CHAPTER - I

INTRODUCTION
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Deaf constitute one category of the handicapped persons and their position in the society cannot be well understood without reference to the position of the handicapped in general. It is therefore considered meaningful to review the various meanings, nature and scope of the handicapped as a broad category of persons. The term 'Handicap' encompasses all types of physical and mental disabilities that interfere with people's leading a normal, and productive life. Physical disabilities include blindness, deafness, deformities, muscular or nervous disorders, paralysis and loss of limbs. Mental disabilities include all grades of mental illness and mental retardation.

This may not be construed to imply that the terms disability and handicap can be used interchangeably. All handicaps are not disabilities. A disability may be a handicap only when it interferes with the person's own and of significant others' expectations, performance and normal living. Further, the same type and level of disability may not have the same impact on different individuals.

DEVELOPMENT OF CONCERN FOR THE HANDICAPPED

Different social and cultural groups have come to evolve over the years different traditions of coping with their disabled. Many of the primitive tribes abandoned their
disabled members on grounds of their physical inability to fight hostile fronts, like wild animals. The unwritten law of primitive societies was that the disabled should be sacrificed for the good of the group. This determined the course of treatment of the disabled persons for many centuries.

People in general, in olden times, believed that evil spirits caused injury or diseases. The Spartans let deformed new born children die of exposure. In Rome, a disfigured infant could be legally drowned by the parents. During the middle ages, from nearly A.D. 400’s to late 1400’s people ridiculed the handicapped and looked at them with suspicion. Some nobles used the physically disabled as court jesters. Many handicapped persons were burnt as witches. One of the most harmful outcome of hostile attitudes towards the handicapped was their exclusion from social intercourse. The disabled had no friends. They were considered ‘marginal persons’ from physical, social as well as vocational points of view.

With the spread of Buddhist doctrines in the east, and Christian ideals in the west such outrageous practices were gradually abandoned, but the physically handicapped continued to be subjected to social boycott. Religious thought emphasised the brotherhood of man and called upon
the strong to protect the weak. St. Jerome urged that one should be eye to the blind, arms to the weak, feet to the lame and ears to the deaf. The christian culture, prevented the killing of the crippled but failed to save them from social boycott. Even reformers and thinkers such as Martin Luther held the physically handicapped in contempt and justified their removal from society by death as an act 'well pleasing to God.' The practice of cutting off the life of the crippled or treatment meted out to them like social outcasts came to an end with the onset of Renaissance in the western civilization which brought in its wake a great intellectual, social, and spiritual awakening. Care and protection of the handicapped became desirable.

During the eighteenth century the ideas of liberty, equality, and fraternity gained currency. The individualism inevitably brought about betterment in the conditions of the physically handicapped. A number of institutions were founded and established for the blind, the deaf and mute. Nevertheless, individuals with handicaps were thought to bring shame on themselves and their families. Many of the handicapped people were kept hidden away at home or in special institutions.

It was only during the early decades of the 20th century that the vocational problems of the handicapped attracted
public attention. A multitude of factors such as the magnitude of the problem, development of an industrial society, the advent of democratic institutions, spread of compulsory education were operational conjunctively. The idea of complete rehabilitation of the disabled gained currency both in the west and the east after the second world war. Modern rehabilitation techniques were identified and developed to help handicapped persons to lead productive lives. Various legal, social and economic developments also took place which ensured relatively more adequate care for the millions of handicapped.

President John F. Kennedy initiated steps to formulate programmes to rehabilitate the diverse types of physically and mentally handicapped. During 1970's the U.S. Congress passed two important laws to help the handicapped (Betts, 1986). The Rehabilitation Act of 1973 prohibited unfair treatment of handicapped individuals in programmes of activities that received government funds. It also demanded that the federally funded business hired qualified handicapped people. The Education of All Handicapped Children Act of 1975 ordered the state to provide free education to any handicapped child of school age. Similar laws were enacted subsequently in Canada and Europe etc.

The Government of India also made some provisions during
1970 for the appointment of the disabled persons in public sector undertakings.


The United Nations set forth before the member nations the following broad objectives:

i) Helping disabled persons in their physical and psychological adjustments in the society.

ii) Promoting all national and international efforts to provide disabled persons with proper assistance, training, care and guidance, to make available opportunities for suitable work, and, to ensure their full integration in the society.

iii) Encouraging study and research projects designed to facilitate practical participation of disabled persons in daily life.

iv) Educating and informing the public of the rights of disabled persons to participate in and contribute to various aspects of economic, social and political life.

v) Promoting effective messages for the prevention of disability and for rehabilitation of disabled persons.
While numerous programmes to rehabilitate the handicapped people took concrete shape in industrialised countries, the third world countries lagged behind. A variety of social, attitudinal, medical, legal and financial problems made the intervention and rehabilitation of handicapped difficult.

Using the experience of various World Bank projects, Heyneman (1983) argued that better quality teaching and teaching tools were crucial for having any effects on school pupil's achievement. The educational qualifications of teachers, the availability of furniture, equipment and other materials needed updating. The UNESCO expert committee (1985), stressed the notion of deafness relative to the prevalent socioeconomic conditions in a country. A nationwide survey of disabled persons in India was undertaken in 1981 as a part of, 'A Rehabilitation/UNICEF Technical Support Programme To Prevent Childhood Disabilities And to Help Disabled Childern'in 1981. The results showed that there were 12 million persons in the country, with at least one disability constituting about 1.8 percent of the total population. Locomotor disabilities accounted for the largest number (5.43 million) followed by visual disabilities (3.7 millions), hearing (3.02 million) and speech (1.75 million).

The cooperative efforts of the Government of India and
UNICEF during 1981-84, focused on production of awareness materials and support of ongoing programmes; training of teachers and community workers, early detection and management, support to national level resource institutes and promotion of research and development activities including support to voluntary agencies.

These were to be supported by UNICEF through its various programmes of cooperation during 1985-89 in the following manner:

- Universal immunization, particularly against poliomyelitis, measles, interventions against micronutrient deficiencies, especially vitamin A and iodine.

- Development of effective systems in identifying and treating ear infections at the family/community level. Family counselling and education of parents, particularly in families with a history of inherited deafness.

- Prevention of accidents in later childhood.

- Priority attention to the relatively neglected problems of communication disabilities and mental retardation.

Kristensen et al. (1987) prepared a digest under the UNESCO-UNICEF co-operative programme designed primarily to
demonstrate to the educational administrators and planners that it was possible to establish sound and inexpensive comprehensive assessment and intervention procedures and programmes with in a short space of time using existing infrastructural facilities and human resources.

The National Policy on Education (1986) laid down some broad objectives to integrate the physically and mentally handicapped within the general community as equal partners to prepare them for normal growth and to enable them to face life with courage and confidence. The following measures were proposed in this regard.

i) Wherever feasible, the education of children with motor and other mild handicaps would be common with that of others.

ii) Special schools with hostels would be provided, as far as possible at district headquarters, for the severely handicapped children.

iii) Adequate arrangements would be made to give vocational training to the disabled.

iv) Teachers training programmes would be reoriented, in particular for teachers of primary classes to deal with the special difficulties of the handicapped children.

v) Voluntary effort for the education of the disabled would be encouraged in every possible manner.
PROBLEMS FACED BY THE HANDICAPPED

Handicapped persons face special problems in their personal, family and community life depending on the type of handicap they suffer from. These may be briefly mentioned as below:

Personal Life: The limited ability to perform day to day activities poses a major problem to the handicapped e.g., an individual with a hearing impairment experiences difficulty in using a telephone. This in turn may be really frustrating and aggravate the situation. Further he/she may experience special psychological problems such as feeling depressed. Examples abound where some handicapped persons considered their disability a challenge while others took it as misfortune. The English poet John Milton was blind when he wrote his epic masterpiece, 'Paradise Lost'. The great German composer Lading Van Beethoven wrote much of his finest music after he became deaf. Franklin D. Roosevelt, paralyzed by polio in both legs at the age of 39, became President of the United States. Hellen Keller became blind, deaf and mute before she was 2 years old but she learnt to read, write and speak. She devoted her life to helping the deaf and the blind.

Family Life: Introduction of a handicapped in the family necessitated a change in already established roles of other
members. Growing children might have trouble in accepting the new roles of their parents. Over protective attitude of parents might not be appreciated by the handicapped and could be instrumental in prompting jealousy and resentment among other members of the family.

Community Life: Ignorance of people and their subsequent behaviour towards handicapped created problems for the handicapped. The majority of people failed to realise how excluded a disabled person felt from community activities, such as athletic events and theatrical productions. Most employers hesitated to hire a handicapped person because they took the handicapped to be poor workers. Weinberg and Sterrit (1986) attributed inadequate identity patterns to bad social relations, negative self evaluations, and low perceptions of family acceptance. Since the present study proposed to focus on hearing impaired children, it may be necessary to discuss some dimensions of hearing impairment.

HEARING IMPAIRMENT: SOME CLASSIFICATIONS

Of all the physical disabilities, hearing impairment was known to be the most complex, confusing and least understood. Inspite of looking normal hearing a impaired person suffered a real disability. Often a hearing impaired individual was not immediately identified by others.
The word deaf was applied to persons who could hear but did not suffer from a major hearing impairment. Yet until only a few years ago, the word deaf frequently had a strong negative connotation in terms of a curse from God. The term deafmute (used either as an adjective or as a noun), carried the notion of a double infirmity, till it was realized that the absence of speech, in those born deaf, was not related to a deficiency of the vocal organs and was only the consequence of lack of hearing.

In general the hearing impairments could be classified as: a) the deaf and b) the hard of hearing. Both types had inherently different handicaps and thus required different types of intervention programmes (Davis, 1978). The two types couldn't be put however, either in water tight compartments or on the same continuum. Schein and Delk (1974) observed that any definition of deafness is arbitrary and depends on the need of the investigator. An audiologist might adopt a definition related to etiology and the degree of loss. An educator might be more interested in amount of residual hearing. A psychologist might define the term in accordance with the individual's self-perception and the sense of identity that the individual might have with other deaf persons.
DEFINITIONS OF DEAF AND HARD OF HEARING

One of the most recent reformulation was developed by an Ad Hoc Committee on Definitions of Deaf and Hard of Hearing appointed by Conference of Executives of American Schools for the deaf and chaired by Frisina (1974).

The committee treated hearing impairment as a broad generic term for any hearing disability regardless of severity and devoid of any implications regarding etiology, age of onset, or educational programming. The concept of hearing impairment was further clarified by indicating that it had to do with, "the physical malformation or alteration (irreversible by present practices) of the ear (auditory system) that produces a disability in hearing.

A hard of hearing person according to the committee, was "one who generally with the use of a hearing aid, had residual hearing sufficient to enable successful processing of linguistic information through audition."

The committee defined a deaf person as "one whose hearing disability precludes successful processing of linguistic information through audition with or without hearing aid."

The committee retained the traditional four categories of hearing impairment - mild, moderate, severe, and profound.
The UNESCO Experts' committee (1985) introduced the notion of relativity of deafness to prevalent socioeconomic conditions:

Children whose spontaneous speech and language development had been very much retarded or was completely absent due to their severe hearing impairment or a hearing impairment combined with a lack of training and/or technical amplification would be considered as deaf. In countries with adequate resources for diagnosis, training, and provision of hearing aids, some children with hearing impairment would not be included in the above-mentioned group, whereas they would be regarded as functionally deaf in countries lacking these resources.

Other terms such as auditorially impaired or deficient, acoustically impaired, hypoacoustic, or, in French, demisourd (half deaf), are used either as synonyms for deaf and hearing impaired or to designate a category of the latter. The word cophotic, limited to the medical profession, is applied to those ears that have completely lost their auditory function.

Among deaf and hard of hearing children and adults, those who were affected from birth or shortly thereafter (before language was established) were distinguished from those who became hearing impaired later on. These groups were
commonly called prelingually and postlingually deaf respectively. The prelingually deaf child would not acquire language by the same natural process as the normally hearing. Their auditory pathways in the brain, as well as those parts of the cerebral cortex concerned with the processing of spoken language, were not adequately stimulated in the early years most favourable for language development. The lack of adequate stimulation during the sensitive period not only resulted in difficulties in the acquisition of spoken language skills but could also produce permanent structural changes in the central nervous system, and thereby diminishing the capacity of the brain to efficiently process speech-linked information later on, even if normal hearing could be restored, or artificial hearing produced (Perier et al., 1986).

The post lingually had a sensory impairment that interfered with their ability to perceive speech and other sounds, but they had completely developed language function. Although the quality of their speech could become distorted after some time because of the lack of auditory feedback, they usually remained intelligible. Their reading and writing capacities remained intact.

**TYPES OF HEARING DISORDERS**

There are two major types of hearing disorders displayed by
deaf-conductive disorders and sensorimotor disorder. Some people suffer from a combination of these disorders.

Conductive Disorders: These resulted from the interference with the transmission of sound through the outer ear or the middle ear. Most cases of conductive hearing loss were due to diseases that prevented the ossicles from working properly.

Sensorineural Disorders: These involved some defect in the inner ear or the auditory nerve, which led from the inner ear to the brain.

CAUSES OF HEARING DISORDERS IN CHILDREN

Diseases: Diseases caused most cases of conductive hearing loss. The leading cause of such disorders was Otitis media (infection of the middle ear). Diseases like Otitis media occurred most commonly during early childhood and could lead to serious hearing loss if not treated properly and promptly.

The other major cause of conductive hearing loss was Otosclerosis, a disease of ossicles. Meningitis and other diseases accompanied by high fever could also severely damage the inner ear and auditory nerve. A disorder of the inner ear called Meniere’s disease also caused hearing loss.
Birth Defects: These accounted for many cases of sensorineural deafness or hearing impairment. Some people were born with inherited defects in their auditory (hearing) systems. Other inherited conditions might lead to hearing loss later in life. German measles during pregnancy and Rh disease would cause hearing disorder in a child.

Environmental Factors: Such as accidents and exposure to loud sound, could damage a person’s hearing. In many of these cases, however, the victim eventually recovered much of the lost hearing. Exposure to loud noise over a long period of time could gradually cause permanent loss of hearing.

Whatever the reason behind deafness deaf in general demonstrated developmental lags in comparison to normals, requiring attention of psychologists, educationist, medical personnel and policy makers. Like all others, deaf also had a right to education. The developments in the education of deaf provided hopeful signs.

TRENDS IN EDUCATION OF DEAF

World’s first public school for the deaf was established in 1755 by Abbott de l’Epee. De I’Epee was convinced that the expression of human thought was not limited only to spoken language, gestures and signs could do the job equally well.
For the deaf, sign language was the natural language. Teaching of articulation accordingly was second to teaching of methodological signs and written language. The year 1778 marked the opening of another school in Leipzig by Samuel Heinicke who privately taught several deaf children in several parts of Germany. He took pride in being able to teach his pupils to speak clearly, and was strongly opposed to teaching of written before spoken language.

During most of the nineteenth century prevailed the controversy between oralism and manualism, not only in England but also in the United States. The year 1847 marked the founding of the first school for the deaf by Thomas Hopkins Gallaudet in the United States. Laurent Clerc, a deaf teacher trained in Paris by del'Epee's successor Sicard, taught there. Other manual schools were also created on the same lines with very little or no importance to articulation - cited by Reynolds and Mann (1987).

In 1880 an International Congress of Educators of the Deaf was convened in Milan, Italy. It adopted two resolutions:

1. Considering the unquestionable superiority of speech over signs for the most perfect knowledge of language, the oral method must be preferred to the gestural method.
2. Considering that simultaneous use of signs and speech had the disadvantage of being noxious to speech, to lip reading and to the precision of ideas, the purely oral method must be preferred.

The total communication (TC) philosophy as defined by Denton (1970), recognised the right of deaf child to learn to use all forms of communication available to develop language competence. This included the child devised gestures, speech, formal sign language, finger-spelling, lip reading, reading, writing, as well as any other methods that may be developed in the future. Many schools in the United States, and a growing number throughout the world were using it from the earliest age. Many were urging parents to learn to communicate with their children through signs in addition to speech. The combination of signs and speech had been termed bimodal communication by Schlesinger (1978).

Sign language interpretation services for the deaf allowed more deaf children to be mainstreamed than was formerly possible. In addition to sign language interpretation, other forms of interpretation were developed in some countries; such as oral interpretation and oral interpretation with cued speech.

It was generally accepted during the last quarter of the twentieth century that many hearing impaired children with
early education, proper hearing aid fitting, and continued support, could be successfully educated with normally hearing (Nix, 1976; Webster & Ellwood, 1985). While the degree of hearing loss was an important factor in determining which hearing impaired children could be mainstreamed, it was generally recognised that this factor was not decisive in itself.

While the trend towards mainstream education steadily grew over the years, the hope that early speech and hearing training would solve the language education difficulties of most hearing impaired children proved overly optimistic. Conrad (1979) demonstrated that whatever method was used, whether oral or manual, the majority of deaf school graduates reached a mean reading age equivalent only to that of 9 to 10 years old hearing children. A set of studies reviewed by Quigley and Kretschmer (1982) showed that deaf children of deaf parents who had signs as their first language were not disadvantaged in the oral skills and had slightly but significantly better gradings in overall language evaluation when compared with deaf children of hearing parents.

The status of education of the deaf was now characterized by a large diversity. The antagonism between methods had somewhat abated. The oral manual controversy was not as
bitter as before with most people on each side now recognizing the merits of the other (Tervoort, 1982a, 1982b). The question was not so much of choice between exclusively oral and combined oral manual methods as of deciding for whom, when, how, how much each modality should be used. Consensus prevailed on the paramount importance of early detection, assessment, and intervention, including proper hearing aid fitting and maintenance. The role of parents as the first educators of their deaf children as stressed by Whetnall and Fry and the Tracy Clinic, came to be widely recognised (UNESCO. 1985).

A crucial problem faced in the education of the deaf, besides cognitive and affective lags, that had important social psychological implications was attitudual and could be discussed as below.

ATTITUDE TOWARDS DEAF

Frequently the attitudes and maladjustments resulted not so much due to any direct effect of disability as to the attitude assumed towards the handicapped by parents, teachers, siblings or playmates. This was true whether the treatment took the form of cuddling and over-protection or of disparagement ridicule or application of jocular or sarcastic epithets.
Rejection:
One of the most prevalent attitudes toward deaf was that of rejection. Parents, siblings, significant others and outsiders had a rejecting impact over the child's perception of society. From the psychological point of view the parental acceptance of the child was primary to the development of attitudes. Handicapped parents were commonly known to accept their deaf children as normal contributing members of society. However, more deaf children were born to normal parents and the problem of acceptance affected them with greater severity (Corson, 1973).

Conner's (1976) longitudinal studies indicated that deaf children of deaf parents performed better than deaf children of hearing parents on a variety of tasks. It was also revealed that the deaf parents were warmer, and the initial flow of conversation between the deaf mothers and their deaf children was easier. The hearing parents did eventually learn to display warmth and acceptance of their deaf children by the time their deaf children were three years old, there was no longer any significant difference between their children and those of deaf parents.

To the hearing impaired child, attitudes of those who were intimately associated with him/her were important. These included his/her family, friends, neighbours, teachers,
employers and co-workers (Mordock, 1979; Sameroff 1979). An attitude of acceptance of hearing impaired child could go a long way, both on the physical and mental plane, in determining how the individual concerned would adjust to his life situation (Williams, 1981).

Pity:
Another prevalent social attitude towards the hearing impaired was of pity. It was an attitude characterised by a recognition of the seriousness of the problem but not appreciation. The person who was filled with pity on coming across a deaf, only recognised the sorry state of affairs, but he/she could take no positive steps to ameliorate the situation. Pity also made its object feel inferior. The person who pitied did not only consider the object of his pity less fortunate than himself but also secretly thanked God that he himself was not made that way.

Over Protection:
Another attitude shown towards the hearing impaired was over-protection. In most cases it stemmed from the mechanism of compensatory behaviour to mask the unconscious feelings of rejection.

Most parents of hearing impaired children subjected them either to over-protection or rejection (Furth, 1973;
Schlesinger and Meadow, 1976; Schlesinger 1978) and in many cases there was an oscillation between these attitudes. The net result of these attitudes was in improper development of the deaf child.

**Sympathy:**
Sympathy should be distinguished from pity. Pity occurred when one considered the object of pity inferior to oneself and it might result in some charity that was given to the less fortunate. The object of sympathy was not considered in any way less than the person sympathising. It included a desire to help the disabled constructively and enabling him to stand on his own. Yet, sympathy was not the most adequate nor the most desirable attitude towards the hearing impaired since it was only a form of compensatory behaviour.

**Dullness:**
Another common attitude towards hearing impaired was to consider them dull or less intelligent. This often resulted in forming a bitter view of the world on the part of the deaf.

People concerned with the growth and development of deaf children should understand that handicapped children had common basic needs with normal children. Handicapping conditions, besides the salient ones, interfered with the psychological development. Thus some of the behavioural
problems of handicapped could be the result of their inability to move successfully through different stages of development.

**MANIFESTATIONS OF DEAFNESS**

During the first few months of life it was difficult to differentiate between a deaf and a normal baby. The deaf baby cooed and chuckled in the same manner as did normals. His mind contained concepts, experiences, the urge to know, the wish to explore and discover. A two-way communication between the child and the people around was needed for further maturation.

A deaf child was however, cut off from the sound of the human voice and other environmental auditory stimulations. He had difficulty in communicating orally with adults and peers and in understanding the stimulations around him.

Deaf children generally displayed the following manifestations:

**Feeling of Insecurity and Isolation:**

Hearing and talking gave to the person a sense of belongingness to the environment on which one was so dependent. Deaf person felt insecure as he was not able to develop that feeling of belongingness. Hearing impairment limited his total sensory experience resulting in isolation
and detachment from environment. He was deprived of normal easy contact with other people (Kannapell, 1980). Such isolation had far reaching implications. The deaf not only missed the social problemsolving but also the recognition and appreciation of the problem.

Helen Keller who was deaf and blind said of her deafness: "The problems of deafness are deeper and more complex if not more important than blindness. Deafness is a much worse misfortune. For it means the loss of the most vital stimulus - the sound of the voice that brings language, sets thoughts astir and keeps us in the intellectual company of man." (Keller, 1968).

Frustration and Emotional Maladjustment:
Many studies found deaf children less socially mature. Meadow (1980) observed that delayed language acquisition experienced by most deaf children led to more limited opportunities for social interaction. Because of lack of sensory motor development deaf children tended to exhibit frustration and emotional maladjustment.

Inferior Performance:
Deaf children were found to score lower than their normal counterparts on scales of social and psychological development, (Streng and Kirk, 1938; Avery, 1948; Myblebust, 1960; Meadow, 1972). Studies showed that deaf children
lagged behind the normal children by three to four years on intellectual level while they still remained within the normal range of intelligence. (Pinter, Eisenson, and Stanton, 1941; Graham and Shapiro, 1953 and Vernon, 1969b).

Multiple Handicaps:
Literature indicated that about one third of deaf population suffered from multiple handicaps (Schein and Delk, 1974). It was next to impossible to find a suitable school system for deaf because apparently different deaf children suffered from additional handicaps. Multiple handicaps were more prevalent in exogeneous than in endogeneous cases of deafness, the Rh blood factor, premature birth, and rubella were the major categories (Vernon 1969a).

It was inevitable that additional serious handicaps would affect deaf children's academic achievement, psychological adjustment, and physical well being. Since emotional and behavioural disturbance increased with additional handicapping conditions, the variables tended to become confounding.

ROLE OF SOCIALISATION AGENTS

The role of primary agents responsible for socialisation of the deaf child was very important in his development.

An understanding of the deaf population required
comprehension of the individual and family dynamics of deafness, with special emphasis on the effects of child's deafness on family.

The addition of a deaf member in any normal family could be a cause for crisis. No parent voluntarily chose to have a deaf child. The time, energy and finances involved in caring of the deaf child were demanding and frustrating for the parents. Each parent and other members of the family had to make adjustments to the hard realities.

Deaf parents were found more likely to accept a deaf child and to include him as a useful member of the family than parents who were not deaf themselves. Since most deaf children were born to hearing parents, the problem of acceptance affected most deaf children (Schlesinger, 1978).

The hearing parents were prone to deny the reality of irreversible hearing loss. They generally kept seeking additional medical opinion in vain hope of hearing something more pleasant. In futile search of a more acceptable diagnosis, parents lost valuable time which was needed for auditory training and early educational opportunities (Mindel and Vernon, 1971).

Deaf children of deaf parents enjoyed a relative advantage as compared to deaf children of hearing parents. The
advantages enjoyed by deaf children of deaf parents had generally been attributed to early exposure to manual communication (Stuckless and Birch, 1966; Meadow, 1968 & Vernon and Koh, 1970, 1971).

An important feature of the deaf child was that the parents adopted measures to hide the deafness and hiding the handicap eventually had the effect of rejecting the child (Furth, 1973).

Murphy (1977) stressed upon the need for loving, communication, rational hope and acceptance of painful reality by parents. Hearing parents also were likely to experience a profound sense of guilt over the fact that they had a handicapped child. The guilt might involve religious overtones in a culture where misfortune was sometimes interpreted as a divine retribution. Or the guilt might simply reflect the parents' awareness that society prized a "sound mind in a sound body" and often stigmatised persons who had a disability. The families of deaf and handicapped persons shared the stigma (Kauffman and Hallahan, 1981).

The problems faced by parents of deaf were sufficiently severe to warrant counselling.

**SOCIAL CONTACTS**

Deaf children were likely to experience differing
opportunities to make social contacts with other deaf or hearing persons depending on their educational placement and life situation. Those deaf children who attended a day school for deaf and spent evenings, weekends and holidays at home were more mainstreamed than deaf attending a residential school. As a result such deaf were likely to cultivate relationships within their neighbourhoods with hearing children and adults. Their close relationships with deaf adults were likely to suffer and, perhaps also with other deaf children except those in their own school or class. Children attending a residential school were likely to make a larger number of deaf friends and acquaintances from the school population. They were less likely to rely upon hearing children living close to their homes for playing or cultivating close and lasting relationships. Even if they went home regularly on holidays they had lesser opportunity to cultivate friendships at home with normal hearing people than deaf children who lived at home and commuted to school every day.

Similarly, if more than one deaf child (multiple deaf) were born to the same parents they would like to be in each other’s company rather than relate with other hearing members of the family or neighbourhood. But if there was only one deaf child in the family (where all others were hearing) he would be better integrated with the hearing
members in and outside the family unlike the case of multiple deaf siblings.

It therefore seemed logical to conclude that the deaf children with greater normal social contact and unconditional integration with the hearing members in and outside the family matrix would be more benefited in their social and psychological development against their counterparts who were either studying in residential schools or staying in the company of their deaf siblings at home.

Literature revealed superiority of day deaf students over the residential ones in domains of social maturity (Meadow 1969, 1972). There was paucity of research comparing performance of single and multiple deaf siblings on various socio-psychological scales. However, most literature on social competence emphasized effective peer relations in social interactions.

There was substantial evidence in the literature against the acceptance of deaf children in mainstreamed educational setup. (Murphy and Newlon, 1987; Margolis and McGettigan, 1988; Duquette and O'reilly, 1988 and Mertens, 1989).

It was natural for a deaf educationally mainstreamed child to generalize his displeasure, emanating from the hearing class mates to hearing persons in general because of the
feeling of isolation. On the other hand the deaf child who attended a day school for the deaf and was growing amidst hearing community after school hours was expected to have better relations and less hostile feelings for the hearing people. It was expected that such deaf children would be better developed than either the educationally, mainstreamed deaf or the deaf staying in residence of special schools (institutionalised deaf).

COGNITIVE FUNCTIONING OF DEAF: ASSESSMENT PROBLEMS

Two divergent views prevailed about cognitive functioning of deaf children. One stressed the development of intelligence tests designed to measure complex problem solving ability and rate of mental growth, the other concentrated on the invention of research tasks designed to measure cognitive development or level of cognitive functioning in areas of perception, memory and learning.

The performance scales were commonly used for the measurement of intelligence of deaf (Vernon and Brown, 1964; Levin 1974). If handled by a skilled examiner, a well constructed intelligence test would yield useful and reliable information about the deaf's intellectual capacity, provided certain assumptions were met (Standards for educational & psychological tests, 1974).
Even after the above assumptions were met the resulting score might still suffer from some measurement errors. It was difficult to prove indeed that in case of deaf children that the above assumptions could be met. The assumption of equal accessibility of information to all persons tested was violated in case of deaf children having sign language as their primary language. The deaf group had a different stimulus-response pattern than normal children. Also violated was the assumption of norms for the deaf population. The tests generally used for deaf school age children did neither have norms for deaf (Levine, 1974), nor were deaf included in the standardization sample. The assumption of a standardized administration posed serious problems. If instructions were given orally those were meaningless for the deaf. If non-verbal procedure or sign language was used, the difference in procedure made the scores non-comparable. The assumption of the competence in communicating with deaf subjects was extremely difficult to satisfy. Levine (1974) surveyed specialists serving deaf clients and found that half of the respondents could not communicate manually and most others rated their own communication skill from fair to poor. Thus the current practices of intellectual assessment of hearing impaired suffered from serious limitations (Gerweck and Ysseldyke, 1975).
The other measures of intellectual competence of deaf children were experiments on cognitive functioning. The generalized deficiency hypothesis (Myklebust, 1964) prompted much of the early work on deaf and normal children's perception (Myklebust & Brutten, 1953), memory (Blair, 1957) and in intelligence, personality, and social maturity (Myklebust and Burchard, 1945). It was believed that the inadequacy in one sensory system would result in reduced amount of total experience. Inferior performance by deaf children in any or all of the tasks was understood as evidence that their auditory impairment caused an organismic shift leading to deficits in other areas of functioning.

An alternative hypothesis enjoying wide acceptance was the hypothesis of linguistic deficiency. Since deaf children and deaf adults clearly manifested a severe language deficit, the hypothesis predicted deficits in the area of cognition as well.

Development lags were often explained using the hypothesis of experiential deficit (Furth 1971). But in the absence of specificity regarding kinds of experiences that were lacking and the manner and the time in which they affected the developmental process the hypothesis could not be confirmed (Liben, 1978).

Although a number of studies had reported about four years
lag in deaf children's development and inferior performance of deaf subjects compared to hearing subjects the data did not uniformly support either a generalized deficiency hypothesis or a linguistic deficiency hypothesis.

Intelligence quotients (IQ) of deaf persons could not be taken to be more than crude estimates of intellectual ability. A high score was more credible than a low one, since superior I.Q. may not be the result of chance factor. But a low score was always to be interpreted with caution since a host of factors other than the lack of ability could be responsible for it, e.g., they could stem from lack of incentive to perform well, from failure to understand the demands of the task, from lack of prior experiences with as many varied test situations as hearing children, from poorer rapport, or from a variety of experiential deficiencies in areas affecting task performance.

Other sources of poorer performance among deaf children were the additional handicapping conditions. The random samples of deaf children often included a substantial number of individuals whose performances were likely to affect group means adversely. Even if subjects were screened to exclude subjects known to be multiple handicapped, the sample nevertheless included undiagnosed cases of neurological impairment.
DEAFNESS AND AFFECTIVE DEVELOPMENT

In daily life one key task the deaf had was to interpret the emotional messages conveyed by facial expressions of others. Research revealed that young children read emotions from facial expressions as poorly as they interpreted a written message. Performance gradually improved through the preschool years till the early teens when adult accuracy was achieved (Bullock and Russell, 1984).

The improvement in performance resulted from verbal as well as non verbal components of interpersonal communication. Tomkins (1980) considered non verbal behaviour (facial expression in particular) as an integral part of the experience of emotions as both had the same neurological basis. Non verbal communication at times contributed to the perception of emotional content of the messages more than the verbal communication. However, the listener had to attend to both components to understand the communication as it was usually transmitted both aurally and visually.

It was expected that when only one mode of communication was used the process of development and interpretation would alter. The deaf used the visual vehicle for language. It was generally believed that the loss of any primary channel led to the development of compensatory sensitivity in the remaining channels that helped in making up for the loss.
It appeared from available evidence that deaf subjects differed from hearing subjects in their perceptions of emotional contents of non-verbal messages.

**THE PROPOSED STUDY**

This study proposed to investigate the following questions and fill up the gap in knowledge about the development and educability of the deaf to some extent:

1. If normal children differed from the deaf children on intelligence, perspective taking ability and perceptions of parental acceptance rejection?

2. If institutionalised deaf children differed from non-institutionalised deaf children on the above variables and also on the educational achievement?

3. If deaf children having deaf siblings (multiple deaf) differed from deaf children having no deaf siblings (single deaf) on the above variables?

The differences were proposed to be examined, using an analytical framework. The concepts of developmental lags, social learning, linguistic and experiential deficits and mainstreaming would be used in discussion of results.

Both the theoretical and applied rationale underlined this study. The available literature (reference Chapter 2)
indicated a paucity of researches comparing the normal and deaf children's cognition and perspective taking ability in India. Differences in the perspective taking ability of deaf children and parental behaviour were not really probed largely because of the inability of researchers (who were normal people) to communicate with deaf, (Hoemann 1972a). They administered performance tests, but while probing into their perceptions found communication as a strong barrier. Deaf people used sign language whereby they communicated with their brethren but most researchers did not understand that. Challenging as it should be, there was need for researchers to pick up the language of the deaf and go deeper into the understanding of deaf children's psychology, if efforts for intervention and rehabilitation were to be made successful.

In general the goals of education for deaf and the normal were the same inspite of the former’s understanding, concept formation and communication being arrested at a lower level. The differences in capabilities of normal and deaf children ought to be assessed and reflected in their educational goals. If the goals of education for deaf were in accordance with their needs and communicative abilities perhaps a larger number of them could succeed in schools and better fit into the society.
Deaf had to adjust to their handicap and also to not so accepting a society, namely the social handicap. The situation was confounded when they could not even clarify and communicate their ideas to show their worth. The extent to which they could adjust to environment depended to a great extent, upon the support of the mother. Many of the deaf children were born to normal parents, and thus there was always the problem of acceptance of the deaf child resulting in his retardation (Corson, 1973; Furth, 1973; Murphy, 1977). This needed to be explored on Indian subjects.

Sullivan (1940) noted that during the preadolescent years from nine until puberty, children began to experience greater consciousness and sympathy toward the world of social relationships. Those who did not develop social sensitivity during preadolescence were not to have a socially comfortable life during adulthood. No study had probed into the relationship between perspective taking ability and parental behaviour. It was required though that understanding of difference in performance of institutionalised vs non-institutionalised and multiple vs single deaf, on different variables would give the researcher a better insight into their growth and development from the angle of integration. Such understandings can make interventions more meaningful.