearing impaired children have same awareness about their educational needs like other children when their age increases.

Table 5.83

Summary of ANOVA for age group and intellectual self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	333.63	2	166.81	9.52
Within groups	4289.07	245	17.50	
Total	4622.71	247		

* Significant at 0.05 level.

The table 5.83 reveals that the obtained 'F' value is highly significant it indicated that the age of the children with hearing impairment is a significant factor in the development of their educational self concept. To find out the significantly different pairs of educational self-concept test of least significant difference is done.

Table 5.84

Test of least significant difference for pair-wise comparison of mean scores of educational self-concept scores of hearing impaired children with respect age.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	31.09 31.15	0.06	1.53
2	13-14 17-18	31.09 25.69	5.4	3.11*
3	15-16 17-18	31.15 25.69	5.46	2.20*

* Significant at 0.05 level

The table 5.84 reveals that test of LSD for paired comparisons yielded significant difference at 0.05 and 0.01 levels between the mean scores of the

age group 13-14 and 17-18, 15-16 and 17-18. These two groups showed better educational self concepts than the other pair 13-14 and 15-16 years.

Table 5.85

Means and standard deviations of severity of educational self-concept scores of hearing impaired children at secondary school.

Severity	N	Mean	SD
Mild	39	29.64	4.539
Moderate	121	28.66	4.267
Severe	83	28.75	4.236
Profound	5	26.80	5.762
Total	248	28.81	4.326

Table 5.85 shows means and standard deviations of educational self concepts with respect to severity of hearing loss of children with hearing impairment hearing impaired children who were having mild hearing loss have better educational self concept and children whose hearing loss with moderate and severe loss also possess higher educational self concept. The children with profound hearing loss were having low physical self-concept.

Table 5.86
Summary of ANOVA of severity of hearing loss and educational self concept of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	50.141	3	16.714	.892
Within groups	4572.569	244	18.740	
Total	4622.716	247		

*Significant 0.05 levels.

Table 5.86 shows that the F ratio obtained is far below the critical value at 0.05 level. Hence the hypothesis is rejected. It can be concluded that the educational self concept of children with hearing impairment does not differ significantly with respect to their severity of hearing loss.

Table 5.87
Shows mean and standard deviation of religion and educational self-concept scores of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	28.87	4.223
Christian	92	29.17	4.447
Muslim	33	27.55	4.265
Total	248	28.81	4.326

Table 5.87 shows means and standard deviation of religion and educational self concept score of children with hearing impairment. Christian children were having better educational self concept scores than Hindu children. Muslim children were having lower educational self concept scores in this study.

Table 5.88

Summary of ANOVA for religion and educational self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	65.392	2	32.696	1.758
Within groups	4557.318	245	18.601	
Total	4622.710	247		

*Significant 0.05 levels.

The table 5.88 shows that the obtained F- ratio is not statistically significant at 0.05 level. Thus the hypothesis is rejected. Hence it can be concluded that educational self concept of hearing impaired children does not differ significantly with respect to their religion.

Table 5.89

Means and standard deviation of occupation of father and educational self-concept scores of children with hearing impairment at secondary school.

Occupation of father	N	Mean	SD
Business	35	29.77	3.39
Government/ Private service	138	29.01	4.36
Agriculture/Labour work	75	27.97	4.57
Total	248	28.81	4.33

Table 5.89 gives means and standard deviations of educational self concept scores of children with hearing impairment with respect of occupation of father. Hearing impaired children who were having business and working at government and private sector have better educational self concept and children whose parents were agriculture/labour work were having low educational self concept.

Table 5.90

Summary of ANOVA for occupation of father educational self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	9062	2	45.31	2.45
Within groups	4532.08	245	18.49	
Total	4622.71	247		

* Significant at 0.05 levels.

Table 5.90 shows that the F-ration is not statistically significant at 0.05 level. Hence, the hypothesis is rejected. It can be concluded that the educational self concept of the children with hearing impairment does not differ significantly with respect to their business.

Table 5.91

Means and standard deviation of education of father and educational self-concept scores of children with hearing impairment at secondary school.

Education of father	N	Mean	SD
Highly educated	35	29.63	3.42
Educated	164	29.09	4.35
Under educated	49	27.29	4.52
Total	248	28.81	4.32

Table 5.91 gives means and standard deviation of educational self concept scores and education of father of children with hearing impairment. Hearing impaired children who were having highly educated and educated have better educational self concept and children whose fathers were under educated were having low educational self concept.

Table 5.92

Summary of ANOVA for education of father and educational self concept scores of children with hearing impairment.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	149.73	2	74.86	4.10
Within groups	4472.98	245	18.26	
Total	4622.71	247		

Table 5.92 shows that the 'F' ratio obtained is 4.10 which is statistically significantly at 0.05 levels. Thus the hypothesis is accepted. Hence it can be concluded that the education of father of children with hearing impairment is a significant factor in the educational self concept. To find out the significantly difference pairs of educational self concept, post hoc-test of least significant difference is done.

Table 5.93

Test of least significant difference for pair wise comparison of mean scores of educational self-concept scores of hearing impaired children with respect to education of father.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1.	Highly educated Educated	29.63 29.09	0.54	2.20
2	Highly educated Under educated	29.63 27.29	2.34	2.62
3	Educated Under educated 27.29	29.09	1.8	1.80*

*Significant at 0.05 levels.

The table 93 reveals that test of LSD for paired comparisons yielded significant difference at 0.05 level between the mean scores of the educated and under educated parents group. The pairs of educated and under educated showed a higher educational self concept than the other two groups in this study.

Table 5.94

Means and standard deviations of income of father and educational self-concept scores scores of hearing impaired children at secondary school.

Income of father	N	Mean	SD
High Income	54	29.57	4.012
Medium	142	28.79	4.286
Low	52	28.06	4.684
Total	248	28.81	4.326

Table 5.94 shows the means and standard deviations of income of father and educational self concept of hearing impaired children. Hearing impaired children who were having high income have better educational self concept and hearing impaired children whose parents income lies in the medium and low income were having low educational self concept in this study.

Table 5.95

Summary of ANOVA for income of father and educational self-concept scores of children with the hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	61.017	2	30.509	1.639
Within groups	4561.693	245	18.619	
Total	4622.710	247		

*Significant at 0.05 levels.

From the table 5.95 it is clear that the obtained ‘F’ ratio is below the

critical value of significant at 0.05 levels. Thus the hypothesis there is significant difference between income of father and educational self concept is rejected. Hence, it can be concluded that the educational self concept of children with hearing impairment does not differ significantly with respect to their father's income.

Table 5.96

Mean and standard deviation and 't' value of gender and moral self-concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	32.90	5.36	1.79
Female	123	31.67	5.412	

The table 5.96 shows the mean standard deviation and 't' value of gender and moral self concept scores of children with hearing impairment. The obtained 't' value is statistically not significant. It includes that there is no significance between the normal self concept scores of male and female student at 0.05 level. Hence the hypothesis is not accepted.

Table 5.97

Mean standard deviation and 't' value of type of school and moral self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	32.40	5.75	0.42
Government	81	32.09	4.68	
Total	3945.54	247		

The above table 5.97 shows the means, standard deviation and 't' value of moral self concept scores of aided and government school children with hearing impairment. Statistical test of significance shows there is no significant difference between moral self concept scores of aided and government school children at 0.05 levels. Hence the hypothesis is rejected.

Table 5.98

Means, standard deviations and 't' value of domicile and moral self-concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	32.14	5.17	0.67
Urban	79	32.63	5.91	

The table 5.98 shows the mean standard deviation and 't' value of locality and moral self concept scores of children with hearing impairment. The obtained 't' value is statistically not significant. Thus the hypothesis is rejected.

Table 5.99

Means and standard deviations of

age group and moral self concept of children at secondary school.

Age group	N	Mean	SD
13-14	117	31.09	4.50
15-16	115	31.15	3.82
17-18	16	25.69	4.62
Total	248	30.77	4.40

Table 5.99 shows the means and standard deviations of age group and moral self concept of children with hearing impairment. Hearing impaired children in the age group between 15-16 and 17-18 years were having better moral self concept and children with 17-18 years were having lower moral self concept. However the children who participated were having mean score above average.

Table 5.100

Summary ANOVA
for age group and moral self-concept scores of
children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	442.00	2	221.00	12.47
Within groups	4343.89	245	17.73	
Total	4785.89	247		

* Significant at 0.05 levels.

Table 5.100 reveals that the obtained ‘F’ value is highly significant at

0.05 level. Thus the hypothesis there is significant difference between age and moral self-concept scores of children with hearing impairment is accepted. To find out the significantly different pairs moral self concept with respect to age, post hoc test least significant difference is done.

Table 5.101

Test of least significant difference for pair wise comparison of mean scores of moral self-concept scores of hearing impaired children with respect to age.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	31.09 31.15	0.06	1.08
2	13-14 17-18	31.09 25.69	5.44	3.11*
3	15-16 17-18	31.15 25.69	5.46	1.42*

* Significant at 0.05 level

The table 5.101 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 levels and 0.01 level between mean scores of the two pairs of age group (13-14 and 17-18, 15-16, 17-18) of children with hearing impairment. The pairs 13-14 and 17-18; 15-16 and 17-18 age group shows a high level of moral self concept than the 13-14 and 15-16 pairs. Hence, it can be concluded that the moral self concept of hearing impaired children is having significantly better in the two groups of pairs.

Table 5.102

Means and standard

deviation of severity and moral self-concept scores of hearing paired children at secondary school.

Severity	N	Mean	SD
Mild	39	31.69	4.33
Moderate	121	30.77	4.34
Severe	83	30.55	4.36
Profound	5	27.20	5.93
Total	248	30.77	4.40

Table gives means and standard deviations of moral self concept with respect to severity of hearing loss. Hearing impaired children who were having mild category have better moral self concept than the moderate and severe categories children who were having profound loss have low moral self concept.

Table 5.103

Summary of ANOVA of severity of hearing and moral self-concept scores of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	100.76	3	33.58	1.75
Within groups	4685.13	244	19.20	
Total	4785.89	247		

* Significant at 0.05 level

Table 5.103 Shows that the F- ratio obtained is below the critical value

of significant at 0.05 levels. Hence the hypothesis is rejected. It can be concluded that more self concept of the children with hearing impairment does not differ significantly with respect to their severity of hearing loss.

Table 5.104

Means and standard deviations of religion and moral self-concept scores of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	30.69	4.48
Christian	92	31.23	4.15
Muslim	33	29.79	4.72
Total	248	30.77	4.40

Table 5.104 gives means and standard deviations of religion and moral self concept of hearing impaired children Christian children are having high moral self concept than Hindus. Muslim children are having low moral self concept in this study.

Table 5.105

Summary of ANOVA
for religion and moral self-concept
scores of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	5191	2	25.95	1.75
Within groups	4733.96	245	19.32	
Total	4785.89	247		

* Significant of 0.05 levels.

From the table 5.105 it is clear that the obtained F-ratio is not statistically significant. Thus the hypothesis is rejected. Hence, it can be concluded that the moral self concept of the hearing impaired children does not differ significantly with respect to their religion.

Table 5.106

Means and standard deviations of
occupation of father and moral self -concept
scores of hearing impairment children at secondary school.

Occupation of father	N	Mean	SD
Business	35	31.20	3.77
Government/ private service	138	30.96	4.46
Agriculture/Labour work	75	30.21	4.55
Total	248	30.77	4.40

Table 5.106 gives means and standard deviation of moral self concept scores of hearing impaired with respect to occupation of father. Children whose parents engaged in business were having high moral self concept than children with other sector like government/private and agriculture/ labour work parents.

Table 5.107

Summary of ANOVA
for occupation of father and moral self-concept
scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	34.89	2	17.44	0.90
Within groups	4751.00	245	19.39	
Total	4785.89	247		

* Significant at 0.05 level.

Table 5.107 shows that the F ratio is far below the critical value at 0.05 level of significant. Hence, the hypothesis is rejected. It can be concluded that the moral concept of children with hearing impairment does not differ significantly respect to their father’s occupation.

Table 5.108

Means and standard deviations of education of father and moral self-concept scores of hearing impaired children at secondary school.

Education of father	N	Mean	SD
Highly educated	35	30.86	4.10
Educated	164	31.14	4.35
Under educated	49	29.47	4.61
Total	248	30.77	4.40

Table 5.108 gives means and standard deviations of education of father and moral self concept of hearing impaired children. Hearing impaired children who were having highly educated have better moral self concept and children whose fathers were educated and under educated were having low moral self concept.

Table 5.109

Summary of ANOVA for education fathers and moral self-concept scores of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	105.63	2	52.81	1.75
Within groups	4680.26	240	19.10	
Total	4785.89	247		

*Significant at 0.05 levels.

The table 5.109 shows that the F-ratio obtained is 2.76 which is statistically not significant. Hence the hypothesis there is significant difference between moral self concept and education of father is rejected. It can be concluded that education of father is not an influencing factor in the development of moral concept of hearing impaired children.

Table 5.110

Means and standard deviations of income of father and moral self-concept scores of hearing impaired children at secondary school.

Income of father	N	Mean	SD
High income group	54	31.22	3.83
Medium income group	142	30.69	4.55
Low income group	52	30.52	4.59
Total	248	30.77	4.40

Table 5.110 shows the means and standard deviation of income of father and moral self concept of hearing impaired children. Children who were having high incomes shows better moral self concept than the other two groups mean scores 30.69 and 30.52 respectively.

Table 5.111

Summary of ANOVA for income of

father and moral self-concept scores of children with hearing impaired at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	15.21	2	7.60	0.39
Within groups	4770.68	245	19.47	
Total	4785.89	247		

* Significant at 0.05 levels.

The above table 5.111 shows that the 'F' ratio obtained is for below the critical value of significance at 0.05 levels. Thus the hypothesis is rejected. Hence, it can be concluded that the moral self concept of children with hearing impairment does not differ significantly with respect to their income of father.

Table 5.112

Means and standard deviation and 't' value of gender and intellectual self concept scores of hearing impaired children at secondary school.

Gender	N	Mean	SD	t
Male	125	29.39	4.66	3.83
Female	123	27.11	4.71	

The table 5.112 shows the mean standard deviation and 't' value of gender and intellectual self concept of children with hearing impairment. Statistical test of significance shows there is significant difference between intellectual self concept scores of boys and girls at 0.05 levels. Thus, the hypothesis there is significant difference between intellectual self concept and gender of hearing impaired is accepted.

Table 5.113

Means standard deviations and 't' value of domicile and intellectual self concept scores of hearing impaired children at secondary school.

Domicile	N	Mean	SD	t
Rural	169	27.84	4.80	2.00
Urban	79	29.15	4.78	

From the above table 5.113, the obtained 't' value is significant at 0.05 levels. It indicates that there is significant difference between intellectual self concept and locality of hearing impaired children at secondary level. Hence, the hypothesis is accepted. Urban children with hearing impairment were having better intellectual self concept than the rural children. This may due to the facilities available in the urban areas for learning activities and other physical experiences directly achieved.

Table 5.114

Mean, standard deviation and 't' value of type of school and intellectual self-concept scores of hearing impaired children at secondary school.

Type of school	N	Mean	SD	t
Aided	167	28.13	4.66	0.59
Government	81	28.52	5	

From table 5.114 the 't' value obtained is not statistically significant. Statistical test of significance shows there is no significant difference between the intellectual self concept scores of aided and government school children at 0.05 levels. Hence the hypothesis is rejected. The aided and government school children were having higher intellectual self concept. It may be due to

both types the schools have equal opportunities and facilities provided by the government agencies.

Table 5.115

Means and standard deviations of age and intellectual self-concept scores of children at secondary school.

Age group	N	Mean	SD
13-14	117	31.09	4.50
15-16	115	31.15	3.82
17-18	16	25.69	4.62
Total	248	30.77	4.40

Table 5.115 shows the means and standard deviations of age group and intellectual self concept of children with hearing impairment. The children between 13-14 and 15-16 age groups possess better intellectual self concept than the other group of 17-18 who were having low intellectual self concept.

Table 5.116

Summary of ANOVA for age and intellectual self-concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	333.36	2	166.81	9.52
Within groups	4289.07	245	17.50	
Total	4522.71	247		

* Significant at 0.05 levels.

Table 5.116 shows that the 'F' ratio obtained 9.52 is statistically significant at 0.05 level. Thus, the hypothesis is accepted. Hence it can be concluded that the age of the children with hearing impairment is a significant factor in the development of intellectual self concept. To find out the significantly different pairs with intellectual self concept post hoc test-test of least significant difference is done.

Table 5.117

Test of LSD for pair wise comparison of mean scores of intellectual self-concept scores of hearing impaired children with respect to age group.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1.	13-14 15-16	28.62 28.51	0.11	1.70
2	13-14 17-18	28.62 23.75	4.87	** 3.46
3	15-16 17-18	28.51 23.75	4.76	** 3.47

** Significant at 0.01 level.

In the above table 5.117 the least significant difference for paired comparison yielded significant difference at 0.01 levels between mean scores

of intellectual self concept of hearing impaired children with respect to their age. Between two pairs it is the age group 13-14 and 15-16 better intellectual self concept than then the children belongs to the age group 17-18 years.

Table 5.118

Means and standard deviations of severity of intellectual self-concept scores of hearing impaired children at secondary school.

Severity	N	Mean	SD
Mild	30	28.67	4.59
Moderate	121	28.24	4.68
Sever	83	28.18	5.10
Profound	5	26.80	6.41

Table 5.118 gives means and standard deviations of intellectual self concept with respect to severity of hearing loss of children with hearing impairment. Hearing impaired children who were having mild loss have better intellectual self concept and children whose hearing loss with moderate and severe loss also holds better intellectual self concept with difference in the mean scores.

Table 5.119

Summary of ANOVA for severity of hearing loss and intellectual self concept of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	17.67	3	5.89	0.251
Within groups	5731.80	244	23.49	
Total	5749.48	247		

* Significant at 0.05 levels.

Table 5.119 shows that the F-ratio obtained is for below the critical value of significant at 0.05 levels. Hence the hypothesis there is significant difference between severity of hearing loss and intellectual self concept of hearing impaired children is rejected. It can be concluded that the intellectual self concept of the children with hearing impairment does not differ significantly with respect to their severity of hearing loss.

Table 5.120

Means and standard deviations of religion and intellectual self concept of children with hearing impairment at secondary school.

Religion	N	Mean	SD
Hindu	123	27.87	4.75
Christian	92	29.09	4.79
Muslim	33	27.39	5.00
Total	248	28.26	4.82

Table 5.120 gives means and standard deviations of religion and intellectual self concept scores of children with hearing impairment. Christian children with hearing impairment were having better intellectual self concept scores than Hindu and Muslim children.

Table 5.121

Summary of ANOVA for religion and intellectual self-concept of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	106.38	2	53.19	2.30
Within groups	5643.10	245	23.03	
Total	5749.48	247		

* Significant at 0.05 level.

From the above table 5.121 the obtained F-ratio is not statistically significantly at 0.05 levels. Thus the hypothesis is not accepted. Hence, it can be concluded that the intellectual self concept of the hearing impaired children does not differ significantly with respect to their religion.

Table 5.122

Means and standard deviation of occupation of father and intellectual self concept of impaired children at secondary school.

Occupation of Father	N	Mean	SD
Business	35	28.91	4.70
Government/ Private services	138	28.54	4.75
Agriculture/Labour work	75	27.44	4096
Total	248	28.26	4.83

The above table 5.122 gives the means and standard deviations of intellectual self concept of hearing impaired children with respect to occupation of father. Children whose parents engaged in business sectors were having high intellectual self concept than children whose parents were having labour work were having low intellectual self concept. However all the children who participated were having mean score above average.

Table 5.123

Summary of ANOVA for occupation of father and intellectual self concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	75.94	2	37.98	
Within groups	5673.54	245	23.15	1.84
Total	5749.48	247		

* Significant at 0.05 level.

Table 5.123 shows that the F-ratio is below the critical value at 0.05 level of significant. Hence, the hypothesis is rejected. Hence, it can be concluded that the intellectual self concept of the children with hearing impairment does not differ significantly with respect to their occupation of father.

Table 5.124

Means and standard deviation of education of father and intellectual self concept of hearing impaired children at secondary school.

Education of father	N	Mean	SD
Highly educated	35	28.74	4.79
Educated	164	28.63	4.70
Under educated	49	26.65	4.99
Total	248	28.26	4.82

Table 5.124 gives means and standard deviations of education of father and intellectual self concept of hearing impaired children who were having highly educated and educated parents have higher intellectual self concept and children whose parents were under educated were having low intellectual self concepts.

Table 5.125

Summary of ANOVA for education of fathers and intellectual self concept scores of children with hearing impairment at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	157.64	2	78.82	3.45
Within groups	5591.84	245	22.82	
Total	5749.48	247		

* Significant 0.05 levels.

From the table 5.125 the obtained F- value is statistically significant at 0.05 levels. Thus the hypothesis is accepted. Hence, it can be concluded that the education of father of children with hearing impairment is a significant factor in the development of intellectual self concept.

Table 5.126

Test of least significant difference for pair wise comparison of mean scores of intellectual self concept of hearing impaired children with respect to education of father.

Sl. No.	Pairs	Mean value	Mean difference	Critical difference
1.	Highly educated Educated	28.74 28.63	0.11	2.46
2	Highly educated Under educated	28.74 26.65	2.09	2.93
3	Educated Under educated	28.63 26.65	1.98	1.20*

* Significant at 0.05 levels.

The table 5.126 revels that test of least significant difference for paired

comparisons yielded significant difference at 0.05 levels. The pair educated and under educated showed high intellectual self concept. This shows that the hearing impaired children who are having educated and under educated fathers having higher intellectual self concept.

Table 5.127

Means and standard deviations of income of father and intellectual self concept scores of hearing impaired children at secondary school.

Income of father	N	Mean	SD
High income	54	29.09	4.724
Medium income	142	28.06	4.66
Low income	52	27.94	5.34
Total	248	28.26	4.825

Table 5.127 shows that means and standard deviation of income of father and intellectual self concept of hearing impaired children. Children who were having high income have shown better intellectual self concept than medium come group,. Hearing impaired children whose parents income lies in low income were having low intellectual self concept in this study.

Table 5.128

Summary of ANOVA for income of father and intellectual self concept scores of hearing impaired children at secondary school.

Source of Variation	Sum of squares	df	Mean square	F
Between groups	48.57	2	24.58	1.04
Within groups	5700.91	245	23.27	
Total	5749.48	247		

* Significant at 0.05 levels.

From the table 5.128 it is clear that the obtained 'F' ratio is below the critical value of significant at 0.05 levels. Thus, the hypothesis there is significant difference between income of father and intellectual self concept is rejected. Hence it can be concluded that the intellectual self concept not significant with respect to their father's income.

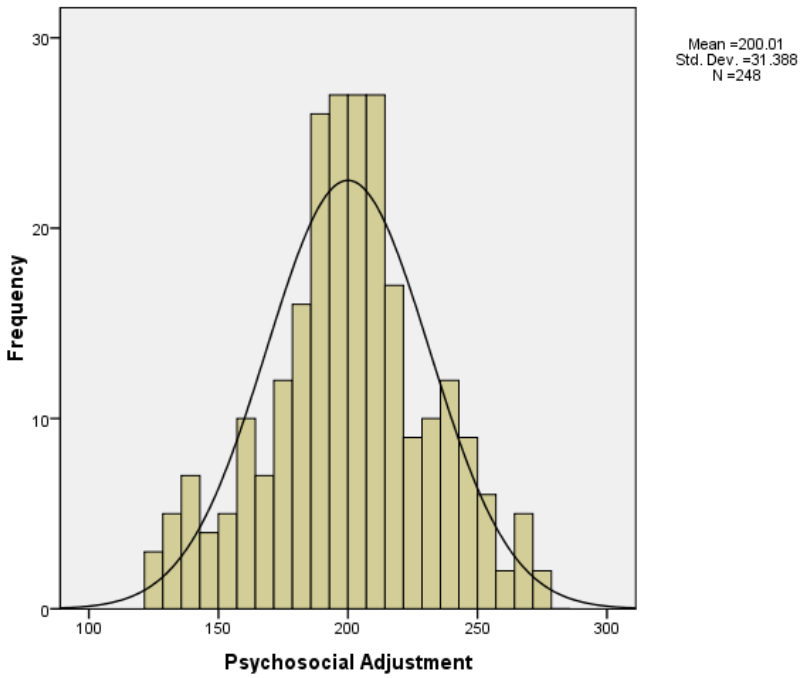

Figure 5.11. Graphical representation of total psychosocial scores of children with hearing impairment at secondary school.

Table 5.129

Mean and standard deviation of psychosocial adjustment scores of children with hearing Impairment at secondary schools.

Variable	N	Mean	Standard Deviation
Psychosocial Adjustment (Total)	248	200.00	31.38

Table 5.129 it is seen that the mean and standard deviation obtained for total psychosocial variable scores of children with hearing impairment are 200 and 31. 38 respectively. Thus it can be interpreted that the hearing impaired children at secondary school possess a above average level of psycho social adjustment.

5.3.2. Psychosocial adjustment of hearing impaired children with respect to total and each of the positive psychosocial adjustment variable

Thirty six items were included in psychosocial adjustment scale under three positive variables viz. self esteem, interaction and social adaptability. The maximum score that can be obtained by a respondent for the total positive psycho social adjustment scale is 180 (36×5) , maximum score 36 (36×1) and the middle score is 108 (36×3).

Each subscale consisted of twelve items. The maximum score that can

be obtained by a respondent for each of the subscales is 60(12 ×5) , minimum score (12×1) and the middle scores 36 (12×3) . The fill up scales were scored separately under each variables. The descriptive statistics for the scores obtained by the sample for the total and each of the positive variables are presented in the table 5.2.

Table 5.130

Mean and standard deviation of psycho total and each of the positive psycho social adjustment variables of children with hearing impairment at secondary school.

Variables	N	Mean	SD
Psycho social Adjustment (Total)	248	115.26	16.55
Self esteem	248	38.71	5.530
Interaction	248	39.08	5.465
Social Adaptability	248	37.47	5.558

The table 5.130 shows the mean values and standard deviation of the scores of psycho social adjustment and the three components, viz self esteem, interaction and social adaptability. These are 115.26 and 16. 55, 38.71and5.53, 39. 08 and5.46and 37.47 and 5.55 respectively. All the mean scores are higher them the respective middle scores. Hence it can be interpreted that the hearing impaired children at secondary level posses a moderate level of psycho social adjustment with respect to total and each of the positive psycho social adjustment variables.

Psychosocial adjustment of hearing impaired children with respect to total and each of the negative psycho social adjustment variables

The negative variables viz, anxiety, alienation and depression, Thirty six items were included in psycho social adjustment scale. The maximum score that can be obtained by a respondent for total negative psycho social is 180(36×5), minimum score 36 (36×1) nd the middle score is 108 (36×3).

Each subscale consisted of tweleve items. The maximum score that canbe obtained by a respondent for each of the subscale is 60(12 ×5) , minimum score (12×1) and the middle score is 36 (12×3) . The filled up scales were scored separately under each variables. The descriptive statistics for the scores obtained by the sample for the total and each of the variables are presented in the table.

Table 5.131

Mean and standard deviation of total and each of the negative psycho social adjustment variables.

Variables	N	Mean	SD
Psycho social Adjustment (Total)	248	84.75	16.043
Anxiety	248	32.29	5.412
Depression	248	23.96	5.055
Alienation	248	28.50	5.576

The table 5.131 gives mean values and standard deviation of the scores of total negative psycho social adjustment variables and that of the three components, viz anxiety, alienation and depression . These are 84.75 and 16.04, 32. 29 and 5.41, 23.96 and 5.05, 28.50 and 5.57 respectively. All the mean scores are lower than the respective middle scores.

Hence it can be interpreted that the children with hearing impairment at secondary level posses a low level of psycho social adjustment with respect to total and each of the negative psycho social adjustment variables.

Comparison of Psychosocial adjustment of hearing impaired children on the basis of gender, age group, domicile, severity, income, type of school, religion, occupation of father and education of father.

Here the total sample is divided into different sub samples based on gender, (boys/ girls), domicile of the children (rural/ urban) age group (13-14, 15-16, 17-18)severity (mild, moderate, severe and profound) Income (high, medium, and low) type of school (aided and government), religion (Hindu, Christian, Muslim) occupation of father

Mean and Standard deviations of Psycho social adjustments of children with hearing impairment with respect to gender

Table 5.132

Mean, Standard deviation and t-value of total psycho social adjustment of children with hearing impaired with respect to gender

Gender	N	Mean	SD	t' values
Boys	125	206.22	32.38	3.20
Girls	123	193.70	29.13	

The above table shows that the mean score of psycho social variables of the hearing impaired boys 206.22 and standard deviation 32. 38. Mean of girls is 193.70 and the standard deviation is 29.13. the obtained 't' values3.20 is greater than the table value (1.96) at 0.05 level. Therefore it

can be interpreted that the exist significant difference between the mean scores of psycho social adjustment of hearing impaired boys and that of girls.

Table 5.133

Means, standard deviations and 't' values of psychosocial adjustment of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	't'
Rural	169	197.81	30.79	1.62
Urban	79	204.72	32.31	

From the above table 5.133 the obtained 't' value is not statistically significant at 0.01 level or 0.05 level. This makes clear that hearing impaired children psychosocial adjustment do not differ significantly with respect to the domicile. This result shows that the domicile of children belongs is not a significant variable that decides the difference in the hearing impaired children psychosocial adjustment.

Table 5.134

Means and standard deviation of psychosocial adjustment scores of hearing impaired children with respect to type of schools.

Type of school	N	Mean	SD	't'
Aided	167	200.37	32.92	.25
Government	81	199.28	281.12	

Table 5.134 Shows that the obtained 't' value is not significant at 0.05 level. This indicates that mean scores of type of schools do not differ significantly. Thus the hypothesis there is significant difference between psychosocial adjustment scores and type of school is not accepted. It may

therefore be said that both aided and government schools were found to have psychosocial adjustment to the same extend.

Table 5.135

Means and standard deviations of psychosocial adjustment scores of children with hearing impairment with respect to age group

Age group	N	Mean	SD
13-14	117	203.82	30.23
15-16	115	200.83	30.37
17-18	16	166.25	28.45
Total	248	200.01	31.388

Table 5.135 shows that out of 248 hearing impaired children 117, student belongs to 13-14 age group, 115 children belongs 15-16 age group, and the rest 16 children belong to 17-18 category. The means of psychosocial adjustment of 13-14 group is 203.82, 15-16 category is 200.83 and 17 -18 groups are 166.25 respectively.

Table 5.136

Summary of ANOVA of psycho social adjustment scores of hearing impaired secondary school children with respect to age group

Source of variables	Sum of squares	df	Mean squares	F- ratio
Between groups	20012.872	2	10006.436	10.978
Within groups	28005.52	245	911.535	
Total	243338.964	247		

**P<.01

The F- ratio in the case of age group is 10.978 at level of significance. The obtained value exceeds the table values, therefore it is inferred that there exist significant differences among the three age groups with respect to their psychosocial adjustment.

Table 5.137

Test of least significant difference for pair-wise comparison of mean scores of hearing impaired children of psychosocial adjustment with respect to age group.

Sl. No	Pairs	Mean values	Mean difference	Critical difference
1	13-14 15-16	203.82 200.83	2.986	10.0
2	13-14 17-18	203.82 166.25	37.57	**29.31
3	15-16 17-18	200.83 166.25	34.58	**29.34

** Significant 0.01 level

Table 5.137 reveals that test of least significant difference for paired

comparisons yielded significant difference at 0.01 level between mean score of age group of 13-14 vs 15-16 and 15-16 vs 17-18. Among both pairs it is the age group of children belongs to 3-14 vs 17-18 and 15-16 vs 17-18 showed a higher psychosocial adjustment of children with hearing impairment. This shows that the age group of children with hearing impairment between 13-14 vs 17-18 and 15-16 vs 17-18 have significantly higher psychosocial adjustment than the age group of 13-14 Vs 15-16.

Table 5.138

Means and standard deviations of the psychosocial adjustment scores of hearing impaired children with respect to severity of hearing loss.

Severity of hearing loss	N	Mean	SD
Mild	39	204.41	29.006
Moderate	121	200.11	30.619
Severe	83	199.24	32.113
Profound	5	176.20	51.626

Table 5.138 Shows the means and standard deviations of the psychosocial adjustment scores of hearing impaired children studying in secondary schools with respect to the severity of hearing loss. The mean scores of hearing loss of the mild is 204.41 with a SD of 29.00, moderate it is 200.11 with SD of 30.619, severe it is 199.24 with SD of 32.11 and the mean score of profound is 176.20 wit a SD of 51.626. A close observation of mean value shows that as the severity of hearing loss decreases the mean scores of hearing loss also decreases.

Table 5.139
Summary of ANOVA of
total psycho social adjustment
scores of hearing impaired secondary school
children with respect to severity of hearing loss.

Source of variables	Sum of squares	df	Mean squares	F- ratio
Between groups	3639.944	3	1213.31	1.235
Within groups	239699.020	244	982.373	
Total	243338.964	247		

The obtained f value 1.235 is less than the table value at 0.01 level significance. Therefore it is inferred that there is no significant difference among the four groups with respect to their psycho social adjustment. To ascertain the groups which show difference in the mean psycho social adjustment scores the data were subjected to a post hoc comparison Least significant difference test. The details are shown table Comparison of each of the psycho social adjustment variables of children with hearing impairment with respect to Religion

Table 5.140

Means and standard deviations of psychosocial adjustment scores of hearing impaired children with respect to the religion.

Religion	N	Mean	SD
Hindu	123	198.54	29.306
Christian	92	203.54	32.974
Muslim	33	195.67	34.270
Total	248	200.01	31.388

Table 5.140 Shows that out of 248 children, 123 children belong to Hindu religion, 92 children belong to Christian religion, and the rest 33 belong to Muslim religion. The mean scores of Hindu is 198.67 respectively.

Table 5.141

Summary of ANOVA of psychosocial adjustment scores of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean square	F
Between groups	2038.21	2	1019.10	1.035
Within groups	241300.74	245	984.90	
Total	243338.964	247		

* Significant at 0.05 level

Table 141 Shows that the obtained ‘F’ value is not significant as it is found to be below the critical value of significant at 0.05 level. hence it can be concluded that there is no, significant difference between psychosocial adjustment of hearing impaired children with respect to their religion. This shows that the religion is not a deciding factor of the psychosocial adjustment of the hearing impaired in secondary school.

Table 5.142
Means and standard deviations of fathers education and psycho social adjustment of secondary school children with hearing impairment.

Education	N	Mean	SD
Highly Educated	35	202.97	30.83
Educated	164	202.84	31.02
Under educated	49	188.45	30.94

The above table gives the mean and standard deviations of psycho social adjustment scores of children with hearing impaired. Hearing impaired children who were having higher education and educated fathers having better psychosocial adjustment and children whose parents were having uneducated were having low psycho social adjustment in this study.

Table 5.143

Summary of ANOVA for fathers Education and psycho social adjustmentscores of secondary school children with hearing impairment

Source of variables	Sum of squares	df	Mean squares	F- ratio
Between groups	8165.315	2	4082.65	4.25
Within groups	235173.649	245	959.89	
Total	243338.964	247		

From the above table, the obtained F value 4.25 is statistically significance at 0.05 level . Thus the hypothesis is accepted. it can be concluded that the psycho social adjustment scores of the children with hearing impairment differ significantly with respect to their fathers education. It shows that there is a statistically significant difference in the mean

psychosocial adjustment scores of hearing impaired children when the children are classified with respect to their level of father's education . As the obtained 'F' ratio is found to be significant at 0.05 level. It can be concluded that education of fathers of hearing impaired student is a significant predictor of the psychosocial adjustment of children at secondary school. To find out the significantly different pairs with fathers education, post hoc test of least significant difference is done.

Table 5.144

Test of least significant difference for pairwise comparison of mean scores of psychosocial adjustment of hearing impaired children with respect to education of fathers.

Sl. No	Pairs	Mean values	Mean difference	Critical difference
1	Highly educated Educated	202.97 202.84	0.136	24.9
2	Highly educated Under educated	202.97 188.45	14.522	19.0
3	Educated Under educated	202.84 188.45	14.39	13.98*

* Significant 0.05 level

The least significant difference test for paired comparisons showed that the third group have a significant difference at 0.05 level between educated and under educated group. This indicates that a higher psychosocial adjustment of children with hearing impairment at secondary level exist in this group than the other two groups.

Table 5.145

Means and standard deviations of the psychosocial adjustment scores of hearing

impaired children with respect to father's occupation.

Father's occupation	N	Mean	SD
Business	35	206.86	31.19
Govt /private service/	138	201.64	30.15
Agriculture	75	193.83	33.051
Total	248	200.01	31.388

Table 5.145 Shows the mean and standard deviation of the psychosocial adjustment of the hearing impaired with respect to father's occupation. A close observation of the mean values from the above table shows the children parents who are undertaken agriculture have low man scores compared to children parents who are employed or business.

Table 5.146

Summary of ANOVA of the psychosocial adjustment scores of hearing impaired children with respect to fathers occupation.

Source of variation	Sum of squares	df	Mean square	F
Between groups	4874.04	2	2437.02	2.504
Within groups	238464.91	245	973.32	
Total	233338.96	247		

* Significant at 0.05 level

Table 5.146 Shows that the obtained F value is not statistically significant at 0.05 level or at 0.01 level. Hence it can be concluded that there is no statistically significant difference in psychosocial adjustment of hearing impaired children with respect to their fathers occupation.

Table 5.147

Means and standard deviation of psychosocial adjustment scores of hearing impaired children with respect to the family income.

Income of Father	N	Mean	SD
High	54	202.72	29.51
Medium	142	200.87	29.66
Low	52	194.87	37.36
Total	248	200.01	31.388

Table 5.147 Shows the means and standard deviation of psychosocial adjustment scores with respect to the family income of hearing impaired children.

Table 5.148

Summary of ANOVA of psychosocial adjustment scores of hearing impaired children with respect to the family income.

Source of variation	Sum of squares	df	Mean square	F
Between groups	1877.61	2	938.80	0.953
Within groups	241461.34	245	985.56	
Total	233338.96	247		

* significant at 0.05 level.

Table 5.148 Shows that the obtained ‘F’ value is not statistically significant as it is found to be far below the critical value of significance either at 0.01 level or at 0.05 level. Hence it can be concluded that there is no statistically significant difference between income of family of hearing impaired children and psychosocial adjustment.

Table 5.149

Test of least significant difference for pair wise comparison of mean scores of self esteem of hearing impaired children with respect to education of father.

Sl. No	Pairs	Mean values	Mean difference	Critical difference
1	Highly educated Educated	177.91 177.27	0.645	11.98
2	Highly educated Under educated	177.91 166.12	11.79	11.24
3	Educated under educated	177.27 166.12	11.15	*5.07

*Significant at 0.05 level

It can be seen from table 5.149 that the least significant difference test for paired comparisons shows that a significant difference at 0.05 level exists between highly educated Vs under educated fathers, of children with hearing impairment studying at secondary schools.

Table 5.150

Mean, standard deviation and 't' value of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to gender.

Gender	N	Mean	SD	t
Male	125	39.90	5.77	3.46
Female	123	37.51	5.02	

The table 5.150 shows that the obtained 't' value 3.46 is statistically

significant at 0.01 level of 0.05 level. This indicates that self esteem of hearing impaired children differ significantly with respect to the gender. This shows that gender is a significant variable in determining the self esteem of the hearing impaired children at secondary schools.

Table 5.151

Mean, standard deviation and 't' value of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	t
Rural	169	38.28	5.45	1.79
Urban	79	39.63	5.61	

From the above table 5.151 the obtained 't' value 1.79 is not statistically significant. This shows that the hearing impaired rural children and urban children do not differ significantly in their psychosocial adjustment related to the variable self esteem.

Table 5.152

Mean, standard deviation and 't' value of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to type of schools.

Type of school	N	Mean	SD	t
Aided	167	38.57	5.63	0.59
Government	81	39.01	5.33	

From the table 5.152 the obtained 't' value 0.59 is not statistically significant. This indicates that the hearing impaired children who are studying

at the aided school and the government school do not differ significantly in their psychosocial adjustments variable related to self esteem.

Table 5.153

Mean and standard deviations psychosocial adjustments variable self esteem scores of hearing impaired children with respect to age group.

Age group	N	Mean	SD
13-14	117	39.37	5.42
15-16	115	38.88	5.28
17-18	16	32.75	4.75

From the table 5.153 the obtained mean scores for the age group 13-14 is 39.37 with a standard deviation of 5.42. The group 15-16 having a meanscore of 38.88 with a standard deviation of 5.28 and the age group 17-18 having meanscores of 32.75 with a standard deviation of 4.75 respectively.

Table 5.154

Summary of ANOVA of psychosocial adjustment variables self esteem scores of hearing impaired children with respect to age group

Source of variation	Sum of squares	df	Mean square	F
Between groups	622.18	2	311.09	10.99
Within groups	6932.49	245	28.29	
Total	7554.67	247		

* Significant at 0.05 level

From the above table 5.154 the obtained f value 10.99 is significant at 0.05 level. hence it can be interpreted that the psychosocial adjustment variable self esteem scores of the children with hearing impairment differ significantly with respect to their age group. To identify the pairs having

significant differences least significant difference test is used.

Table 5.155

Test of least significant difference for pair wise comparison of mean scores psychosocial adjustment variable self esteem of student with hearing impairment with respect to age group.

Sl.No	Pairs	Mean values	Mean difference	Critical difference
1	13-14 vs 15-16	39.37 38.88	0.49	0.03*
2	13-14 vs 17-18	39.37 32.75	6.6	3.10*
3	15-16 Vs 17-18	38.88 32.75	6.1	3.93*

*Significant at 0.05 level

In the above table 5.155 the test of least significant difference for paired comparisons yielded significant difference at 0.05 level between mean scores of self esteem of hearing impaired children of the age group 13-14 vs 15-16 vs, 13-14 vs 17-18 and 15-16 vs 17-18. From these it can be inferred that age group plays an important role in deciding the self esteem of children with hearing impairment.

Table 5.156

Means and SD of psychosocial adjustment related to the variable self esteem of hearing impaired children with respect to severity of hearing loss.

Severity of hearing loss	N	Mean	SD
Mild	39	39.46	5.31
Moderate	121	38.77	5.44
Severe	83	38.54	5.48
Profound	5	34.40	9.15
Total	248	38.71	5.53

Table 5.156 shows the means and standard deviation of self esteem scores of hearing impaired children in secondary schools with respect to severity of hearing loss.

Table 5.157

Summary of ANOVA of self esteem scores of hearing impaired children at secondary schools with respect to severity of hearing loss.

Source of variation	Sum of squares	df	Mean square	F
Between groups	117.65	3	39.21	1.28
Within groups	7437.01	244	30.48	
Total	7554.67	247		

* Significant at 0.05 level

The F ratio 1.28 obtained is less than the table value of 0.05 level of significance. Therefore it is concluded that there exist no significant difference between and among the three groups with respect to their self esteem.

Table 5.158
Means and standard deviations of psychosocial adjustment variable self esteem

scores of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	38.67	5.22
Christian	92	39.11	5.79
Muslim	33	37.79	5.93
Total	248	38.71	5.53

Table 5.158 shows the mean and standard deviation of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to religion.

Table 5.159

Summary of ANOVA of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean square	F
Between groups	42.91	2	21.46	0.70
Within groups	7511.76	245	30.66	
Total	7554.67	247		

*significant at 0.05 level

Table 5.159 Shows that the ratio obtained is not statistically significant as it is found to be far below the critical value of significance either at 0.05 level or at 0.05 level. hence it can be concluded that there is no significant difference in the psychosocial adjustment variable self esteem of hearing impaired children with respect to religion.

Table 5.160
Means and standard deviation of psychosocial adjustment related to the variable self esteem of hearing impaired children with respect to educational status of father.

Education of father	N	Mean	SD

Highly educated	36	39.14	4.98
Educated	164	39.18	5.61
Under educated	49	36.86	5.31
Total	248	38.71	5.53

Table 5.160 Shows the means and stand deviations of psychosocial adjustment related to variable self esteem of children with hearing impairment at secondary schools.

Table 5.161
Summary of ANOVA of self esteem of children with hearing impairment at secondary school.

Source of variation	Sum of squares	df	Mean square	F
Between groups	210.51	2	105.25	3.51
Within groups	7344.15	245	29.97	
Total	7554.67	247		

* Significant at 0.05 level

The f ratio 3.51 is greater than the table value at 0.05 level of significance. Therefore it is inferred that there exist significant difference between and among three groups with respect to their self esteem,. Hence further analysis was necessary to locate the exact groups which show the difference sand least significant difference was done for the purpose. Result of least significant difference test for the significance of group pair is given in table 4.

Table 5.162

Test of least significant difference for pairwise. Comparison of mean scores of self esteem of hearing impaired with respect to education of father.

Sl. No	Pairs	Mean values	Mean difference	Critical differenc

				e
1	Highly educated Vs Educated	39.14	0.04	2.792
2	Highly educated Vs Under educated	39.14 36.86	2.28	3.33
3	Educated VS Under educated	39.18 36.86	2.32	2.47

* Significant at 0.05 level

The table 5.162 shows that the obtained ‘t’ value 3.31 is statistically significant at 0.05 or 0.01 level. This indicates that interaction of hearing impaired children differ significantly with respect to the gender. This shows that gender is a significant variable in deciding the self-esteem of the hearing impaired children at secondary schools.

Table 5.163

Means and standard deviations of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to occupation of father.

Occupation of father	N	Mean	SD
Business	35	39.77	5.09
Government/private employee	138	39.04	5.52
Agriculture	75	37.63	5.63
Total	248	38.71	5.53

Table 5.163 shows the means and standard deviations of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to occupation of father.

Table 5.164

Summary of ANOVA of self-esteem scores of hearing impaired children with respect to occupation of father.

Source of variation	Sum of squares	df	Mean square	F
Between groups	142.13	2	71.06	2.34
Within groups	7412.53	245	30.25	
Total	7554.67	247		

* Significant at 0.05 level

The f ratio obtained in the above table is less than the table value at 0.05 level significance. Therefore, it is inferred that there exist no significant between and among the three groups with respect to their self esteem.

Table 5.165

Means and standard deviations of psychosocial adjustment variable self esteem scores of hearing impaired children with respect to income of father.

Income of father	N	Mean	SD
High income	54	39.41	5.31
Medium income	142	38.84	5.22
Low income	52	37.65	6.45

From the above table 5.183 it is seen that the mean scores of high income group is 39.41 with a standard deviation of 5.31, the mean scores of medium income group is 38.84 with SD of 5.22 and the low income groups, it is 37.65 and 6.45 respectively.

Table 5.166

Summary of ANOVA of psychosocial adjustment variables self esteem scores of hearing impaired with respect to the income of father.

Source of variation	Sum of	df	Mean	F

	squares		**square**	
Between groups	86.59	2	43.29	1.42
Within groups	7468.08	245	30.48	
Total	7554.67	247		

*Significant at 0.05 level

Table 5.166 shows that the F ratio obtained is not statistically significant as it is found to be below the critical value of significance either at 0.01 level or at 0.05 level. Hence it can be concluded that there is no significant difference in the self esteem of hearing impaired high school children with respect to the income of father.

Table 5.167

Mean standard deviation and 't' value of psychosocial adjustment variable interaction of hearing impaired children with respect to gender.

Gender	**N**	**Mean**	**SD**	**t**
Male	125	40.20	5.620	3.31
Female	123	37.93	5.07	

The table 5.167 shows that the mean scores of variable interaction of hearing impaired children. The obtained 't' value 3.31 is statistically significant at 0.05 level. The male have mean score of 40.20 shows better psychosocial adjustment related to interaction. Therefore it can be interpreted that hearing impaired girls and boys differ significantly in their psychosocial adjustment related the variable interaction.

Table 5.168

Shows mean, standard deviation and 't' value of psychosocial adjustment variable

interaction of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	t
Rural	169	38.64	5.38	1.87
Urban	79	40.03	5.54	

The table 5.168 shows that the 't' value is less than the table value. It implies that there existence no significant difference between the mean scores of rural and urban hearing impaired children studying at secondary school.

Table 5.169

Shows mean, standard deviation and 't' value of psychosocial adjustment variable interaction of hearing impaired children with respect to type of school.

Type of school	N	Mean	SD	t
Aided	167	39.23	5.50	0.60
Government	81	38.76	5.39	

The table 5.169 shows that the obtained 't' value is found to be statistically not significant. This means, the psychosocial adjustment of hearing impaired children related to the variable interaction is do not differ significantly with respect to the type of school. However tha aided school children shows high interaction than the government school children.

Table 5.170

Shows mean and standard deviation of variable interaction scores of hearing impaired children with respect to type of school.

Age group	N	Mean	SD
13-14	117	39.74	5.39
15-16	115	39.22	5.15
17-18	16	33.25	5.04

Total	248	39.08	5.46

From the about table 5.170 it is seen that the main value of age group 13-14 is 39.74 with a standard deviation of 5.39, 15-16 group mean is 39.22 with a standard deviation 5.15 and group 16-17 mean is 33.25 with standard deviation 5.04 respectively. It can be concluded that the first group process higher interaction than the second group.

Table 5.171

Summary of ANOVA of interaction scores of hearing impaired children with respect to age.

Source of variation	Sum of squres	df	Mean square	F
Between group	597.51	2	298.75	10.79
Within groups	6778.87	245	27.66	
Total	7376.38	247		

* Significant at 0.05 level.

The obtained F ratio 10.79 is significant at 0.05 level, hence it can be concluded that there is significant difference between age group of hearing impaired children. To found out the significantly different pairs of age group Post-hoc test of least significant difference is done.

Table 5.172

Test of least significant difference of pairwise comparisons of mean scores of interaction of hearing impaired children with respect of age.

Sl. No,	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	39.74 39.22	0.52	1.91

2	13-14 17-18	39.74 33.25	6.49	3.88**
3	15-16 17-18	39.22 39.25	5.97	3.9**

** Significant at 0.05 level and 0.01 level.

Table 5.172 Revels that test of least significant paired comparison yielded significant difference at 0.05 level or 0.01 level between mean scores of age group between 13-14 Vs 17-18 Vs and 15-16 Vs 17-18. This indicate that the age group of children with hearing impairment between the two groups were having significantly higher psychosocial interation than the first group.

Table 5.173
Means and standard deviation of psychosocial variable interaction of hearing impaired children with respective severity.

Severity	N	Mean	SD
Mild	39	39.92	5.09
Moderate	121	39.08	5.34
Severe	83	38.92	5.58
Profound	5	35.20	8.81
Total	248	39.08	5.47

Table 5.173 shows the means and standard deviation of psychosocial adjustment variable interaction of hearing impaired children at secondary school with respect to severity. A close observation reveals that the mild category of children having better psychosocial adjustment variable related to interaction than the moderate category.

Table 5.174

Summary of ANOVA of interaction scores of hearing impaired children with respect to severity.

Source of variation	Sum of squares	df	Mean square	F
Between group	105.24	3	35.07	1.18
Within group	7271.15	244	29.80	
Total	7373.39	247		

* Significant at 0.05 level.

From the table 5.174 the obtained F value 1.17 is less than the table value at 0.05 level of significance therefore it is inferred that there exist no significant difference between groups with respect to severity of hearing loss of the children with hearing impairment.

Table 5.175

Means and standard deviation of interaction of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	39.10	5.09
Christian	92	39.40	5.83
Muslim	33	38.12	5.79
Total	248	39.8	5.47

Table 5.175 shows the means and standard deviation of psychosocial adjustment variable interaction of hearing impaired children of with respect religion, The Christian children were having better psychosocial interaction than the Hindu and Muslim hearing impaired children.

Table 5.176

Summary of ANOVA of interaction scores of hearing impaired children with respect to religion.

Source of variation	Sum squres	df	Mean squres	F
Between groups	39.92	2	19.96	0.67
Within groups	7336.46	245	29.94	
Total	7376.39	247		

* Significant at 0.05 level.

The obtained F value 0.67 is less than the table value at 0.05 level of significance therefore it is inferred that there exist no significant difference between the religion Hindu, Christian and Muslim with respect to religion,

Table 5.177

Means and standard deviation of interaction scores of hearing impaired children with respect to occupation of father.

Occupations of father	N	Mean	SD
Business	35	40.51	5.00
Government/Private service	138	39.38	5.39
Agriculture/ Labour work	75	37./85	5.62
Total	248	39.08	5.45

Table 5.177 shows mean and standard deviation of psychosocial adjustment variable related to interaction of hearing impaired children with respect to occupation of father. A close observation reveals that children of business people were having higher psychosocial adjustment related to interaction.

Table 5.178

Summary of ANOVA of interaction of hearing impaired children with respect to occupation of father.

Source of variation	Sum of squares	df	Mean square	F
Between groups	197.61	2	98.80	3.37
Within groups	7178.77	245	29.30	
Total	7376.38	247		

The above table 5.178 shows that there is significant difference in the mean scores of interaction of hearing impaired children with respect to occupation of father. As the obtained F-ratio is found to be significant at 0.05

level; it can be concluded that the occupation of father is significant factor deterring psychosocial variable interaction of hearing impaired children at secondary level. To find out the significantly different pairs of interaction post-hoc test –hoc least significant difference is done.

Table 5.179

Test of Least Significant Difference for Pairwise comparison of mean schools of variable interaction of hearing impaired children with respect to occupation of father.

Sl.No,	Pairs	Mean value	Mean difference	Critical difference
1	Business Government/Private service	40.51 39.38	1.13	0.10
2	Business Agriculture/Labour work	40.51 37.85	2.66	*3.07
3.	Government/Private service Agriculture/Labour work	39.38 37.85	1.53	*1.20

** Significant at 0.05 level.

In the above table 5.179 least significant difference for paired comparisons yielded significant difference at 0.05 level between mean scores of business and agriculture/ labour worker and government/private service and agriculture labour work. The two group showed better psychosocial interaction. Hence it can be concluded that hearing impaired children belongs to the group business Vs agriculture/ labour work and government/private service Vs agriculture labour work of parents having significantly better psychosocial adjustment in relation to self concept.

Table 5.180

Mean and standard deviation of psychosocial variable interaction and education of the father of the hearing impaired children at secondary school.

Education of father	N	Mean	SD
Highly educated	35	39.78	4.96
Educated	164	39.55	5.51
Under educated	49	37	5.24
Total	248	39.08	5.47

The above table 5.180 shows the means and standard deviation of children's parents education with respect to psychosocial variable interaction. A close observation reveals that highly educated parents mean score is 39.77 which means the children belongs to the group process better psychosocial adjustment in relation to the variable interaction.

Table 5.181

Summary of ANOVA of interaction variable of hearing impaired children with respect to education of father.

Source of variation	Sum of squres	df	Mean square	F
Between groups	265.71	2	132.86	4.58
Within groups	7110.68	245	29.02	
Total	7376.39	247		

* Significant at 0.05 level.

The table 5.181 shows that exist difference in the mean score of interaction of children with hearing impairment with respect to fathers education have the obtained F-ratio is found to be significant at 0.05 level it can be concluded that fathers education is significant factor and deterring

psychosocial adjustment variable related to interaction. To found out the significantly different pairs of father's education with interaction post-hoc test of least significant difference is done.

Table 5.182

Test of least significant difference for pair wise comparison of mean scores of variable interaction of the hearing impaired children with respect to education of father.

Sl.No.	Pairs	df	Mean square	F
Between groups	265.71	2	132.86	0.66
Christian	92	178.55	23.92	
Muslim	33	168.82	25.833	
Total	248		23.56	

*Significant at 0.05 level

Table 5.183

Mean and standard deviation of psychosocial variable interaction and income of the father of the hearing impaired children at secondary school.

Interaction	N	Mean	SD
high	54	39.91	5.384
medium	142	39.16	5.069
low	52	38.00	6.444
Total	248	39.08	5.465

The above table 5.183 shows the means and standard deviation of children's parents income with respect to psychosocial variable interaction. A close observation reveals that highly bound parents mean score is .733 which means the children belongs to the group process better psychosocial adjustment in relation to the variable interaction.

Table 5.184

Summary of ANOVA of interaction variable of hearing impaired children with respect to income of father.

Interaction	Sum of Squares	df	Mean Square	F
Between Groups	98.575	2	49.288	1.659
Within Groups	7277.812	245	29.705	
Total	7376.387	247		

* Significant at 0.05 level.

The table 5.184 shows that exist difference in the mean score of interaction of children with hearing impairment with respect to fathers income have the obtained F-ratio is found to be significant at 0.05 level it can be concluded that fathers income is significant factor and deterring psychosocial

adjustment variable related to interaction. To found out the significantly different pairs of father's income with interaction post-hoc test of least significant difference is done.

Table 5.185

Mean, standard deviation and 't' value of social adaptability scores of hearing impaired children with respect to gender

Gender	N	Mean	SD	t
Males	125	38.60	5.62	3.28
Females	123	36.33	5.26	

The table 5.185 shows that the mean score of social adaptability of hearing impaired boys is 38.60 and SD is 5.62. Girls have the mean score of 36.33 and standard deviation is 5.16. The 't' value calculated (3.28) is greater than the table value (2.58) implying a significant difference between the mean scores at 0.01 level.

Table 5.186

Means , standard deviations and 't' of value of psychological variables-social adaptability of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	T
Rural	169	36.95	5.53	2.193
Urban	79	38.59	5.47	

The table 5.186 shows that the mean score of psychosocial variable – social adaptability mean score of hearing impaired rural statements is 36.95 with a SD of 5.53. Urban children have the mean score of 38.59 with a SD of

5.47. The ‘t’ value 2.19 exceeds the table value (1.96). It implies that the difference between the mean score is significant at 0.05 level.

Therefore it can be interpreted that the hearing impaired boys and girls differ significantly in that psychological adjustment related to the variable social adaptability. Hearing impaired boys possess more psychosocial adjustment related to the variable social adaptability than that of hearing impaired girls.

Table 5.187

Mean, standard deviation and ‘t’ value of psychosocial adjustment variable – social adaptability of hearing impaired children with respect to type of school.

Type of school	N	Mean	SD	‘t’
Aided	167	37.61	5.74	0.56
Government	61	37.19	5.17	

Table 5.187 shows that the obtained ‘t’ value is found to be not statistically significant. This shows that social adaptability of hearing impaired children do not differ significantly with respect to the type of schools. This indicates that type of school is not a significant variable that decides the difference in the hearing impaired children social adaptability.

Table 5.188

Mean and standard deviation of social adaptability scores of hearing impaired children with respect to age group

Age group	N	Mean	SD
13-14	117	38.15	5.44
15-16	115	37.58	5.32
17-18	16	31.75	5.00

From the above table it is seen that the mean value of age group 13-14 is 38.15 with a standard deviation of 5.44, 15-16 group it is 38.15 with a standard deviation of 5.32 and 17-18 group it is 31.75 with a standard deviation of 5.00 respectively. It is clear that when the age group is low the social adaptability of hearing impaired children is high and the age group increases the mean value is decreases.

Table 5.189

Summary of ANOVA of social adaptability scores of hearing impaired children with respect to age group.

Source of variation	Sum of square	df	Mean square	F
Group	578.30	2	289.15	
Within groups	7051.49	245	28.78	10.04
Total	7629.80	247		

*Significant at 0.01 level

The F-ratio 10.04 obtained is greater than the table value at 0.01 level of significance. Therefore, it is inferred that there exist significant differences between the three groups with respect to their social adaptability. So further analysis was necessary to locate the exact groups which show the differences and the least significant difference was done for the purpose. Result of LSD

test for the significance of group pair is given in the table given below.

Table 5.190

Test of least significant difference for pair comparison of mean scores of so hearing impaired children respect to social adaptability.

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	13-14 Vs 15-16	38.15 37.58	0.057	2.34
2	13-14 Vs 17-18	38.15 31.75	6.39	14.88
3	15-16 Vs 17-18	37.58 31.75	5.83	3.96*

** Significant at 0.05 level

The table 5.190 reveals that test of LSD for paired comparisons yielded significant difference at 0.05 or 0.01 level between mean scores of age group between 15-16 Vs 17-18. This indicates that the age group of children with hearing impairment between 15-16 Vs 17-18 have significantly higher social adaptability than the other two groups.

Table 5.191
Means and standard deviations of social adaptability scores of hearing impaired children with respect to severity of hearing loss.

Severity of hearing loss	N	Mean	SD
Mild	39	38.15	5.10
Moderate	121	37.40	5.45
Severe	83	37.53	5.67
Profound	5	33.00	8.74
Total	248	37.47	5.58

Table 5.191 shows the means and SD of social adaptability scores of hearing impaired children with respect to severity. The highest mean value obtained by the mild groups and the other two groups, moderate and severe possess the same mean scores and the lower meanscore value is obtained by the profound category children.

Table 5.192

Summary of ANOVA of social adaptability scores of hearing impaired children with respect to severity of hearing loss.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	119.09	3	39.69	1.29
Within groups	7510.71	244	30.78	
Total	7629.80	247		

The obtained F-ratio 1.29 is less than the table value of 0.05 level of significance. Therefore it is impaired that there exist no significant difference between and among the three groups with respect to severity.

Table 5.193

Means and standard deviations of social adaptability scores of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	37.45	5.26
Christian	92	37.86	5.80
Muslim	33	36.48	5.97
Total	248	37.47	5.58

Table 5.193 Show the means and standard deviations of social adaptability of hearing impaired children at secondary schools with respect to religion.

Table 5.194

Summary of ANOVA of social adaptability scores of hearing impaired children with respect to religion

Source of variation	Sum of squares	df	Mean squares	F
Between groups	45.99	2	22.99	0.743
Within groups	7583.81	245	30.95	
Total	7629.80	247		

The obtained F-ratio 0.743 is less than the table value at 0.05 level of significance. Therefore it is inferred that there exist no significant difference between the three groups with respect to religion.

Table 5.195

Means and standard deviations of social adaptability of hearing impaired children with respect to occupation of father.

Occupation of father	N	Mean	SD
Business	35	39.23	5.14
Govt/Private services	138	37.67	5.42
Agriculture / labour work	75	36.29	5.78
Total	248	37.47	5.55

Table 5.195 shows the means and standard deviations of social adaptability of hearing impaired children with respect to occupation of their father. It is seen that the mean value is higher in the business groups, next to government/private sector employees. The lowest mean value is related to agriculture groups that is 36.29.

Table 5.196

Summary of ANOVA of social adaptability of hearing impaired children with respect to occupation of father

Source of variation	Sum of squares	df	Mean squares	F
Between groups	217.41	2	108.70	3.59
Within groups	7412.38	245	30.25	
Total	7629.80	247		

* Significant 0.05 level

The obtained F ratio is 3.59 is exceeds the table value at 0.05 level of significance. Therefore it is inferred that there exist significant differences between the three groups with respect to their social adaptability. To ascertain the groups which show difference in the mean social adaptability scores, the data were subjected to a post hoc comparison LSD.

Table 5.197

Test of Least significant difference for pair wise

comparison of mean scores of social adaptability scores of hearing impaired children with respect to occupation of father

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	Business Vs Govt/Private service	39.23 37.67	1.56	0.54**
2	Business Vs Agriculture	39.23 36.29	2.93	0.54**
3	Govt/Private Service Vs Agriculture	37.67 36.29	1.38	0.40*

** Significant at 0.01 level

The obtained F-values (business Vs /Private services=0.54; business Vs agriculture = 0.54 and govt/private services Vs agriculture = 0.40) exceeds the f value required for significant difference at 0.01 level. this indicates that among the three sets of paired groups compared, significant differences exist at 0.01 level in all cases. Thus it can be interpreted that the business Vs govt/private services gmsps and business Vs agriculture groups children possess more social adaptability than govt/private service Vs agriculture group.

Table 5.198

Mean and standard deviation of psychosocial adjustment variable social adaptability of hearing impaired children with respect to educational status of father.

Education of father	N	Mean	SD
Highly educated	35	38.63	5.12
Educated	164	37.86	5.54
Under educated	49	35.36	5.44
Total	248	37.47	5.55

Table 5.198 Shows the means and standard deviations of psychosocial adjustment variable social adaptability of hearing impaired children with respect to education of father. The highest mean value is obtained by the highly educated group is 38.63, and the lowest is under educated category (35.36). The educated category comprises of 37.86.

Table 5.199

Summary of ANOVA of psychosocial adjustment variable. Social adaptability of hearing impaired children with respect to education of father.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	292.75	2	146.37	4.88
Within groups	7337.04	245	29.94	
Total	7629.80	247		

* Significant at 0.05 level

The F ratio obtained in the case of different levels of social adaptability of hearing impaired exceeds the table value at 0.05 level or 0.01 level. Therefore, it is inferred that there exist significant differences among the three groups with respect to their education of father. To ascertain the groups which

show difference in the mean social adaptability scores, the data were subjected to post hoc comparison least significant difference.

Table 5.200

Test of least significant difference of mean score of social adaptability of hearing impaired children with respect to education of father.

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	Highly educated Educated	38.63 37.86	0.77	2.82
2	Highly educated Under educated	38.63 35.35	3.28	3.35
3	Educated Under educated	37.86 35.35	2.51	2.46*

* Significant at 0.05 level

The least significant difference test for paired comparisons showed that a significant difference at 0.05 level exists between educational and under educated fathers with a higher social adaptability of the hearing impaired children.

Table 5.201

Mean and standard deviations of psychosocial variable social adaptability of hearing impaired children with respect to income of father.

Income of father	N	Mean	SD
High income	54	38.07	5.25
Medium income	142	37.54	5.26
Low income	52	36.65	6.57
Total	248	37.47	5.55

Table 5.201 Shows the means and standard deviations of social adaptability scores of hearing impaired children with respect to their income of father.

Table 5.202

Summary of ANOVA of psychosocial variable – social adaptability of hearing impaired children with respect to income of father.

Source of variation	Sum of squares	df	Means square	F
Between groups	55.08	2	27.54	0.89
Within groups	7574.71	245	30.91	
Total	7629.80	247		

The obtained f-ratio is less than the table value at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three groups with respect to their income of father.

Table 5.203

Means, standard deviations and 't' value of anxiety scores of hearing impaired children with respect to gender

Gender	N	Mean	SD	t
Male	125	32.90	5.36	1.79
Female	123	31.67	5.41	

The table 5.203 shows that the obtained t value (1.79) is not statistically significant. This shows that anxiety of hearing impaired children do not differ significantly with respect to gender. This shows that gender is not a significant variable that decides the difference in the hearing impaired children anxiety.

Table 5.204

Means, SD and 't' value of anxiety scores of hearing impaired children with respect to domicile

Domicile	N	Mean	SD	't'
Rural	169	32.14	5.17	.673
Urban	79	32.63	5.91	

Table 5.204 Shows that the obtained 't' value is found to be not significantly with respect to the domicile. This indicates that domicile not a significant variable that decides the difference in the hearing impaired children anxiety.

Table 5.205

Mean, Standard deviations and 't' value of anxiety scores of hearing impaired children with respect to type of school.

Type of school	N	Mean	SD	't'
Aided	167	32.40	5.74	.421
Government	81	32.09	4.67	

Table 5.205 shows that the obtained 't' value is found to be not statistically significant. This shows that anxiety of hearing impaired children do not differ significantly with respect to the type of schools where they are studying. This indicates that type of school is not a significant variable that decides the difference in the hearing impaired children anxiety.

Table 5.206

Means and SD of psychosocial adjustment variable anxiety scores of hearing impaired children with respect to age group.

Age group	N	Mean	SD
13-14	117	32.74	5.08
15-16	115	32.64	5.38
17-18	16	26.56	4.91
Total	248	32.29	5.41

The mean and the standard deviation scores obtained for anxiety in hearing impaired children are 32.74 and 5.08 for the 13-14 group, 32.64 and 5.38 for the 15-16 age group and 26.56 and 4.91 for the 17-18 age group respectively.

Table 5.207

Summary of ANOVA of psychosocial adjustment variable

anxiety scores of hearing impaired children with respect to age group.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	562.40	2	281.20	10.32
Within groups	6671.10	245	27.22	
Total	7233.51	247		

* Significant 0.05 level

The table 5.207 shows that thee is significant difference in the mean score of anxiety of hearing impaired children. As the obtained ‘f’ ratio is found to be significant at 0.05 level it can be said that the anxiety is a significant factor in determining psychosocial adjustment of hearing impaired children. To found out the significantly difference pairs of anxiety, post hoc test of least significant is done.

Table 5.208

Test of least significant difference for pairwise comparison of mean scores of anxiety hearing impaired children with respect of age group.

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	32.74 32.64	0.1	1.89
2	13-14 17-18	32.74 26.56	6.18	**3.85
3	15-16 17-18	32.64 26.56	6.08	**3.85

** Significant at 0.05 level

The table 5.208. reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 or 0.01 level between meanscore of age group 13-14 Vs, 17-18 respectively. These two

groups showed a higher anxiety. This indicates that the age group of children with hearing impairment between 13-14 Vs 17-18 and 15-16 Vs 17-18 have significantly higher anxiety them the age group of 13-14 Vs 15-16 category.

Table 5.209

Means and standard deviations of anxiety scores of hearing impaired children with respect to severity.

Severity of hearing loss	N	Mean	SD
Mild	39	32.82	4.59
Moderate	121	32.23	5.24
Severe	83	32.41	5.73
Profound	5	27.80	8.90
Total	248	32.29	5.412

Table 5.209 shows the means and standard deviations of anxiety scores of hearing impaired children with respect to severity of hearing loss. The highest mean values obtained by the mild, moderate and the severe categories of children and the lowest mean value is obtained by the profound category.

Table 5.210

Summary of ANOVA of anxiety scores of hearing impaired children with respect to severity of hearing loss.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	113.37	3	37.79	0.277
Within groups	7120.13	244	29.18	
Total	7233.51	247		

* Significant at 0.05 level

The F –ratio 0.27 obtained is less than the table value at 0.05 level of significance. Therefore it is inferred that there exist no significant difference between and among the three groups with respect to their severity.

Table 5.211

Means and standard deviations of anxiety scores of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	31.80	5.17
Christian	92	33.03	5.52
Muslim	33	32.09	5.87
Total	248	32.29	5.41

Table 5.211 shows the means and standard deviations of psychosocial adjustment variable related to anxiety with respect to religion of hearing impaired children studying at secondary level.

Table 5.212

Summary of ANOVA of anxiety scores of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	81.96	2	40.98	1.40
Within groups	7151.54	245	29.19	
Total	7233.51	247		

The obtained f-ratio 1.40 is less than the table value of 0.05 level of significance. Therefore it is inferred that there exist no significant difference between and among the three groups with respect to religion.

Table 5.213

Shows the means and standard deviations of anxiety scores of hearing impaired children with respect to education of father.

Education of father	N	Mean	SD
Highly educated	35	32.14	5.75
Educated	164	32.76	5.28
Under educated	49	30.86	5.43
Total	248	32.29	5.41

The table shows that the means and standard deviation of children ‘s parents education with respect to anxiety. The educated group shows high anxiety than the other two groups.

Table 5.214

Summary of ANOVA of anxiety scores of hearing impaired children with respect to education of father.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	136.96	2	68.49	2.36
Within groups	7096.53	245	28.96	
Total	7233.51	247		

The obtained F-ratio is less than the table value 3.02 at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three groups with respect to their education of father.

Table 5.215

Means and standard deviations of anxiety scores of hearing impaired children with respect to occupation of father.

Occupation of father	N	Mean	SD
Business	35	32.86	5.82
Govt/private service	138	32.51	5.14
Agriculture	75	31.64	5.70
Total	248	32.29	5.41

Table 5.215 Shows the means and standard deviations of anxiety scores of hearing impaired student at secondary with respect to their occupation of father.

Table 5.216

Summary of ANOVA of anxiety scores hearing impaired children with respect to occupation of father.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	49.45	2	24.72	0.84
Within groups	7184.05	245	29.32	
Total	7233.51	247		

The obtained F-ratio is less than the table value at 0.05 level of significance. Hence it can be concluded that there exist no significant difference between the three groups with respect to their occupation of father.

Table 5.217

Mean and standard deviation of anxiety scores of hearing impaired children with respect to income of father.

Income of father	N	Mean	SD
High income	54	32.54	5.38
Medium income	142	32.32	4.97
Low income	52	31.71	6.54
Total	248	32.29	5.41

Table 5.217 shows the means and standard deviations of anxiety scores of hearing impaired children with respect to income of father.

Table 5.218

Summary of ANOVA of anxiety scores of hearing impaired s children with respect to income of father.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	22.92	2	11.46	0.39
Within groups	7210.58	245	29.43	
Total	7233.51	247		

The obtained F-ratio is less than the table value at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three groups with respect to their income of father.

Table 5.219
Means, SD and t value of psychological adjustment variable alienation of hearing impaired children with respect to gender.

Gender	N	Mean	SD	t
Boys	125	29.50	5.76	2.88
Girls	123	27.48	5.20	

From the table 5.219 it is seen that the mean score of psychosocial adjustment variable- alienation of hearing impaired boys is 29.50 with a SD of 5.76. Girls have the mean score of 27.48 with a SD of 5.20. The ‘t’ value is greater than the table value (2.88). It implies that the difference between the mean score is significant at 0.05 level.

Table 5.220

Means, standard deviation and ‘t’ value of psychosocial adjustment variable alienation of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	t
Rural	169	28.20	5.47	1.243
Urban	79	29.14	5.76	

From the above table, the obtained ‘t’ value is not statistically significant. This makes clear that hearing impaired children alienation do not differ significantly with respect to their domicile. This results shows that the domicile of children is not a significant variable that decides the difference in the hearing impaired children alienation.

Table 5.221

Means, standard deviations and ‘t’ value of psychosocial adjustment variable – Alienation of hearing impaired children with respect to type of school.

Type of school	N	Mean	SD	t
Aided	167	28.49	5.93	0.020
Government	81	28.51	4.78	

Table 5.221 shows that the obtained ‘t’ value is not statistically significant at 0.05 level. This indicates that mean scores of type schools do not differ significantly. Thus the hypothesis there is significant difference between psychosocial adjustment variable alienation with respect to type of school is not accepted. It may therefore he said that both aided and government school children were found to have alienation to the same extent.

Therefore it can be interpreted that the hearing impaired boys and girls differ significantly in their psychosocial adjustment related to the variable

alienation. Boys possess greater psychosocial adjustment related to the variable alienation, since the mean score for boys is greater than that of girls.

Table 5.222

Means and standard deviation of psychosocial adjustment variable –alienation of hearing impaired children with respect to age group

Age group	N	Mean	SD
13-14	117	29.16	5.35
15-16	115	28.63	5.47
16-17	16	22.69	4.81
Total	248	28.50	5.57

Table 5.222 Show the means and standard deviations of psychosocial adjustment variable – alienation of hearing impaired children with respect to their age group.

Table 5.223

Summary of ANOVA of psychosocial adjustment variable alienation of hearing impaired children with respect to age group

Source of variation	Sum of squares	df	Mean square	F
Between groups	593.72	2	296.86	0.26
Within groups	7086.27	254	28.92	
Total	7679.99	24		

From the table 5.223 the obtained F ratio 10.26 is statistically significant at 0.05 level or 0.01 levels the means mean score the alienation of hearing impaired children on the basis of age group indicated that they differ among themselves significantly. To ascertain the groups which show

difference in the man alienation scores, the data were subjected to post hoc comparison LSD test. The details are shows in table 4. ( )

Table 5.224

Test of LSD for pairwise comparison of mean score of alienation of hearing impaired children with respect to age group.

Pairs	Mean value	Mean difference	Critical difference
13-14 15-16	29.16 28.63	0.53	0.25**
13-14 17-18	29.16 22.69	6.47	5.22*
15-16 17-18	28.63 22.69	5.94	** 3.97

** Significant at 0.01 level

The obtained critical values (13-14 vs 15-17=0.25, 13-14vs 17-18=5.22; 15-16 vs 17-18-3.97) indicates that among the three paired groups compared , significant differences exist in all cases at 0.01 or 0.05 level. the group having high psychosocial adjustment variable alienation, possess in the 13-14 vs 17-18 groups (5.22) than that of the 15-16 vs 17-18 groups (3.97) and that of the 13-14 vs 15-16 (0.25) groups. This substantiate that the age group influences the alienation of hearing impaired children at secondary level.

Table 5.225

Mean and standard deviations of alienation of hearing impaired children with respect to severity of hearing loss.

Severity of loss	N	Mean	SD
Mild	39	28.92	5.06
Moderate	121	28.60	5.59
Severe	83	28.42	5.560

Profound	5	23.80	8.13
Total	248	28.50	5.576

Table 5.225 Shows the means and SD of alienation scores of hearing impaired children with respect to severity. The highest mean scores obtained by the three categories (mild, moderate , and severe) and the lowest mean score is 23-80 for the profound category.

Table 5.226

Summary of ANOVA of psychosocial variable alienation of hearing impaired children with respect to severity of hearing loss.

Source of variation	Sum of squares	df	Mean square	F
Between groups	119.22	3	39.74	1.28
Within groups	7560.76	244	30.96	
Total	7679			

* Significant at 0.05 level

The obtained F ratio 1.28 is less than the table value at 0.05 level of significance. Therefore it is inferred that there exist no significant difference between the three groups with respect to seventy.

Table 5.227

Means and standard deviation of psychosocial adjustment variable alienation of hearing impaired children in relation to their religion

Religion	N	Mean	SD
Hindu	123	28.35	5.27
Christian	92	28.95	5.88
Muslim	33	27.79	5.84

Total	248	28.50	5.67

The above table shows the mean and standard deviation of the variable of alienation of hearing impaired children with respect their religion. The children belonged to Christian possess high level alienation compared to the Hindu and Muslim children.

Table 5.228

Show the means and SD of psychosocial variable alienation, of hearing impaired children with respect to their religion

Source of variation	Sum of squares	df	Mean score	F
Between groups	37.78	2	18.89	0.60
Within groups	7642.21	245	31.19	
Total	7679.99	247		

The obtained F value 0.60 is less than the table value at 0.05 level of significance. Therefore it is inferred that there exist no significant difference between the three groups with respect to religion.

Table 5.229

Means and standard deviations scores of variable alienation of hearing impaired children with respect to educational status of father.

Education of father	N	Mean	SD
Highly educated	35	29.00	5.63
Educated	164	28.94	5.58
Under educated	49	26.65	5.21

Total	248	28.50	5.57

Table 5.229 shows the means and SD of variable alienation of hearing impaired children with respect to educational status of their father. The mean value of highly educated group is 29.00 with a SD of 5.63, the mean value of educated group is 28.94 with a SD of 5.58 and it is 26.65 with a SD of 5.21 for the under educated groups.

Table 5.230

Summary of ANOVA of psychosocial adjustment variable –alienation of hearing impaired children with respect to education of father.

Source of variation	Sum of squares	df	Mean square	F
Between groups	207.50	2	103.75	3.40
Within groups	7472.49	245	30.50	
Total	7679.99	247		

* Significant at 0.05 level

The F ratio obtained in the case of different levels of alienation of hearing impaired exceeds the table value at 0.05 level. Therefore, it is inferred that there exist significant differences among the three groups with respect to their education of father. To ascertain the groups which show difference in the mean alienation scores, the data were subjected to post hoc comparison least significant difference test.

Table 5.231

Test of least significant difference of mean score of alienation of hearing impaired children with respect to education of father.

Pairs	Mean value	Mean difference	Critical difference

Highly educated Educated	29.00 28.94	0.06	2.82
Highly educated Under educated	29.00	2.35	3.35
Educated Undereducated	28.94 26.65	2.29	2.47

* Significant at 0.05 level

The least significant difference test for paired comparisons shows that a significant difference at 0.05 level exist between highly educated and under educated fathers of children with hearing impairment having alienation with respect to education.

Table 5.232

Means and standard deviations scores of alienation of hearing impaired children with respect to occupation of father.

Occupation of father	N	Mean	SD
Business	35	29.71	5.74
Govt/Private services	138	28.75	5.53
Agriculture/ Labour	75	27.45	5.4
Total	248	28.50	5.57

Table 5.233 Shows the means and SD of alienation of hearing impaired children with respect to occupation of father. It s seen that the mean value of government/private service is 28.75 with a SD of 5.53, the business of groups means is 29.71 with a SD 5.74 and for the agriculture group the mean is 27.45 with a SD of 5.47 respectively.

Table 5.233

Summary of ANOVA of alienation of hearing impaired children with respect to occupation of father

Source of variation	Sum of squares	df	Mean square	F
Between groups	142.64	2	71.32	2.31
Within groups	7537.35	245	30.78	
Total	7679.99	247		

From the table 5.233 the obtained F ratio is less than the table value at 0.05 level of significant. Therefore concluded that there exist no significant difference between the three groups with respect to occupation.

Table 5.234

Mean and standard deviation of psychosocial adjustment variable alienation of hearing impaired children with respect to income of father

Income of father	N	Mean	SD
High income	54	28.52	4.97
Medium income	142	28.86	5.47
Low income	52	27.48	6.36
Total	248	28.50	5.57

Table 5.234 Shows the means and standard deviation of alienation scores of hearing impaired children with respect to their income of father.

Table 5.235

Summary of ANOVA of psychosocial variable-alienation of hearing impaired children with respect to income of father.

Source of variation	Sum of squares	df	Mean square	F
Between groups	72.35	2	36.17	1.16
Within groups	7607.64	245	31.05	
Total	7679.99	247		

* Significant at 0.05 level

The obtained F ratio is less than the table value at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three income groups with respect to their income of father.

Table 5.236
Means, standard deviations and
t value of psychosocial adjustment variable
depression of hearing impaired children with respect to gender.

Gender	N	Mean	SD	t
Boys	125	24.78	5.13	2.58
Girls	123	23.14	4.85	

From the table 5.236 It is seen that the mean score of psychosocial adjustment variable depression of hearing impaired boys is 24.78 with a SD of 5.13. Girls have the mean score of 23.14 with a SD of 4.85. The t value calculated (2.58) is lesser than the table value (2.58). it implies that the difference between the mean score is significant. Therefore it can be interpreted that the hearing impaired boys and girls differ significantly in their psychosocial adjustment related to the variable depression. Boys possess greater psychosocial adjustment related to the variable depression, since the mean score for boys is greater than that of girls.

Table 5.237

Means, standard deviations and
t value of psychosocial adjustment variable-
depression – of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	t
Rural	169	23.69	4.87	1.23
Urban	79	24.54	5.40	

The table 5.237 Shows that the mean score of psychosocial variable depression of hearing impaired rural is 23-69 and SD 4.87. Urban have the mean score of 24.54 and SD 5.40. The obtained t value (1.23) is less than the

table value (2.58) hence there exist no significant difference between the meanscores at 0.05 level.

Table 5.238

Means, standard deviations and t value of psychosocial adjustment variable depression of hearing impaired children with respect to type of schools.

Type of school	N	Mean	SD	t
Aided	167	23.98	5.15	0.05
Government	81	23.94	4.87	

From the above table 5.238 it is seen that the obtained mean scores of psychosocial adjustment variable depression aided school is 23.98 with a SD of 5.15. The government school have the mean scores of 23.94 with a SD of 4.87. The 't' value is 0.05 is less than the table value (2.58), implying there exist no significant difference between mean scores at 0.05 level.

Table 5.239
Means and standard deviations of psychosocial adjustment variable-depression of hearing impaired children with respect to age group.

Age group	N	Mean	SD
13-14	117	24.32	4.86
15-16	115	24.24	5.03
17-18	16	19.31	4.54
Total	248	23.96	5.05

The table 5.239 shows that the mean score of psychosocial adjustment variable depression of hearing impaired children age group 13-14 is 24.32 with a SD of 4.86. The 15-16 age group's mean is 24.24 with a SD of 5.09,

and the 17.18 age groups mean score is 19.3 and SD 4.54 respectively.

Table 5.240

Summary of ANOVA of psychosocial adjustment variable depression scores of hearing impaired children with respect to age group.

Source of variation	Sum of square	df	Means squares	F
Between groups	370.39	2	185.19	
Within groups	5942.27	245	24.25	7.63
Total	6312.67	247		

** Significant at 0.01 level

The F ratio obtained in the case of different categories of age group of hearing impaired children exceeds the table value, 0.05 level or 0.01 level of significance. Therefore, it is inferred that there exist significant differences among the three groups with respect to their depression. To ascertain the groups which show difference in the mean depression scores, the data were subjected to a post hoc comparison LSD’s test.

Table 5.241

Test of least significant difference for pairwise comparison of mean scores depression of hearing impaired children with respect to age group.

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	24.32 24.24	0.08	1.79
2	13-14 17-18	24.3219.31	5.01	**3.63
3	15-16 17-18	24.24 19.31	4.93	**3.64

** Significant at 0.01 level

The table 5.241 reveals that test of LSD for paired comparisons yielded significant difference at 0.05 or 0.01 level between mean scores of age group between 13-14 Vs 17-18 and 15-16 Vs 17-18. This indicates that the age group of children with hearing impairment of the above two groups have significantly higher depression than compared to the group 13-14 Vs 15-16 group.

Table 5.242

Means and standard deviations of depression scores of hearing impaired children with respect to severity

Severity	N	Mean	SD
Mild	39	24.36	4.47
Moderate	121	23.87	5.00
Severe	83	24.04	5.24
Profound	5	22.00	8.09
Total	248	23.96	5.05

Table 5.242 Shows the means and standard deviations of depression scores of hearing impaired children with respect to severity of hearing loss.

The highest mean value is for the mild and severe categories, the moderate group mean values is 23-87 and the mean value for profound group is 22.00 respectively.

Table 5.243

Summary of ANOVA psychosocial adjustment scores of depression of hearing impaired children with respect to severity

Source of variation	Sum of squares	df	Mean squares	F
Between groups	26.92	3	8.97	0.348
Within groups	6285.75	244	25.76	
Total	6312.67	247		

The F ratio obtained 0.34 is less than the table value at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three groups with respect to severity of hearing loss.

Table 5.244

Means and SD of psychosocial adjustment variable depression of hearing impaired children with respect to religion

Religion	N	Mean	SD
Hindu	123	23.44	4.63
Christian	92	24.86	5.21
Muslim	33	23.42	5.85
Total	248	23.96	5.05

Table 5.244 Shows the means and standard deviations of psychosocial adjustment variable related to depression with respect to religion of hearing impaired children.

Table 5.245
Summary of ANOVA of depression of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean square	F
Between groups	117.15	2	58.57	2.316
Within groups	6195.51	245	25.28	
Total	6312.67	247		

From the above table 5.245 the obtained F-ratio 2.31 is less than the table value at 0.05 level of significance. Therefore it is inferred that there exist no significant difference between and among the three groups with respect to religion.

Table 5.246

Mean and standard deviations of depression scores of hearing impaired children with respect to education of father.

Education of father	N	Mean	SD
Highly educated	35	23.66	4.99
Educated	164	24.49	5.02
Under educated	49	22.41	4.95

Table 5.246 shows the means and standard deviations of depression scores of hearing impaired children with respect to education of father.

Table 5.247

Summary of ANOVA of depression scores of hearing impaired children at secondary schools with respect to education of father.

Source of variation	Sum of squares	df	Mean square	F

Between groups	167.96	2	83.97	
Within groups	6144.71	245	25.08	0.037
Total	6312.67	247		

The obtained F ratio is less than the table value at 0.05 level of significance. Hence it can be concluded that there exist no significant difference between the three groups with respect to their education of father.

Table 5.248

Means and standard deviations of depression scores of hearing impaired children with respect to occupation of father.

Occupation of father	N	Mean	SD
Business	35	24.14	5.05
Govt/ private Service	138	24.21	4.88
Agriculture/labour work	75	23.43	5.38
Total	248	23.96	5.05

Table 5.248 Shows the means and standard deviation of depression scores of hearing impaired children at secondary schools with respect to their occupation of father.

Table 5.249

Summary of ANOVA of depression score of hearing impaired children with respect to occupation of father.

Source of variation	Sum of squares	df	Mean square	F
Between groups	31.13	2	15.56	
Within groups	6281.53	245	25.63	0.60

Total	6312.67	247		

The obtained F value is less than total value at 0.05 level of significance. Hence it can be concluded that there exist no significant difference between the three groups with respect to their occupation of father.

Table 5.250
Mean and SD of psychosocial variable depression of hearing impaired children with respect to income of father.

Income of father	N	Mean	SD
High income group	54	24.11	4.50
Medium income group	142	24.06	4.88
Low income group	52	23.56	6.04
Total	248	23.96	5.05

Table 5.250 shows the means and standard deviations of depression scores of hearing impaired children with respect to income of father. A close observation indicated that the mean scores of high income and medium income group posses 24.11 and 24.06 respectively. While the low income group posses the mean value of 23.56 it is less than the other two groups.

Table 5.251

Summary of ANOVA of depression scores of hearing impaired children with respect to the income of father.

Source of variation	Sum of squares	df	Mean square	F
Between	10.96	2	5.48	0.21

groups				
Within groups	6301.71	245	25.72	
Total	6312.67	247		

From the above table, the obtained F ratio is less than the table value at 0.05 level of significance. Therefore it can be concluded that there exist no significant difference between the three groups with respect to their income of father.

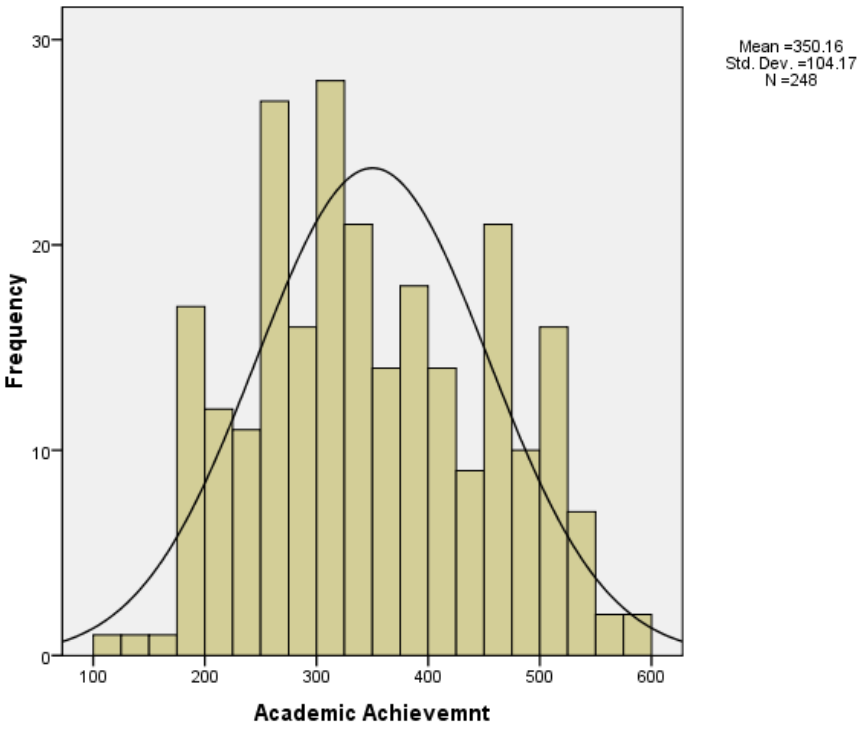

Figure 5.12. Graphical representation of total academic achievement scores of children with hearing impairment at secondary school.

Table 5.252

Means, standard deviation and 't' value of academic achievement scores of hearing impaired children with respect to gender.

Gender	N	Mean	SD	t
Male	125	362.35	106.84	1.86
Female	123	337.76	100.29	

Table 5.252 Shows that the 't' value 1.86 is found to be not significant at 0.05 level. This indicates that there is no significant difference in the academic achievement of hearing impaired children. It shows that means scores of academic achievement of male sand females do not differ significantly. Thus the hypothesis there is significant difference in mean scores of academic achievement is rejected. It may therefore be said that both males and females were found to have academic achievement to the same extend.

Table 5.253

Mean, standard deviations and 't' value of academic achievements scores of hearing impaired children with respect to domicile.

Domicile	N	Mean	SD	t
Rural	169	341.36	102.976	1.956
Urban	79	366.97	104.865	

From table 5.253 it can be seen that the 't' values is 1.96 which is significant. It shows that mean scores of academic achievement of rural and urban children differ significantly. Then the hypothesis there is significant difference in mean scores of academic achievement of urban and rural hearing impaired student at secondary level is accepted.

Table 5.254

Mean, standard deviations and 't' value of academic achievements scores of hearing impaired children with respect to type of school

Type of school	N	Mean	SD	t
Aided	167	338.82	100.90	2.48
Govt.	81	373.53	107.49	

Table 5.254 shows that the obtained 't' value is 2.487 significant at 0.01 level or at 0.05 level. this indicates that there is significant difference in the academic achievement of hearing impaired children at secondary school with respect to type of school. Hence it can be concluded that type of school of hearing impaired children is a significant factor in deciding the academic achievement.

Table 5.255
Mean and Standard deviation of academic achievement scores of hearing impaired children with respect to age group

Age group	N	Mean	SD
13-14	117	366.64	101.08
15-16	115	344.37	105.51
17-18	16	271.19	77.66
Total	248	350.16	104.17

Table 5.255 shows the means and standard deviations of academic achievement scores of hearing impaired. Out of 248 children 117 belongs to 13-14 age group, 115 belongs to 15-16 age group and the rest 16 children belongs to 17-18 age group. The mean score of academic achievement of 13-14 groups is 366.64, 15-16 category it is 115, and 17-18 category it is 16 respectively.

Table 5.256
Summary of ANOVA of
total scores of academic achievement of
hearing impaired children with respect to age group.

Source of variation	Sum of squares	df	Mean square	F
Between groups	135416.58	2	67708.29	6.51
Within group	2544856.28	245	10387.16	
Total	2680272.86	247		

The table 5.256 shows that there is significant difference in the mean score of academic achievement of hearing impaired children of their age group. As the obtained 'F' ratio is found to be significant at 0.05 level it can be concluded that age group is a significant factor in determining academic achievement of hearing impaired children. To found out the significantly different pairs of age group with academic achievement post hoc test of least significant difference is done.

Table 5.257

Test of least significant difference
for pair wise comparison of mean scores of hearing
impaired children academic achievement with respect to age group.

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	13-14 15-16	306.64 344.37	22.27	37.09
2	13-14 17-18	366.64 271.16	95.45	75.29
3	15-16 17-18	344-37 271-19	73.18	75.37

* Significant at 0.05 level.

The table 5.257 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level between mean

scores of age group of 13-14 Vs 15-16, 13-14 Vs 17-18 and 15-16 Vs 17-18. Among the pairs it is the age group of children belongs to 13-4 Vs 17-18 groups showed a higher academic achievement. This indicates that the age group of children with hearing impairment between 13-14 Vs 17-18 have significantly higher academic achievement than the age group of 13-14 Vs 15-16 and 15-16 Vs 17-18.

Table 5.258
Mean and SD of academic achievements of hearing impaired children with respect to religion.

Religion	N	Mean	SD
Hindu	123	353.37	102.24
Christian	92	354.38	104.65
Muslim	33	326.42	109.93
Total	248	350.16	104.170

Table 5.258 shows the mean scores of hindu religion is 353.37 with a SD of 102.24. The Christian religion's mean is 354.38 with a SD of 104.65 and the muslim religions mean is 326.42 with a SD of 109.93.

Table 5.259
Summary of ANOVA of academic achievement score of hearing impaired children with respect to religion.

Source of variation	Sum of squares	df	Mean Square	F
Between groups	21494.58	2	10747.29	0.990
Within groups	2658778.28	245	10882.15	
Total	2680272.86	247		

From table 5.259 it can be seen that 'F' value is 0.990 which is not significant. It indicates that mean score, of academic achievement of hearing impaired belonging to Hindu, Christian and Muslim do not differ

significantly. Thus the hypothesis that there is significant difference in meanscores of achievement of hearing impaired children belonging to Hindu, Christian and Muslim religion is not accepted. It may there for be said that children belongs to different religion were found to have academic achievement to the same extent.

Table 5.260

Means and standard deviations of academic achievement scores of hearing impaired children with respect to severity

Severity of hearing cost	N	Mean	SD
Mild	39	378.16	118.54
Moderate	121	338.36	102.13
Severe	83	357.46	98.45
Profound	5	296.00	90.87
Total	248	350.16	104.17

Table 5.260 show the means and standard deviations of academic achievement scores of hearing impaired children with respect to the severity of hearing loss. The mean scores of hearing loss of the mild category is 378.16 with a SD of 118.54, moderate it is 338.36 with a SD of 102.13, severe it is 357.46 with a SD of 98.45 and profound category its mean is 296.00 with a SD of 90.87 respectively,

Table 5.261

Summary of ANOVA of academic achievement scores of hearing impaired children with respect to severity of hearing loss.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	66566.802	3	22188.93	

Within groups	2613706.06	244	10711.91	2.071
Total	2680272.86	247		

* Significant at 0.05 level.

Table 5.261 Shows that the ‘F’ value is not significant as it is found to be below the critical value. It indicates that mean scores of academic achievement of hearing impaired belonging to mild, moderate, severe and profound do not differ significantly. Thus the hypothesis that there is significant difference in mean scores of academic achievement of hearing impaired children mild, moderate , severe and profound loss is not accept. It may therefore be said that children belonging to categories of severity were found to have academic achievement to the same extent.

Table 5.262

Means and standard deviation of academic achievement of hearing impaired children with respect in income.

Family income	N	Mean	SD
High	54	370.00	104.11
Medium	142	356.61	100.35
Low	52	311.92	106.88
Total	248	350.16	104.17

Table 5.262 shows the means and SD of academic achievement scores of hearing impaired children with respect to income of father. The mean scores of parents income of high groups is 370.00 with a SD of 104.11, for medium group mean score is 356.61 with a SD of 100.35 and the low groups mean score is 311.92 with a SD of 106.88.

Table 5.263
Summary of ANOVA of academic achievement scores of hearing impaired children with respect to parent's income.

Source of variation	Sum of squares	df	Mean squares	F
Between groups	103195.47	2	51597	
Within groups	2577077.38	245	10518.68	4.905
Total	2680272.86	247		

* Significant of 0.05 level

Table 5.263 shows that the 'f' value is significantly differs at 0.05 level. The mean score f academic achievement of hearing impaired with respect to parents income is 4.90. Thus the hypothesis there is significant difference in meanscores of parents income is accepted. In order to know which group of income of children means score is significantly higher, the

data were further analysed with the help of least significant difference test and the results are given in the table 5.278.

Table 5.264

Test of Least significant difference for pair wise comparison of mean scores of hearing impaired children's academic achievement with respect to income

Sl.No	Pairs	Mean value	Mean difference	Critical difference
1	Higher income – Median income	370.00 356.61	13.39	45.45
2	High income Low income	370.00 311.92	58.08	55.23*
3	Median income Low income	356.61 311.92	44.60	46.0

* Significant 0.05 level

The table 5.264 reveals that test of least significant difference for paired comparisons yielded significant difference of 0.05 level between mean scores of income groups of high group Vs medium group, high income group Vs low income group and median income group Vs low income group. Among the three group high income group Vs low income group showed a higher academic achievement. This indicates that the parent's income of children with hearing impairment in the showed significantly higher academic achievement than the medium income group Vs low income group, and the higher income Vs medium income group.

Table 5.265

Mean, and standard deviations of academic achievement scores of hearing impaired children with respect to father's education.

Father's education	N	Mean	SD
Highly educated	35	349.91	93.837
Educated	164	358.81	107.36
Under educated	49	321.37	96.71
Total	248	350.16	104.17

Table 5.265 shows the mean and SD of academic achievement scores of hearing impaired children with respect to fathers education. The mean score of fathers who are highly educated is 349.91 with a SD of 93.83, fathers who belongs to educated groups mean 358.81 with a SD of 107.36 and under educated groups mean is 321.37 with a SD of 96.71 respectively.

Table 5.266

Summary of ANOVA of academic achievement scores hearing impaired children with respect to father's education

Education of father	Sum of squares	df	Mean square	F
Between groups	52897.59	2	26448.79	
Within groups	2627375.27	245	10723.98	2.46
Total	2680272.86	247		

* Significant at 0.05 level

Table 2.66 shows that there is no statistical significance in the mean scores of academic achievement of hearing impaired when the children are classified with respect to their level of fathers education. As the obtained 'f' ratio is not found to be significant. It can be concluded that fathers education of hearing impaired children is not a significant factor of their academic achievement. Hence the hypothesis that there is significant difference in mean scores of academic achievement of hearing impaired children with respect to their fathers education is not accepted.

Table 5.267

Means and standard deviation of the academic achievement scores of hearing impaired children with respect to father's occupation.

Father's occupation	N	Mean	SD
Business	35	368.29	96.59
Govt/private service	136	362.66	106.34
Agriculture	75	318.69	97.70
Total	248	104.17	337.13

Table 5.267 Shows the means and SD of academic achievement scores

of the hearing impaired with respect to fathers occupation. A close observation of the mean values of the table shows that parents who are undertaken agriculture as their occupation have low mean scores compared to parents who are employed and business.

Table 5.268

Summary of ANOVA of academic achievement scores of hearing impaired children with respect to father's occupation.

Source of variation	Sum of squares	df	Mean square	F
Between groups	107320.78	2	53660.39	5.11
Within groups	2572952.08	245	10501.84	
Total	2680272.86			

From table 5.268 it can be seen that 'f' value is 5.11 which is significant at 0.05 level. it indicates than meanscores of academic achievement of hearing impaired children with respect to fathers income is differ significantly. Thus the hypothesis that there is significant difference in meanscore of academic achievement of hearing impaired children fathers occupation is accepted. Inorder to know which groups mean score of academic achievement is significantly higher than other, the data were further analysed with the help of least significant difference test and the results are given in the table 5.283

Table 5.269

Test of least significant difference for pairwise comparison of meanscore of hearing impaired children academic achievement with respect to fathers occupation.

Sl.	Pairs	Meanvalue	Mean difference	Critical difference
1	Business Govt/Private Services	368.29 362.66	5.63	76.14
2	Business Agriculture	368.29 318.69	49.6	58.14
3	Govt/Private service Agriculture	362.66 318.69	43.9	40.85

* Significant at 0.05 level

The table 5.269 reveals that test of least significant difference for paired comparisons yielded significant difference at 0.05 level between mean scores of fathers occupations of business Vs government/private services, business Vs agriculture ,and government/private service Vs agriculture. Among the three groups government/private services Vs agriculture showed a higher academic achievement. This indicates that the hearing impaired parents occupation comes under the above one categories have significantly higher academic achievement than the business Vs government/private services and business Vs agriculture.

Table 5.270

Coefficient of correlation between psychosocial adjustment and academic achievement of hearing impaired children at secondary school.

Variable	N	r
Psychosocial adjustment	248	0.692
Academic achievement	248	

From the table 5.270 it is evident that the obtained value of 'r' (0.629) is greater than that of the table value at 0.05 significance level. hence, it can be concluded that there is a significant positive relationship between psychosocial adjustment and academic achievement scores of children with hearing impairment. Hence, the hypothesis is accepted. This finding showed that good social emotional adjustment enhanced academic performance of all children. Similarly, the finding of Rogers, Rogers and Belinger also substantiated this finding by reporting that educational outcomes were positively associated with general adjustment to disability in hearing impaired adolescent children.

Table 5.271

Coefficient of correlation between self concept and academic achievement of hearing impaired children.

Variable	N	r
Self concept	248	.571
Academic achievement	248	

From the table 5.271 it is clear that the correlation between self concept and academic achievement is 571. The obtained value of coefficient

of correlation exceed the critical value at 0.01 level. indicating significant positive relationship between correlated variables.

Table 5.272

Coefficient of correlation between self concept and psychosocial adjustment of hearing impaired children.

Variable	N	r
Self concept	248	.813
Psycho social adjustment	248	

From the above table 5.272 It is clear that the correlation coefficient between self concept and psychosocial adjustment is .813. The obtained value of coefficient correlation exceed the critical value at.01 level, indicating significant positive relationship between the correlated variables.

Table 5.273

Coefficient of correlation between psychosocial adjustment and Academic achievement of hearing impaired children at secondary school

Variable	N	r
Psycho social adjustment	248	.963
Psychosocial adjustment	248	

The above table shown that the correlation coefficient between total psychosocial adjustment and variable social adaptability is .963. It indicates that there exist high positive relationship between psychosocial adjustment and social adaptability. This results shown that the hearing impaired children maintain social adaptability in their school settings, how even without coming

their severity of hearing loss or any other demographic aspects.

Table 5.274

Coefficient of correlation between psychosocial adjustment and negative psychosocial variables of hearing impaired children at secondary school

Variable	N	r
Anxiety	248	.901
Alienation	248	.942
Depression	248	.927

From the table 5.274 it is clear that the correlation between anxiety and psychosocial adjustment is .901, between alienation and psychosocial adjustment is .942; and between depression and psychosocial adjustment is .927. All the obtained values of coefficient correlation exceeds the critical value at 0.01 level, indicating significant positive relationship between the correlated variables.

Table 5.275

Coefficient of correlation between psychosocial adjustment and self esteem of hearing impaired children.

Variable	N	r
Psychosocial adjustment	248	.959
Self esteem	248	

From the table 5.275 it is clear that the correlation between self esteem and psychosocial adjustment is 959 the obtained value exceed the critical value at 0.01 level, indicating significant high positive relationship between correlated variables.

Table 5.276

Coefficient of correlation between psychosocial adjustment and interaction of hearing impaired children.

Variable	N	r
Psychosocial adjustment	248	.964
Interaction	248	

From the table 5.276 It is seen that the obtained correlation .964 is significant at 0.01 level between variable interaction and psychosocial adjustment. It indicates that there exist high positive relationship between correlated variables.

Table 5.277

Coefficient of correlation between academic achievement and components of positive psychosocial adjustment of hearing impaired children at secondary schools.

Variable	N	r
Self esteem	248	.684
Interaction	248	.676
Social adaptability	248	.689

** Significant at 0.01 level

From the table 5.277 it is clear that the correlation between self esteem and academic achievement is .684; between interaction and academic achievement is .676, and between social adaptability and academic achievement is .689. All the obtained values of coefficient of correlation exceed the critical value at 0.01 level, indicating significant relationships between the correlated variables.

Thus, it can be interpreted that all the positive psychosocial variables – self esteem, interaction and social adaptability have significant positive relationship with the academic achievement of hearing impaired children at secondary level.

Table 5.278

Coefficient of correlation between academic achievement and components of negative psychosocial adjustment of hearing impaired children at secondary school.

Variable	N	r
Anxiety	248	.636
Alienation	248	.662
Depression	248	.659

** significant at 0.01 level

From the table 5.278 it is clear that the correlation between anxiety and academic achievement is .636; between alienation and academic achievement is .662; and between depression and academic achievement is .659. All the obtained values of coefficient of correlation exceed the critical value at 0.01 level, indicating significant positive relationship with the academic achievement of hearing impaired children at secondary level. however, the

findings was encouraging, the anxiety, alienation and depression of the hearing impaired children, were able to maintain good adjustment as well as academic performance.

Table 5.279

Coefficient of correlation between total self-concept and positive psychosocial variables of hearing impaired children at secondary school.

Variable	N	r
Self esteem	248	.799
Interaction	248	.810
Social adaptability	248	.804

From the table 5.279 it is clear that the correlation between self-concept and psychosocial variable self esteem is .799; between self-concept and intervention is .810; and between concept and social adaptability is .804. All the obtained values of coefficient of correlation exceed the critical value at 0.01 level, indicating significant relationship between the correlated variables.

Thus it can be interpreted that all the positive psychosocial variable– self esteem, interaction, and social adaptability have significant high positive relationship with the self-concept of hearing impaired children at secondary level.

Table 5.280

Coefficient of correlation between total self- concept and psychosocial variable anxiety of hearing impaired children at secondary school

Variable	N	r
Anxiety	248	.705
Alienation	248	.746
Depression	248	.728

From the table 5.280 It is clear that the correlation between anxiety and self concept is .705, between alienation and self concept is .746, and between depression and self concept is .728. All the obtained values of coefficient of correlation exceed the critical value at 0.01 level, indicating significant higher positive relationships between the correlated variables.

Thus it can be interpreted that all the negative psychosocial adjustment variable –anxiety, alienation and depression – have significant positive relationship with the self concept of hearing impaired children at secondary schools.

Table 5.281

Coefficient of correlation between academic achievement and various dimensions of self concept of hearing impaired children at secondary school

Variable	N	r
Physical self concept	248	.572
Social self concept	248	.532
Temperamental self concept	248	.369
Educational self concept	248	.546
Moral self concept	248	.526
Intellectual self concept	248	.494

Table 5.281 gives the correlation coefficient of the dimensions of self concept and academic achievement of children with hearing impairment. The obtained value of all the dimensions of self concept are significant at 0.01 levels. So the hypothesis there exist significant correlation between academic achievement and dimensions of self concept is accepted. Hence, it can be concluded that there is significant positive correlation between all the dimensions of self concept and academic achievement of children with hearing impairment.

CHAPTER VI

SUMMARY, CONCLUSION AND SUGGESTIONS

- Study in Brief
- Objectives of the study
- Hypotheses
- Methodology in brief
- Conclusion based on findings of the study
- Tenability of Hypotheses
- Suggestion based on the study
- Suggestion for further research

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CHAPTER VI

SUMMARY, CONCLUSIONS AND SUGGESTIONS

The present study has been designed to investigate the self concept, psychosocial c adjustment and academic achievements of children with hearing impairment. The study was also expected to explore the relationship between self concept and academic achievement and also the dimensions of self concept and dimensions of psychosocial adjustments. The study also considered the influence of socio demographic factors on the self concept, psychosocial adjustment, and academic achievement of children schools. The details of the objectives and the methodology followed are given below.

STUDY IN BRIEF

The present study has been designed to find out the self-concept, psychosocial adjustment and academic achievements of children with hearing impaired at secondary schools. This investigation explores the hearing impaired adolescent developmental challenges, self-concept and psychosocial adjustments. During this time the hearing impaired students maintain intimate attachment to parents and peers as well as belonging to social net work is essential for healthy development in adolescents. Support from parents and peers help to cope with stress and give emotional support. Self-identify depends on the knowledge that our own feelings and attitudes are similar to those of our peers. The inability of the deaf children to profit from language

regarding their roles and interpersonal relationship may create serious problems in this area. The deaf may be somewhat self centered because they lack communication through language. So deafness itself causes emotional problems.

OBJECTIVES OF THE STUDY

1. To find out the extent of self-concept in hearing impaired students at secondary school.

2. To asses the self-concept and its dimensions such as physical, social, temperamental, educational, moral and intellectual self-concept of children with hearing impairment at secondary school with respect to socio demographic variables gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

3. To find out the extent of psychosocial adjustment in hearing impaired students at secondary school.

4. To find out the extent of psychosocial adjustment in hearing impaired students with respect to total and each of the positive psychosocial adjustment variables.

5. To find out the extent of psychosocial adjustment in hearing impaired students with respect to total and each of the negative psychosocial adjustment variables.

6. To asses the psychosocial adjustment and it's components such as self-esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school with respect to socio demographic variables such as gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

7. To asses academic achievement of children with hearing impairment at secondary school with respect to socio demographic variables such as gender, domicile, type of school, age, severity, religion, education of father, occupation of father and income of father.

8. To find out whether there exist significant relationship between self-concept and psychosocial adjustment of children with hearing impairment at secondary school.

9. To find out whether there exist significant relationship between self-concept and academic achievement of children with hearing impairment at secondary school.

10. To find out whether there exist significant relationship between psychosocial adjustment and academic achievement of children with hearing impairment at secondary school.

11. To find out whether there exist significant relationship between self-concept and severity of hearing loss of children with hearing impairment at secondary school.

12. To find out whether there exist significant relationship between psychosocial and severity of hearing loss of children with hearing impairment at secondary school.

13. To find out whether there exist significant relationship between academic achievement and severity of hearing loss of children with hearing impairment at secondary school.

HYPOTHESES

1.A

The children with hearing impairment at secondary school posses low self-concept.

a. There will be significant difference between self-concept and gender of children with hearing impairment at secondary school.

b. There will be significant difference between self-concept and domicile of children with hearing impairment at secondary school.

c. There will be significant difference between self-concept and type of school of children with hearing impairment at secondary school.

d. There will be significant difference between self-concept and the age group of the children with hearing impairment at secondary school.

e. There will be significant difference between self-concept and severity of hearing of children with children hearing impairment.

f. There will be significant difference between self-concept and religion of the children with hearing impairment at secondary school.

g. There will be significant difference between self-concept and father's education of the children with hearing impairment at secondary school.

h. There will be significant difference between self-concept and father's occupation of the children with hearing impairment at secondary school.

i. There will be significant difference between self-concept and father's income of the children with hearing impairment at secondary school.

1. B

a. There will be significant difference between gender and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

b. There will be significant difference between domicile and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

c. There will be significant difference between type of school and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

d. There will be significant difference between age group and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

e. There will be significant difference between severity and dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

f. There will be significant difference between religion and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

g. There will be significant difference between education of father and dimensions of self-concept such as as physical self-concept, social self-concept, temperamental self-concept, educational self-concept, moral self-concept and intellectual self-concept of hearing impaired children at secondary school.

h. There will be significant difference between occupation of father and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

i. There will be significant difference between income of father and dimensions of self-concept such as physical self, educational self, moral self and intellectual self concept of hearing impaired children at secondary school.

2. A

1. The children with hearing impairment at secondary school posses low psychosocial adjustment.

2. The children with hearing impairment at secondary school posses low psychosocial adjustment with respect to total and each of the positive psychosocial adjustment variable.

3. The children with hearing impairment at secondary school posses low psychosocial adjustment with respect to total and each of the negative psychosocial adjustment variable.

2.B

a. There will be significant difference between psychosocial adjustments of hearing impaired boys and girls at secondary school.

b. There will be significant difference between psychosocial adjustments of hearing impaired rural and urban at secondary school.

c. There will be significant difference between psychosocial adjustment and type of school of hearing at secondary school.

d. There will be significant difference between psychosocial adjustment and age group of hearing at secondary school.

e. There will be significant difference between psychosocial adjustment and severity of hearing at secondary school.

f. There will be significant difference between psychosocial adjustment and religion of hearing at secondary school.

g. There will be significant difference between psychosocial adjustment and education of father of hearing at secondary school.

h. There will be significant difference between psychosocial adjustment and occupation of father of hearing at secondary school.

i. There will be significant difference between psychosocial adjustment and income of father of hearing at secondary school.

2.C

a. There will be significant difference between gender and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

b. There will be significant difference between domicile and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

c. There will be significant difference between type of school and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

d. There will be significant difference between age group and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

e. There will be significant difference between severity and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

f. There will be significant difference between religion and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

g. There will be significant difference between education of father and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

h. There will be significant difference between occupation of father and components of psychosocial adjustment such as self esteem, interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

i. There will be significant difference between income of father and components of psychosocial adjustment such as self esteem,

interaction, social adaptability, anxiety, alienation and depression of children with hearing impairment at secondary school.

3.A

a. There will be significant difference between academic achievement and gender of hearing impaired children at secondary school.

b. There will be significant difference between academic achievement and domicile of hearing of hearing impaired children at secondary school.

c. There will be significant difference between academic achievement and type of school of hearing of hearing impaired children at secondary school.

d. There will be significant difference between academic achievement and age group of hearing of hearing impaired children at secondary school.

e. There will be significant difference between academic achievement and severity of hearing of hearing impaired children at secondary school.

f. There will be significant difference between academic achievement and of religion of hearing impaired s children at secondary school.

g. There will be significant difference between academic achievement and of education of father of hearing impaired children at secondary school.

h. There will be significant difference between academic achievement and of occupation of father of hearing impaired children at secondary school.

i. There will be significant difference between academic achievement and of income of father of hearing impaired children at secondary school.

4.A

a. There will be significant relationship between self-concept and psychosocial adjustment of children with hearing impairment.

b. There will be significant relationship between self-concept and academic achievement of children with hearing impairment at secondary school.

c. There will be significant relationship between psychosocial adjustment and academic achievement of children with hearing impairment at secondary schools.

4.B

a. There will be significant relationship between academic achievement and positive components of psychosocial adjustment such as self esteem, interaction and social adaptability of children with hearing impaired at secondary school.

b. There will be significant relationship between academic achievement and negative components of psychosocial adjustment such as anxiety, alienation and depression of children with hearing impaired at secondary school.

c. There will be significant relationship between self-concept and positive components of psychosocial adjustment such as self esteem, interaction

and social adaptability of hearing impaired children at secondary school.

d. There will be significant relationship between self-concept and negative components of psychosocial adjustment such as anxiety, alienation and depression of children with hearing impaired at secondary school.

e. There will be significant relationship between academic achievement and dimensions of self-concept such as physical, social, temperamental, educational, moral and intellectual self-concept of hearing impaired children at secondary school.

f. There will be significant correlation between self-concept and severity of hearing loss of children with hearing impairment at secondary school.

g. There will be significant correlation between psychosocial adjustment and severity of hearing loss of children with hearing impairment at secondary school.

h. There will be significant correlation between academic achievement and severity of hearing loss of children with hearing impairment at secondary school.

METHODOLOGY IN BRIEF

The present study intends to find out the self-concept, psychosocial adjustment and academic achievements of children with hearing impairment at school secondary school. This will bring into light to what extent the hearing impairment will affect the self-concept, psychosocial adjustment, and academic achievements of those students. The narrative method was adopted for the present investigation in which the technique used. Considering the nature of the study random sample technique was used. The sample includes 248 hearing impaired Secondary school students collected from districts of Kerala (Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam, Ernakulam, Thrissur, and Palakkad). The tools used for the study were self-concept inventory developed by R.K.Saraswat, the psychosocial adjustment scale (prepared and followed by the investigator) and academic achievement score collected from the school records.

The data thus collected were consolidated codified suitably and subjected to analysis. For analyzing the data appropriate descriptive and inferented statistical procedures were employed.

CONCLUSIONS BASED ON FINDINGS OF THE STUDY

The present study was undertaken to analyze the self-concept, psychosocial adjustment, and academic achievement of children with hearing impairment at secondary schools.

Self-Concept and its dimensions

1. It has been found that self-concept of hearing impaired children at secondary school is above average level.

2. It has been found that self- concept is high among the hearing impaired male students than compared to female. The obtained ‘t’ value is found to be significant at 0.05 level. The mean of male is 181.42 and for the female 168.80.

3. It has been found that there was no significant difference between urban and rural students regarding their self-concept. Locality of living is not influence of the self-concept of students of secondary level. The obtained ‘t’ value is 1.84 is not statistically significant. The mean of rural students is 173.28 and urban 179.18.

4. It has been found that type of school and self concept of children with hearing impairment has no significant relationship. The obtained ‘t’ value 0.25 is not statistically significant. However the aided school student possess better self-concept (mean 200.27) than the government school students (199.28).

5. Age group is a significant influencing factor in the self concept of the children with hearing impairment in all dimensions of self-concept. In all the six dimensions younger age group student were having better self concept than the other two groups. The obtained ‘F’ value 13.12 is statistically significant. So the age group is significant factor in

determining self concept of the hearing impaired children at secondary level.

6. It has been found that severity of hearing loss is not a significant factor influencing the self concept of hearing impaired children. The obtained 'F' value 1.15 is not significant. It indicates that mean score of self concept of hearing impaired students of mild, moderate and profound hearing loss do not defer significantly.

7. It has been found that the religion is not a significant influencing factor in their self concept. Christian students with hearing impairment were having better self concept than Hindu or Muslim students. The obtained 'F' value 2.25 is not statistically significant at 0.05 level.

8. Father's occupation is not a significant factor in the self concept of children with hearing impairment. Even any of the dimensions of self concept were also not influenced by their father's occupation. Students whose fathers were engaged in business sector having better self concept than other groups. The obtained 'F' value 0.153 is very low, hence it can be conclude that the occupation of father has no relationship with the self-concept of their children with hearing impairment.

9. Father's education is a significant influencing factor in the self concept of the children with hearing impairment. Highly educator parents children shows better self-concept than the other two groups. The

obtained ‘F’ value 4.637 is significant at 0.05 level. So it was concluded that father’s education is significantly affect the self concept of the hearing impaired children.

10. It has been found that income of father is not a significant factor in the self concept of children with hearing impairment. The high income group posses high self concept than the medium and low income group. The obtained ‘F’ value 0.55 is not statistically significant at 0.05 level.

11. It has been found that regarding physical self concept of children with hearing impairment, gender is a significant factor that influences the dimensions of physical self-concept. The obtained ‘t’ value for physical self-concept is3.87; social self-concept 4.38, temperamental self-concept 3.28, educational self-concept 3.86, and intellectual self-concept is 3.83 respectively. It is concluded that the values are statistically significant and shows significant difference except in the case of moral self-concept of boys and girls with hearing impairment. The hearing impaired males were having better physical self-concept than the female students.

12. It has been found that regarding dimensions of self concept of children with hearing impairment, locality is not a significant factor that influences the dimensions of self-concept such as physical self-concept, social self-concept, educational self-concept and moral self-concept. The obtained ‘t’ value for physical self-concept is.937; social

self-concept 1.73, educational self-concept 1.71 and moral self-concept 1.79. While for temperamental self-concept the 't' value is 2.15, and intellectual self-concept is 2.00 is statistically significant.

13. It has been found that regarding dimensions of self concept of children with hearing impairment, type of school is a significant factor that influences the dimensions of self-concept such as physical self-concept, social self-concept, educational self-concept and moral self-concept. The obtained ‘t’ value for physical self-concept is3.08 and educational self-concept 2.19. While 't' value for social self-concept is 0.24, temperamental self-concept 't' value is 1.5, for moral self-concept 't' value is 0.42 and for intellectual 't' value is 0.59 shows no statistical significant.

14. It has been found that regarding dimensions of self concept of children with hearing impairment, age group is a significant factor that influences all the dimensions of self-concept such as physical self-concept, social self-concept, educational self-concept and moral self-concept. The obtained ‘F’ value for physical self-concept is11.91, social self-concept 10.30, temperamental self-concept 8.14, educational self-concept 9.52, moral self-concept 12.47 and for intellectual self-concept 9.52 respectively.

15. It has been found that regarding dimensions of self concept of children with hearing impairment, severity is not a significant factor that influences all the dimensions of self-concept such as physical self-

concept, social self-concept, educational self-concept and moral self-concept. The obtained ‘F’ value for physical self-concept is1.86, social self-concept 1.24, temperamental self-concept 0.58, educational self-concept 0.89, moral self-concept 1.75 and for intellectual self-concept 2.30 respectively.

16. It has been found that regarding dimensions of self concept of children with hearing impairment, religion is not a significant factor that influences all the dimensions of self-concept such as physical self-concept, social self-concept, educational self-concept and moral self-concept. The obtained ‘F’ value for physical self-concept is 2.80, social self-concept 1.64, temperamental self-concept 1.76, educational self-concept 1.75, moral self-concept 1.34 and for intellectual self-concept 2.30 respectively.

17. It has been found that regarding dimensions of self concept of children with hearing impairment, education of father is a significant factor that influences the dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept educational self-concept, intellectual self-concept, moral self-concept. The obtained ‘F’ value for physical self-concept is 4.06, social self-concept 4.03, temperamental self-concept 3.14, educational self-concept 4.10, and for intellectual self-concept 3.45 respectively. While for moral self-concept the 'F' value 2.76 is not statistically significant.

18. It has been found that regarding all the dimensions of self concept of children with hearing impairment, income of father is not a significant factor that influences the dimensions of self-concept such as physical self-concept, social self-concept, temperamental self-concept educational self-concept, moral self-concept and intellectual self-concept, The obtained 'F' value for physical self-concept is 1.69, social self-concept 0.31, temperamental self-concept 0.24, educational self-concept 1.63,and moral self-concept 0.39 respectively intellectual self-concept 1.04 respectively.

Psychosocial Adjustment and it's components

19. It has been found that the psychosocial adjustment of the hearing impaired children at secondary school posses above average level of psychosocial adjustment. The obtained mean value is 200.00 and Standard Deviation is 31.38.

20. It has been found that the psychosocial adjustment of the hearing impaired children with respect to total and each of the positive psychosocial variable posses above average level of psychosocial adjustment. The obtained mean value for self esteem is 38.71, Standard Deviation is 5.53, Interaction mean value is 39.08 and the SD is5.46, Social adaptability mean is 37.47 and SD is5.55.

21. It has been found that the psychosocial adjustment of the hearing impaired children with respect to total and each of the negative

psychosocial variable possess low level of psychosocial adjustment. The obtained mean value for self esteem is 38.71, Standard Deviation is 5.53, Interaction mean value is 39.08 and the SD is5.46, Social adaptability mean is 37.47 and SD is 5.55.

22. It has been found that the psychosocial adjustment of the hearing impaired children with respect to gender is found to be significantly different. The obtained 't' value is 3.20 is statistically significant.

23. It has been found that the psychosocial adjustment of the hearing impaired children with respect to domicile is not found to be significantly different. The obtained 't' value is 1.62 is very low and is not statistically significant.

24. It has been found that the psychosocial adjustment of the hearing impaired children with respect to type of school is not found to be significantly different. The obtained 't' value is 0.25 is very low and is not statistically significant.

25. It has been found that the psychosocial adjustment of the hearing impaired children with respect to age group is found to be significantly different. The obtained 'F' value 10.97 is statistically significant.

26. It has been found that the psychosocial adjustment of the hearing impaired children with respect to severity is not found to be significantly different. The obtained 'F' value1.23 is statistically not significant.

27. It has been found that the psychosocial adjustment of the hearing impaired children with respect to religion is not found to be significantly different. The obtained 'F' value1.03 is statistically not significant.

28. It has been found that the psychosocial adjustment of the hearing impaired children with respect to education of father is found to be significantly different. The obtained 'F' value 4.25 is statistically significant.

29. It has been found that the psychosocial adjustment of the hearing impaired children with respect to occupation of father is not found to be significantly different. The obtained 'F' value 2.50 is statistically not significant.

30. It has been found that the psychosocial adjustment of the hearing impaired children with respect to income of father is not found to be significantly different. The obtained 'F' value 0.95 is statistically not significant.

31. It has been found that components of psychosocial adjustment such as self-esteem ('t' value 3.46), interaction ('t' value 3.31), social adaptability ('t' value 3.28), alienation('t' value 2.88) and depression('t' value 2.58) has significant difference with respect to gender of children with hearing impairment. The component anxiety does not differ significantly since the 't' value is 1.79.

32. It has been found that components of psychosocial adjustment such as self-esteem ('t' value 1.79), interaction ('t' value 1.87), anxiety('t' value 0.67) alienation('t' value 1.24) and depression('t' value 1.23) has not significant difference with respect to domicile of children with hearing impairment. The component social adaptability (t' value 2.19) found to be significant.

33. It has been found that components of psychosocial adjustment such as self-esteem ('t' value 0.59), interaction('t' value 0.60), social adaptability ('t' value 0.56), anxiety('t' value0.42), alienation('t' value 0.02) and depression('t' value 0.05) found to be not significant with respect to type of school.

34. It has been found that all the components of psychosocial adjustment such as self-esteem('F' value 10.99), interaction('F' value 10.79), social adaptability ('F' value 10.04), anxiety('F' value 10.32) alienation('F' value 10.26) and depression('F' value 7.63) has found to be significant with respect to age group of children with hearing impairment.

35. It has been found that all the components of psychosocial adjustment such as self-esteem('F' value 0.70), interaction('F' value 0.67), social adaptability ('F' value 0.74), anxiety('F' value 1.40) alienation('F' value 0.60) and depression('F' value 2.31) has found not to be significant with respect to religion of children with hearing impairment.

36. It has been found that the components of psychosocial adjustment such as self-esteem('F' value 3.57), interaction('F' value 4.58), social adaptability ('F' value 4.88), anxiety('F' value 2.36) alienation('F' value 3.40) and has found not to be significant with respect to education of father of children with hearing impairment . The depression component ('F' value 0.03) is not statistically significant.

37. It has been found that the components of psychosocial adjustment such as self-esteem ('F' value 2.34), interaction ('F' value 3.37), social adaptability ('F' value 3.59),) alienation ('F' value 2.31), and has found to be significant with respect to occupation of father of children with hearing impairment. The anxiety ('F' value 0.84) and depression('F' value 0.60) are found not to be statistically significant.

38. It has been found that the components of psychosocial adjustment such as self-esteem('F' value 3.35), , social adaptability ('F' value 4.88) has found to be significant with respect to age group of children with hearing impairment. The interaction ('F' value 1.65), anxiety ('F' value 0.39), alienation ('F' value 1.16) and depression('F' value 0.21) are found not to be statistically significant.

Academic Achievement and its components

39. It has been found that academic achievement and gender of hearing impaired children at secondary school is not found to be statistically significant. The 't' value 1.86 is below the table value.

40. It has been found that academic achievement and domicile of hearing impaired children at secondary school is found to be statistically significant. The 't' value 1.96 is significant on the table value.

41. It has been found that academic achievement and type of school of hearing impaired children at secondary school is found to be statistically significant. The 't' value 2.48 is significant on the table value.

42. It has been found that academic achievement and age group of hearing impaired children at secondary school is found to be statistically significant. The 'F' value 6.51 is significant on the table value.

43. It has been found that academic achievement and religion of hearing impaired children at secondary school is not found to be statistically significant. The 'F' value 0.99 is not significant on the table value.

44. It has been found that academic achievement and severity of hearing impaired children at secondary school is not found to be statistically significant. The 'F' value 2.07 is not significant on the table value.

45. It has been found that academic achievement and education of father of hearing impaired children at secondary school is not found to be statistically significant. The 'F' value 2.46 is not significant on the table value.

46. It has been found that academic achievement and occupation of father of hearing impaired children at secondary school is found to be

statistically significant The 'F' value 5.11 is significant on the table value.

47. It has been found that academic achievement and income of income of hearing impaired children at secondary school is found to be statistically significant. The 'F' 4.91 value is significant on the table value.

48. It has been found that the relationship between self-concept and psychosocial adjustment of children with hearing impairment are found to be significant. The correlation value .813 is statistically significant.

49. It has been found that the relationship between self-concept and academic achievement of children with hearing impairment are found to be significant. The correlation value .571 is statistically significant.

50. It has been found that the relationship between psychosocial adjustment and academic achievement of children with hearing impairment are found to be significant. The correlation value .692 is statistically significant.

51. It has been found that the relationship between academic achievement and positive components such as self-esteem, interaction and social adaptability are found to be statistically significant. The correlation value of self esteem (.684), interaction (.676) and social adaptability(.689) respectively.

52. It has been found that the relationship between academic achievement and negative components of psychosocial adjustment such as anxiety, alienation and depression are found to be statistically significant. The correlation value of anxiety(.636), alienation (.662) and depression(.659) respectively.

53. It has been found that the relationship between self-concept and positive components of psychosocial adjustment such as self esteem, interaction and social adaptability of hearing impaired children at secondary school is found to be statistically significant. The correlation value for self esteem(.799), interaction(.810) and social adaptability(.804) respectively.

54. It has been found that the relationship between self-concept and negative components of psychosocial adjustment such as anxiety, alienaton and depression of hearing impaired children at secondary school is found to be statistically significant. The correlation value for anxiety(.705), alienation(.746) and depression(.728) respectively.

55. It has been found that the relationship between academic achievement and dimensions of self-concept such as physical, social, temperamental, educational, moral and intellectual self-concept of hearing impaired children secondary school is found to be significant. The correlation value for physical self-concept (.572), social self-concept (.532), temperamental self-concept (.369), educational self-

concept (.546), moral self-concept (.526) and intellectual self-concept (.494) respectively.

56. It has been found that the relationship between self-concept and severity of hearing loss of children with hearing impairment found to be not statistically significant. The correlation value is (-.074) is not significant on the table value.

57. It has been found that the correlation between psychosocial adjustment and severity of hearing loss of children with hearing impairment found to be not statistically significant. The correlation value is (-.084) is not significant on the table value.

58. It has been found that the correlation between academic achievement and severity of hearing loss of children with hearing impairment found to be not statistically significant. The correlation value is (-.055) is not significant on the table value.

TENABILITY OF HYPOTHESES

Establishing the tenability of hypotheses is an integral part of research. Based on the findings of the study the investigator made an attempt to find out the tenability of the descriptive and statistical hypotheses is presented below.

1.A

The first hypothesis “the hearing impaired children at secondary school possess low self concept” is rejected since the study reveals that the respondents possess above average level of self concept.

The hypothesis 5 (a) “there will be significant difference between self concept of hearing impaired boys and girls at secondary school” is accepted based on the findings of the study. The extend of possession of self concept in both the categories is not same.

The hypothesis 5 (b) “there will be significant difference between self concept of rural and urban children with hearing impairment at secondary school” is rejected based on the findings of the study. The extent of possession of self concept in both the categories is same.

The hypothesis 5(c) “there will be significant difference between self concept of aided and government school children with hearing impairment at secondary school” is rejected based on the findings of the study.

The hypothesis 5 (d) “there will be significant difference between self concepts of age group of children with hearing impairment at secondary school” is accepted based on the findings of the study.

The hypothesis 5(e) “there will be significant difference between self concept and severity of children with hearing impairment at secondary school” is rejected based on the findings of the study.

The hypothesis 5(f) there will be significant difference between self concept and religion of children with hearing impairment is rejected based on the findings of the study.

The hypothesis 5(g) “there will be significant difference between the self concepts of education of father of children with hearing impairment at secondary school” is accepted based on the study.

The hypothesis 5(h) there will be significant difference between self concept and father’s occupation is rejected based on the study.

The hypothesis 5(i) “there will be significant difference between self concept and income of father of children with hearing impairment at secondary school” is rejected.

1.B

The hypothesis 6(a) “there will be significant difference between gender and dimensions of self-concept of hearing impaired children at secondary school” is accepted; in the case of physical self concept, social self

concept, temperamental self concept, educational self concept and intellectual self concept based on the study. However in the case of rural self concept the hypothesis is rejected.

The hypothesis 6(b) “there will be significant difference between domicile and dimension of self concept of hearing impaired children at secondary school” is accepted; in the case of physical self concept, temperamental self concept and intellectual self concept. However, in the case of social self concept, educational self concept and moral self concept the hypothesis is rejected

The hypothesis 6(c) “there will be significant difference between type of school and dimensions of self concept of hearing impaired children at secondary school” is accepted in all dimensions of self concept based on the study.

The hypothesis 6(d) “there will be significant difference between age group and dimensions of self concept of hearing impaired children at secondary school” is accepted in the case of physical and educational self concept. However in the case of social, temperamental, moral and intellectual self concept of the hypothesis is rejected.

The hypothesis 6(e) “there will be significant difference between severity and dimensions of self concept of children with hearing impairment at secondary school is not accepted based on the study.

The hypothesis 6 (f) ‘‘there will be significant difference between religion and dimensions of self concept of children with hearing impairment at secondary school” is rejected based on the study.

The hypothesis 6(g) “there will be significant difference between education of father and self concept of children with hearing impairment at secondary school” is accepted in the case of physical, social, temperamental, educational and intellectual self concept. However, in the case of moral self concept the hypothesis is not accepted based on the study.

The hypothesis 6(h) “there will be significant difference between occupation of father and self concept of children with hearing impairment at secondary school” is rejected based on the study.

The hypothesis 6(i) “there will be significant difference between income of father and dimensions of self concept of children with hearing impairment at secondary school” is rejected based on the study.

2.A

1. The hypothesis “the hearing impaired children at secondary school possess low psychosocial adjustment is not accepted since the study reveals that the respondents possess above average level of psychosocial adjustment.

2. The hypothesis “the hearing impaired children at secondary level possess low psychosocial adjustment with respect to total and each of the positive psychosocial adjustment variables” is not accepted since

the study reveals that the respondents possess above average level of psychosocial adjustments with respect to total and each of the positive psychosocial adjustment variable.

3. The hypothesis “the hearing impaired children at secondary level possess low psychosocial adjustment reveals that the respondents with respect to total and each of the negative psychosocial adjustment variables posses low level of psychosocial adjustment with respect to total and each of the negative psychosocial adjustment variables.

2.B

a. The hypothesis “there will be significant difference between hearing impaired boys and girls at secondary school” is accepted based on the findings of the study. The extent of possession of psychosocial adjustment in both the categories is same.

b. The hypothesis, “there will be significant difference between psychosocial adjustment of rural and urban children at secondary school” is rejected based on the findings of the study.

c. The hypothesis “there will be significant difference between psychosocial adjustment and type of school of hearing impaired children at secondary school” is rejected based on the findings of the study.

d. The hypothesis “there will be significant difference between psychosocial adjustment and age group of hearing impaired children at secondary school” is accepted based on the findings of the study

e. The hypothesis “there will be significant difference between psychosocial adjustment and seventy of hearing loss of hearing impaired children at secondary school” is rejected based on the findings of the study.

f. The hypothesis “there will be significant difference between psychosocial adjustment and religion of hearing impaired children at secondary school” is rejected.

g. The hypothesis “there will be significant difference between psycho social adjustment and education of father of hearing impaired children at secondary school” is accepted based on the findings of the study.

h. The hypothesis “there will be significant difference between psychosocial adjustment and occupation of father of hearing impaired children of secondary school” is rejected based on the findings of the study.

i. The hypothesis “there will be significant difference between psychosocial adjustment and income of father of hearing impaired children at secondary school” is rejected based on the findings of the study.

2.C

a. The hypothesis “there will be significant difference between gender and components of psychosocial adjustment of hearing impaired children at secondary school” is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study.

b. The hypothesis “there will be significant difference between domicile and components of psychosocial adjustment of hearing impaired children at secondary school” is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study. However in the case of anxiety the hypothesis is rejected.

c. The hypothesis “there will be significant difference between type of school and components of psychosocial adjustment of hearing impaired children at secondary school” is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study is rejected based on the findings of the study.

d. The hypothesis “there will be significant difference between age group and components of psychosocial adjustment of hearing impaired children at secondary school” is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study.

e. The hypothesis “there will be significant difference between severity and components of psychosocial adjustment of hearing impaired

children at secondary school" is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study.

f. The hypothesis "there will be significant difference between religion and components of psychosocial adjustment of hearing impaired children at secondary school" is accepted in the case of self esteem, interaction, social adaptability, alienation and depression based on the study.

g. The hypothesis "there will be significant difference between education of father and components of psychosocial adjustment of hearing impaired children at secondary school" is accepted in the case of self esteem, interaction, social adaptability, and alienation based on the study. While in the case of anxiety and depression the hypothesis is rejected.

h. The hypothesis "there will be significant difference between occupation of father and components of psychosocial adjustment of hearing impaired children at secondary school" is accepted in the case of interaction and social adaptability. While in the case of self-esteem, anxiety, alienation and depression the hypothesis is rejected.

I. The hypothesis "there will be significant difference between income of father and components of psychosocial adjustment of hearing impaired children at secondary school" is rejected in the case of self esteem,

interaction, social adaptability, anxiety, alienation and depression based on the study.

3.A

a. The twentieth hypothesis, there will be significant difference between academic achievements and gender of hearing impaired children at secondary school gender rejected based on the findings of the study.

b. The hypotheses, there will be significant difference between academic achievements and domiciles of hearing impaired children at secondary school is rejected based on the findings of the study.

c. The hypotheses, there will be significant difference between academic achievements and type of the school of hearing impaired children at secondary school is rejected based on the findings of the study.

d. The hypotheses, there will be significant difference between academic achievements and age group of hearing impaired children at secondary school is rejected based on the findings of the study.

e. The hypotheses, there will be significant difference between academic achievements and severity of hearing impaired children at secondary school is rejected based on the findings of the study.

f. The hypotheses, there will be significant difference between academic achievements and religion of hearing impaired children at secondary school is rejected based on the findings of the study.

g. The hypotheses, there will be significant difference between academic achievements and education of father of hearing impaired children at secondary school is rejected based on the findings of the study.

h. The hypothesis, there will be significant difference between academic achievements and occupation of father of hearing impaired children at secondary school is rejected based on the findings of the study.

i. The hypothesis, there will be significant difference between academic achievements and income of father of hearing impaired children at secondary school is rejected based on the findings of the study.

4.A

a. The hypothesis there will be significant relationship between psychosocial adjustment and academic achievements of hearing impaired children at secondary school is rejected based on the findings of the study.

b. The hypothesis there will be significant relationship between self concept and academic achievements of hearing impaired children at secondary school is rejected based on the findings of the study.

c. The hypothesis there will be significant relationship between self-concept and psychosocial adjustment of hearing impaired children at secondary school is rejected based on the findings of the study.

4.B

a. The hypothesis there will be significant relationship between academic achievement and positive components of psychosocial adjustment such as self esteem, Intervention and social adaptability of hearing impaired children at secondary schools is accepted on the basis of the findings of the study.

b. The hypothesis there will be significant relationship between academic achievement and negative components of psychosocial adjustment such as self esteem, Intervention and social adaptability of hearing impaired children at secondary schools is accepted on the basis of the findings of the study.

c. The hypothesis there will be significant relationship between self concept and positive components of psychosocial adjustment such as self-esteem, Intervention and social adaptability of hearing impaired children at secondary schools is accepted on the basis of the findings of the study.

d. The hypothesis there will be significant relationship between self concept and negative components of psychosocial adjustment such as self-esteem, Intervention and social adaptability of hearing impaired children at secondary schools is accepted on the basis of the findings of the study.

e. The hypothesis there will be significant relationship between academic achievement and dimensions of self-concept such as physical, social,

temperamental, educational, moral and intellectual self-concept of hearing impaired children at secondary school is accepted on the basis of the findings of the study.

f. The hypothesis there will be significant relationship between self-concept and severity of hearing impaired children at secondary school is rejected on the basis of the study.

g. The hypothesis there will be significant relationship between psychosocial adjustment and severity of hearing impaired children at secondary school is rejected on the basis of the study.

h. The hypothesis there will be significant relationship between academic achievement and severity of hearing impaired children at secondary school is rejected on the basis of the study.

SUGGESTIONS BASED ON THE STUDY

The following suggestions are put forward based on the findings of the present study.

1. It is advisable that every special school for the hearing impaired to have sufficient special trained special educators since this will help in providing necessary support in their academic activities. The special school must be appointed a permanent counselor to deal the to deal the various psychological problems that they faced everyday. Since hearing impaired children have to face various adjustmental as well as psychological problems in their everyday life.

2. As teachers are the modifiers of behavior, they should identify the hearing impaired child's learning, social, emotional and behavioral problems, unstable home life and absenteeism and thereby they can develop self-concept of hearing impaired children.

3. Special schools for the hearing impaired should arrange the facilities for building self-concept, and psychological adjustment by the students and the psychosocial adjustment by the students and the conducive environment so also feel a better education.

4. Age is a significant factor in the development of self-concept and psychosocial adjustment of the hearing impaired children, the school authorities must be give special care to the teenage students who need more support and help in this particular years of their development.

5. Teachers and parents should analyze the psychosocial adjustment and academic achievements of hearing impaired students and focus more on personality development which require effective and integrated planning of their curriculum.

6. The hearing impaired students at secondary school, posses above average self concept and moderate level of psychosocial adjustment and they should be given such an education, thus they may get more opportunities to win over their disability.

7. Psychosocial variables-self-esteem, interaction and social adaptability, influence the academic achievement of hearing impaired students.

Teachers and trained personals should provide proper support to these children, in a manner by which self determination can be promoted, which may enable them to fulfill the aims of education of life.

8. The study shows there exist significant difference in the academic achievement and income of fathers of hearing impaired children. Also the occupation of father played a critical role. Many of the students belonged to a lower socio-economic background, the father's occupation played a crucial role in managing the family, in creating educational ambitions achieve better in academics.

9. Reducing the number of language based subjects and introducing subjects and introducing subjects based more on activity and ability, into the existing curriculum could help them not only an securing good marks but also in preparing than for the job.

10. The management of the school is a significant factor affecting the academic achievements of hearing impaired children. Government schools for the hearing impaired maintain better academic performances. The aide school management should give care for necessary academic development programs for their schools.

11. It is suggested that periodical refresher training at least once a year should be given to special education teachers to improve their capacity. IT will also help teachers to work on innovative ways to address the educational needs of the students with hearing impairment.

12. All the special schools will be advisable to initiate moral education classes to improve the general self-concept of hearing impaired children.

SUGGESTIONS FOR FURTHER RESEARCH

1. The study can be conducted to find out the relationship between emotional maturity, self-concept and, academic achievement.

2. The study can be conducted on other types of disability namely orthopedically handicapped, visually handicapped, and multiply handicapped.

3. A study on the effectiveness of self-concept, guidance needs and academic achievement of hearing handicapped can be conducted.

4. A more elaborate study can be made on the line of the present study, selecting samples from all districts of Kerala.

5. The present study can be attempted on a sample of different age groups and standards of study.

6. An inventory can be constructed and standardized for assessing the self-concept and academic motivation of hearing impaired with a view to providing the necessary guidance on the

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APPENDICES