

A PSYCHOLOGICAL STUDY  
OF  
HEARING HANDICAPPED CHILDREN

Thesis submitted to Bangalore University  
for the Degree of  
Doctor of Philosophy in Psychology

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## CERTIFICATE

This is to certify that the thesis entitled "A Psychological Study of Hearing Handicapped Children" submitted by Mrs. Dharitri, R. in fulfilment of the requirements for the Degree of Doctor of Philosophy in Psychology has been conducted under my supervision. It embodies the results of her own research work and it is a record of the candidate's personal effort. This work has neither been submitted anywhere else nor has formed the basis for the award of any other degree or diploma to the candidate.

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DECLARATION

I hereby declare that this research was conducted by me at the Department of Psychology, Bangalore University under the valuable guidance of Dr. (Mrs) Vinoda N. Murthy, Professor and Head of the Department of Psychology, Bangalore University. This thesis has been submitted to Bangalore University for the award of the degree of Doctor of Philosophy in Psychology in the month of April, 1966. This thesis or parts thereof has not been submitted to any other university for any other purpose so far.

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A B S T R A C T

The present investigation aimed at studying the psychological aspects of hearing impaired children. Psychological aspects included cognitive functions and social-emotional aspects. The cognitive functions investigated were perceptual motor functions and intelligence. Social emotional aspects were social maturity, body image, behavioural and emotional problems, and parental attitudes. Three hundred seventeen hearing impaired and a control group of 90 normal hearing children were studied. The sample of hearing impaired children was drawn from schools and institutes at Bangalore and Mysore, using purposive sampling technique. Control group of hearing children was drawn using neighbourhood control technique from regular schools. The type of school attended by the children (special school or regular school), degree of hearing loss (moderate, severe or profound) and their age (5½ to 7½ years, 7½ to 9½ years or 9½ to 11½ years) were taken into consideration for subdividing the sample into 18 groups accordingly. The hearing impaired children were congenitally or prelingually deaf.

Perceptual motor functions were assessed using Bender Visual Motor Gestalt test. For the assessment of intelligence Seguin Form Board and Malin's Intelligence Scale for Indian children was used. Social maturity was assessed using Vineland Social Maturity Scale and body image by using Draw-A-Person

test. Behaviour Problem check list was made use of to explore the behaviour problems. Parental Attitude Research Instrument was used to assess the parental attitudes. A General Information Schedule was used to elicit information regarding demographic details of the subjects, and their personal and medical histories.

The children were assessed in individual sessions and parents were also interviewed individually. The scores obtained were subjected to statistical analysis. According to the suitability, both parametric and non parametric statistics were used.

Results revealed delayed maturation of perceptual motor functions among hearing impaired children. They were equal to normal hearing children in their 'general' intelligence but were significantly below normal hearing children when perceptual-conceptual ability, planning and organizing ability, and ability to associate symbols were considered. Hearing impaired children differed from normal hearing children with respect to the manifestation of behaviour problems in magnitude and not quality. Mothers of hearing impaired children showed extreme attitudes whereas the mothers of normal hearing children were moderate in their attitudes. Type of school and degree of hearing impairment

were found to influence the cognitive functions but not social-emotional aspects. No sex differences emerged on the various measures.

The results have been discussed in the light of cognitive-developmental and behaviouristic theoretical models. Implications of the study to education has also been discussed.

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## **I N T R O D U C T I O N**

## INTRODUCTION

Society is known by the ways in which it takes care of its members, especially the minority group. Handicapped members are the weakest in this group. Because of the inborn or acquired enduring disability, the handicapped child has to face and overcome many problems in the process of growth, development and adjustment. Different type of disabilities result in various handicapping conditions. Hearing impairment is one such disability.

Accurate figures regarding the number of hearing impaired persons in India, are not available. It is estimated that there are about 20,00,000 hearing impaired persons out of which 4,00,000 are children of school going age, though only 2% of them are actually enrolled in schools. The 1981 census reports, 17,613 deaf children in the state of Karnataka, India. Out of this 14,970 have been reported to be in urban areas and 2,643 in the rural areas. Few survey studies, restricted to certain areas, village or town, report different rate of prevalence of hearing impairment. A common feature reported in these studies, is that hearing defects are seen more in lower socio-economic levels and that there is a high rate of consanguineous marriages among parents of hearing impaired children (Nikam, 1970; Abrol et. al., 1970; Abrol and Raghavan, 1977; Kameshwaran, 1967; Vijay A. Shah, et. al., 1971).

A nationwide, systematic and comprehensive survey with an audiometric assessment is necessary.

Hearing is one of the most important sensory mechanism through which an individual keeps himself in constant touch with his environment. Consequences of this sensory deprivation is of immense significance. Hearing impairment is not only a loss of an important sensory mechanism but also a lack of the most important mode of communication i.e., speech. Sharing a common language is a basic requirement for the proper integration of a child into family, community and society.

In caring for an hearing impaired child one is faced with three main problems - the child's mental ability and educationability, his adjustment patterns at home, school and society, and how he can be helped to become a contributing member of the society. Service facilities for such children in India, are far from adequate and have usually been the subject of concern. Facilities need to be enhanced, and widened in scope in different directions.

First and foremost is identifying or diagnosing the child with hearing impairment. It is essential that hearing impairment be diagnosed and assessed as early as possible so as to be able to help them at the critical periods of growth and development. In India, diagnostic facilities are being provided by Speech and Hearing Institutes, Ear-Nose-

Throat (ENT) Departments, Speech Pathology and Audiology Departments of general hospitals. Voluntary organizations also help in organizing screening programmes in rural areas. However, these facilities are not sufficient. Many of the children still remain undetected. This is especially the case with children having mild to moderate degrees of hearing losses. It has been found that 9.7% of the children in normal schools have hearing impairment but have gone unnoticed, and about 1.6% in the special schools remain without proper and accurate audiometric assessment. Many of the symptoms of deafness in children like chronic inattention, frequent failure to respond when spoken to, considerable delay in age of speaking, and extremely faulty articulation, apparent backwardness in school, are associated with other problems like mental retardation, emotional disturbance and brain damage. This makes diagnosis or identification very difficult. Absence of any physical sign like ear discharge, ear injury or infection add to this problem. Parents and other lay persons fail to suspect hearing problem among these children. In such situations parents become worried only when the child crosses the age when normally children begin to speak. Increasing public awareness through public education is necessary. Screening at infancy, i.e., immediately after birth, maintaining a high risk register, and follow-up is of great importance. These measures are yet to be taken up in India.

Second important requirement is of trained personnel.

Training of personnels as audiologists, speech pathologists and psychologists is being done in various academic institutions. Special educators of the deaf are being trained at various training centers. However, the present number of personnels is meagre and does not meet the requirements. National Council of Educational Research and Training has taken up the task of training special educators of the handicapped, including the deaf, in an organized and systematic way.

Another most important requirement is the information about problems faced by such children in different spheres of life, its consequences on the child's psychological development, and different disabilities or handicaps associated with it. With such an information available one can think in terms of the child's need for education and training. Children with hearing impairment have been, and are being educated in two main settings - residential schools and special day schools. Both these settings are based on the concept of segregation. The trend is changing now and educational systems are being directed towards integration. In this connection the Government of India has made it mandatory for all the schools to enroll children with hearing impairment when parents seek enrollment (1978 Regulation). However, the school authorities still hesitate to do so. Though there are schools termed as integrated schools, they do not function on the true concept of integration. A severely or profoundly deaf child needs

supplementary training by a special teacher of the deaf in the environment of a regular school. Special class, with some integration with the regular class or a still greater degree of integration with the assistance of resource teachers, consultants or itinerant teachers, can be the best mode of integration. Gradual integration instead of an abrupt complete integration has been found to be most beneficial (Motte and Warwrensk, 1963). Information about the child's mental capacity, abilities and deficits can help one to understand how much, and in what area integration is beneficial, and what type of special training programme would benefit them most.

Similarly one needs to know the problems faced by the family members as a result of the presence of a hearing impaired child. This can help the concerned personnel to have a better understanding of the family environment. This in turn can help him to help the family, toward: better understanding and acceptance of the child, and also in initiating an effective home training programme. If information about the common features of emotional reactions and behaviour of hearing impaired children is made available, both, teachers and parents, can be helped to be able to handle them properly in day to day situation.

Such information is lacking in India. There is a dearth of systematic and comprehensive investigation in this field. The present study is an attempt in this direction. The

investigation is aimed at studying the psychological aspects of hearing handicapped children.

Hearing deficit is referred to by a variety of terms with various degrees of stigmatizing connotations. "Deaf", "deaf-mute", "deaf and dumb", "hard of hearing", "hearing handicapped", "aurally handicapped", and "hearing impaired" are the various terms used for this sensory deficit. The term "hearing impaired" was found to be least stigmatizing (Wilson, Ross and Calvert, 1974).

There are two types of definitions given for hearing impairment - the quantitative and the psychological, educational and social. The quantitative definitions indicate auditory deficit as the degree of hearing loss measured audiometrically in terms of decibels (db). The definition proposed by the white house conference on Child Health and Protection (1959) is more functionally oriented and distinguishes between the Hard of hearing and the deaf in terms of age of onset of the hearing loss. The deaf is defined as (1) those persons who are born with sufficient hearing loss to prevent the spontaneous acquisition of speech; (2) those who became deaf before language and speech are established; (3) those who became deaf so soon after speech and language were acquired that these skills have been practically lost. The hard of hearing are defined as those persons who acquired useful speech and the ability to understand speech prior to their hearing loss, and who have continued to do so. However, such a definition violates the

common sense use of the terms "deaf" and "hard of hearing".

The definition of the committee on nomenclature of the conference of Executives of American schools for the Deaf (1938) is simple and more practical. The term deaf is defined as "those people in whom the sense of hearing is non functional for the ordinary purposes of life". The term hard of hearing is defined as "those in whom the sense of hearing, although defective, is functional with or without a hearing aid". This nomenclature has been widely accepted and is in use in present times also.

The deaf are subdivided into the congenitally deaf and the adventitiously deaf. Congenitally deaf are those who were born deaf, and adventitiously deaf are those who were born with normal hearing but whose hearing became nonfunctional through accident or disease. The hearing handicapped are sometimes subdivided according to the type of organic involvement into conductive hearing loss, sensori neural hearing loss and mixed hearing loss. Conductive hearing loss results from the pathological changes in the middle ear due to congenital or acquired abnormalities of the middle ear. These are amenable to surgical and medical treatment and are commonly of mild degree. Abnormalities in the inner ear or the auditory nerve result in hearing loss termed sensori neural hearing loss. These are not amenable to surgical and medical treatment. The principal mode of therapy for children having sensori neural hearing loss is educational.

Causes of hearing impairment are many, though it might be difficult to trace back the exact cause of hearing impairment in a person's medical history. Some hearing defects are inherited e.g. a degenerative nerve deafness which can be present at birth or can occur in later life. Some of the important pre-natal causes of hearing impairment are German measles or maternal rubella, influenza and mumps in early pregnancy. Some type of drug treatment and irradiation during early pregnancy can result in hearing impairment which is not hereditary. Some of the perinatal factors have also been found to be associated with hearing impairment. These factors are prematurity, anoxia, breech delivery, and Rh incompatibility. Postnatal causes of hearing loss include ear injury, chronic ear infections, childhood diseases like scarlet fever, mumps, measles, whooping cough, meningitis, typhoid, small pox, pneumonia and influenza.

Whatever is the cause of hearing impairment the consequence is a sensory deprivation which results in deviancy in different spheres of life. This needs to be studied and helped.