# A STUDY OF QUALITY OF LIFE OF STUDENTS WITH HEARING IMPAIRMENT WITH REFERENCE TO THEIR INTERACTION AND PARTICIPATION IN INCLUSIVE SCHOOLS OF RAJASTHAN





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in

# **SPECIAL EDUCATION**

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I, Pramod Kumar Kulhade, certify that the work "A Study of Quality of Life of Students with Hearing Impairment with Reference to their Interaction and Participation in Inclusive Schools of Rajasthan" reported in this thesis is my own and carried out by me under the supervision of Dr. Akhilesh Kumar, Assistant Professor, School of Education, Vardhman Mahaveer Open University, Kota.

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Date: 25/04/2022

Place: Kota

(Pramod Kumar Kulhade)

#### Preface

The research work entitled "A Study of Quality of Life of Students with Hearing Impairment with Reference totheir Interaction and Participation in Inclusive Schools of Rajasthan" submitted to Vardhaman Mahaveer Open University, Kota, at the time of profound and deep principled and practical changes in all domains of education including special education all over the world. We are en route towards inclusive education and inclusive school setup. However, the journey towards inclusion and quality of life of divyangjans began a very long time ago; actually, it started at the same moment when some formal education for children with special needs was established. Taking this into account, we can ask where we are now, mainly in the area of rehabilitation and improving the quality of life of an individual with divyangjan; what is a symptomatic feature describing recent and contemporary development? One answer to this might be that the ongoing transformation in education, as well as special education, has been lately relatively rapid, covering the increasing number of interlinked domains of quality of life and dimensions of the society: international and national policies & schemes, educational administration, school infrastructure and contents, teaching method, special educators qualification, educational sciences, student's interaction & participation, community participation, and parental participation in the school system. The conservational nature of change in special education is increasingly evident.

At the turn of the 1960s and 1970s, it was started to discuss and negotiate the precincts between regular and special education. This period in education can be described, according to one icon of special pedagogy M.C. Reynolds, with the terms "least restrictive alternative", "mainstreaming", or "progressive inclusion". The 1970s finally brought us to the time of educational inclusion and improving quality of life, having numerous symptoms, signs and discussions on different levels in society. The discussion has led to an important

conclusion: Inclusive schools will accommodate a wide range of individual differences only when changes have been made in the whole education system.

Currently, on the societal and policy level, the most remarkable ongoing shift is the movement from segregation towards inclusive educational policies and systems, education for all. Transition into holistic thinking regarding education has been influenced by many factors, for example, the construction of the social model of disability in the 80s by Mike Oliver. The model does not deny disability but locates it squarely within society. Subsequently, one underlying key reason for striving towards inclusive education is the global development of and discussion on human rights issues in general and the rights of persons with disabilities in particular.

Interaction is the activity of being with and talking to other people and how people react to each other. Social interaction is a fundamental kind of interaction that includes many behaviours, so many that in sociology. Interaction is usually divided into five categories. These are exchange, competition, cooperation, conflict, and coercion. In statistics, an interaction may arise when considering the relationship among three or more variables and describes a situation in which the effect of one causal variable on an outcome depends on the state of a second causal variable (that is, when the effects of the two causes are not additive).

Participation or "involvement in life situations" is a crucial outcome. Participation may take place anywhere. School participation includes unstructured activities (e.g., friendships,play), organized activities (e.g., sports, clubs, arts), classroom-based activities (e.g., group work, study), and engagement in social roles. Children with impairment are at significant risk for limited Participation in school. Such restrictions have significant life outcomes for achievement, quality of life, and well-being. Several issues influence the Participation of Divyangjan. Attendance for Divyangjan is reduced compared to peers. Students with disabilities participate less in structured and unstructured activities and experience reduced interaction and playground participation. Children with disabilities, in addition, show less engagement in the broader school world, including clubs and organizations.

Quality of Life is an individual's perception of their position in life in the context of the culture and value systems in which they live and their goals, expectations, standards, andconcerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships, and relationship to salient features of their environment. Quality of Life (QoL) is a significant characteristic of every individual, the QoL of every divyangjan has been affected due to his/her disability. For refining the Quality of Life of every specially-abled person, the Government of India emphasizes implementing an Inclusion policy. So every specially-abled child needs to be integrated into general schools, but in practice,students with Hearing Impairment have been facing many problems. Generally, they use sign language for communication, which is difficult to understand by their classmates with normal hearing, teachers, other school authorities, and a society member. This communication gap creates many barriers to his/her quality of life due to a lack of resources or support services, awareness, Govt. policies, etc.

Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. Divyangjan with Hearing Impairment, has actively participated in non-verbal activities like-drawing, painting, crafting, etc., and is less interested in those activities that need to use more oral language like debate, singing, dance, music, etc. Divyangjan with Hearing Impairment sadly shares his/her educational progress, especially with normal-hearing peers, and is blamed for their impairment. Early identified & intervened Divyangjan with Hearing Impairment who got CochlearImplant (CI) in his/her critical age have uses more

oral language during communication. CI user Divyangjan with Hearing Impairment, has better participation skills in family and society than other hearing aid users. Other than CI user Divyangjan with Hearing Impairment has participated in mobile-based recreational activities where the minimum use of oral language will be used.

Participation of parents in academic and non-academic activities is unsatisfactory. Lack of hearing assessment clinics. Lack of speech therapists for speech correction for the student with hearing impairment. Transport-related barriers to reaching school. Students with hearing impairment were facing problems understanding the teacher's lectures. Problems in communication with peers. Students with hearing impairment show less participation in academic and non-academic activities. They are unable to represent themselves in the classroom. Unable to read complex sentences. Problems in proper pronunciation. They have hesitation in sharing their learning materials. Facesproblems in understanding new concepts. Faces problems in recalling any concept.

Children with hearing impairment face problems in oral communication. Unable to express himself adequately. The child is less interested in household work. Due to the communication gap, the child is less interested in participating in social activities. Lower self-help skills. For improving the Quality of Life of Divyangjan with hearing impairment, it needs to be aware of the population about Divyangta. We need to remove the barrier between the able and disabled. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the student's level. Parent's participation in academic and non-academic activities. Motivation them to represent themselves. Reinforcement will be given against each activity. Early identification and intervention of hearing impairment. We need to provide advanced and appropriate hearing aid.

	List of Abbreviations
A.A.C.	Augmentative and Alternative Communication
A.D.Ls.	Activities of Daily Living
ANOVA	Analysis of Variance
B.Ed.	Bachelor in Education
B.S.L.	Brazilian Sign Language
B.T.E.	Behind The Ear
C.A.P.E.	Children's Assessment of Participation and
	Enjoyment
C.G.	Control Group
C.I.	Cochlear Implant
C.P.	Cerebral Palsy
C.P.Q.	Classroom Participation Questionnaire
C.w.H.I.	Children with Hearing Impairment
C.W.S.N.	Children with Special Needs
dB	Decibel
dBHL	Decibel Hearing Impairment
D.Ed.	Diploma in Education
D.H.H.	Deaf and Hard of Hearing
Govt.	Government
H.As.:	Hearing Aids
H.H.I.ES.	Hearing Handicap for the Elderly—Screening
	version
H.I.	Hearing Impairment
H.I.S.	Hearing Impaired Students

# Abbreviations, Tables and Figures

International Classification of Impairments
Disability and Handicaps
Integrated Education for Disabled Children
Interaction of Hearing Impaired Student in
Inclusive School
Inventory of Life Quality of Children and Youth
Inclusive School Teacher
Learning Disabilities
Master in Education
Master in Education Special Education Hearing
Impairment
Pervasive Development Disorders
Participation and Environment Measure for
Children and Youth
Parents of Hearing Impaired Students
Participation of Hearing Impaired Student in
Inclusive School
Person with Disabilities
Quality of Life
Quality of Life Scale for Children and Adolescents
Rehabilitation Council of India
Rights of Persons with Disabilities
Special Educational Needs
Students in a Sign Bilingualism and Co-Enrollment

# Abbreviations, Tables and Figures

S.P.S.S.	Statistical Package for the Social Sciences
S.w.H.I.	Students with Hearing Impairment
T.V.	Tele Vision
U.H.L.	Unilateral Hearing Loss
U.N.	United Nations
U.N.E.S.C.O.	United Nations Educational, Scientific and Cultural
	Organization
U.S. A.	United State of America
W.H.O.	World Health Organization

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# A Study of Quality of Life of Students with Hearing Impairment with Reference to their Interaction and Participation in Inclusive Schools of Rajasthan

## Abstract

With a growing awareness of human rights and people with disabilities, inclusive education has gained momentum since the latter half of the twenty-first century, and as a result, the quality of life of people with disabilities has become popular among researchers in the last two decades. A study of the quality of life of students with hearing impairment in relation to their interaction and participation in inclusive schools in Rajasthan was conducted with four fold objectives: to study the participation and interaction of students with Hearing Impairment in inclusive school, to investigate the Quality of Life of students with Hearing Impairment, especially at school, to identify barriers to improve the Quality of Life of students with Hearing Impairment and to suggest a model for improving the Quality of Life of students with hearing impairment in an inclusive educational set-up. For this study, a convergent concurrent design was chosen from among several mixed method designs. This study's sample included 100 peers of children with hearing impairments, 20 parents, 20 special educators, and 20 children with hearing impairments from Jaipur and Ajmer, who were chosen using purposive sampling methods. The researcher created a tool to assess the interaction and participation of children with hearing impairments in school-related curricular and co-curricular activities. A 3-point rating scale was used to elicit responses from peers, teachers, and parents. Interviews and focus group discussions were conducted with selected samples in order to identify barriers and develop an effective model to improve interaction and participation of children with hearing impairment in school. Data was analysed qualitatively and quantitatively. The findings of this study revealed that children with hearing impairment have a poor quality of life in terms of interaction and participation in various activities at school. Lack of special educators in schools, a lack of early identification and intervention services, and a lack of hearing-impaired friendly technologies, including a signed language teacher and interpreter, were major barriers to the inclusion of children with hearing impairments in Rajasthan. The study paves the way for future research on the quality of life at school for all students with disabilities.

# CHAPTER-1 INTRODUCTION

#### Introduction

#### 1.1 Meaning & Concept of Hearing Impairment

Hearing Impairment is the most misunderstood of all human disabilities. Different people have different misconceptions about the abilities of person with hearing impairment. Some think the hearing-impaired are intellectually deficient, while others think that though they may not hear, they should not have any problem using language and speaking naturally. This is not surprising because, on the face of it, it is not easy to immediately correlate deafness with the ability to acquire language and speech skills. Another reason for this could be that they have perhaps met people who have become postlingually deaf and therefore can speak (read and write) quite well. Most people who have not come in close contact with the prelingually deaf and have not been required to interact with them cannot appreciate the gravity of the problemsarising out of this disability.

For hundreds of years, the congenitally deaf were considered "dumb," not only in the sense of being unable to speak but also "dumb," that is "stupid." In fact, they were regarded by law as "incompetent" to inherit property, marry, receive education, do any challenging work, and were denied fundamental human rights. However, by the middle of the eighteenth century, it was generally realized that the deaf population does have the normal range of variation in intellectual capacity (same as the hearing population) and that they are educable both in learning language and speaking and being educated rough the way they can learn. Consequently, efforts are now being made to educate the general public and change the social attitude, and the terms such as " deaf and dumb" or " beharagunga" or " behara muka" are slowly being replaced by the terms " the deaf" or "the hearing impaired." However, it is needless to add the change merely in the usage of terms is not going to make the deaf "speaking persons" or quickly turn them into

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"educated person." It is only the consistent, systematic, and intelligent efforts towards stimulation and training the HI children individually over a long period that is likely to bring about the desired change.

The attitude of society towards the person with Divyangjan has been changing with time. In all the world's countries, people with disabilities are the largest minority group. People with disabilities have a long history of neglect, segregation, isolation, deprivation, charity, welfare, and even pity. Let us look into the international and national scenario regarding the person's status with disabilities.

#### **1.2 International Scenario:**

The 19<sup>th</sup> century saw the advent of special education in Europe and America. Many physicians, psychologists, and educators took initiatives in developing special education. At the beginning of the 19<sup>th</sup> Century, Itard (a French physician) was recognized by most historians as the first person who tried to educate a wild boy of about 12 years, named Victor, apparently abandoned in a forest in Southern France at the age of 3 or 4.

Seguin, known as the most outstanding teacher of the mentally deficient, established the first public school for the feeble-minded in Paris in 1837. In 1846, he published his classic textbook " Idiocy and its Treatment by the Physiological Method" Montessori Method of education owed much to the concept of education developed by Seguin, who subsequently worked in collaboration with Samuel Howe for the education of children with mental retardation in the U.S. are generally said to have started in Providence, Rhode Island in 1894. Pedro Ponce de Leon of Spain, in the late 1500s, was perhaps the first to demonstrate that the deaf can be taught and are capable of learning. The first school for the deaf started in France during the 1700s. Abbe de l'Epee in Paris, Thomas Hopkins Gallaudet in the USA, Pedro Ponce de Leon in Spain, Jacob Periere in

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France, Samuel Heinicke in Germany, and Thomas Braidwood in England were the pioneers in the growth of special education of the deaf. Gallaudet established the first residential school for the deaf in 1817 in Hartford, USA. The Gallaudet College in Washington D.C. is the only college for the deaf named in his honor. As early as 1930, parents began to unite efforts and bond to share problems and seek answers for exceptional children's education and care. The first parent group to organize on behalf of children with disabilities were children with cerebral palsy. Shortly after that, the National Association of Retarded Children was organized in 1950. Subsequently, parents' organizations with similar interests of the learning disabled, gifted, and talented have been formed. Parents persistently encouraged the educators to recognize their rights as parents to seek relief for their children and pass laws that would meet the needs of children with special needs (IGNOU- NCDS,2010).

#### **1.3 National Scenario:**

The sage Charaka studied the phenomenon in detail and postulated the causes for the disabilities. However, no evidence in the literature indicates that some form of educating the disabled also existed. It is possible that the scholars were forbidden to undertake any attempt to educate any disabled persons due to negative attitudes then prevalent. Sage Manu does not give equal status to the disabled in society. The disabled person and the women, the aged, and the animal were put into a separate category and were thus discriminated against as being unequal. They were debarred from participating in social functions of religious nature. Manu also recommended that these members of the society be given no share in inheritance.

When the British embraced political power in India, the programs and policies that the Rulers implemented in their mother country of Great Britain were also implemented here,

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even after the Indian Independence, the policy of charity towards persons with disabilities, a legacy of colonial times, continued. Christian missionaries and other voluntary organizations provided services to persons with disabilities (PWD) on a charity model. Society's attitude towards PWDs has not changed much, which is a crucial responsibility of the government and civil society.

In India, the PWDs were not kept in institutions, and they used to live in the community, which could be termed to some extent as co-existence in a limited inclusive setting, though the treatment and attitude were at variance. Concerning education, even the Gurukula Ashram promoted the basic educational concepts of special education like finding out every student's abilities and needs, individualizing teaching targets and methods to match the expertise and interests, and getting ready to meet the social expectations of their prospective interests.

In India, the first special school, 'Bombay Institute for Deaf and Mutes,' was established in 1884 in Mazagaon Mumbai. The second school, 'Calcutta Deaf and Dumb School,' was established by Stalwarts like Mr. E.D. Dutt Mr. J.N. Banerjee in 1893. Ms. Florence Swainson established the third school in Palaymkotai, Tamilnadu, in 1897. Subsequently, the special schools increased in numbers because the then pioneers in India who had gone abroad studied the activities initiated there and gained experience in special education. This had resulted in the establishment of more number of special schools in India. From 1900 to 1947, about 38 schools were established. After Independence, the Government of India had played a significant role in the development and promotion of education of children with hearing impairment and bringing best practices in India. Article 46 states, "The State shall promote, with special care, educational and economic interests of all people belonging from weaker sections, and shall protect them from social injustice and form of exploitation." Post-Independent Education

#### Introduction

Commissions like Kothari Commission (1964-66) stressed and recommended the establishment of special schools in every district. To support integrated education in the country, the Government of India had launched a scheme of Integrated Education for Disabled Children (I.E.D.C.) in 1974. The year 1981 was celebrated as the Year of Disabled throughout India, which helped improve public awareness enormously. The National Policy of Education 1986 further stressed the need for education and suggested that wherever possible, the disabled should be integrated into the mainstream system of the school. District Primary Education Programme (1993) was initiated to reduce the wastage and stagnation, thereby achieving Universalization of Primary Education. Persons with Disability Act of 1995 also emphasized the education of the disabled, including children with hearing impairment, in an appropriate educational set-up. The act further emphasizes equal opportunities, protection of rights, and full participation of the disabled in the mainstream. Attaining the goal of 'Education for all,' including children with hearing impairment, the government has initiated several schemes through the Ministry of Social Justice and Empowerment in setting up special schools, distribution of assistive devices, scholarship, etc. Apart from these, various concessions and facilities have been provided to the disabled and their parents. The government undertook the program of Sarva Shiksha Abhiyan (2002) to educate all, including children with hearing impairment.

#### 1.4 The Rights of Persons with Disabilities (RPWD) Act 2016:

The RPWD Act, 2016, was ratified on December 28, 2016, which came into force on April19, 2017. The remarkable features of the act are:-

- Obligation has been cast upon the appropriate governments to take adequate measures toensure that persons with disabilities enjoy their rights equally.
- Disability has been defined on the basis of an evolving and dynamic concept.

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The RPWD Act, 2016 covers the following specified disabilities:-

- Blindness
- Low-vision
- Leprosy Cured persons
- Hearing Impairment
- Locomotor Disability
- Dwarfism
- Intellectual Disability
- Mental Illness
- Autism Spectrum Disorder
- Cerebral Palsy
- Muscular Dystrophy
- Chronic Neurological conditions
- Specific Learning Disabilities
- Multiple Sclerosis
- Speech and Language disability
- Thalassemia
- Hemophilia
- Sickle cell disease
- Multiple Disabilities, including deaf-blindness
- Acid Attack victims
- Parkinson's disease (RPWD Act, 2016)

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#### 1.5 Terminology & Definitions of Hearing Impairment

In year 1980, The World Health Organization (WHO) has described the terms 'Impairment' 'Disability' and 'Handicap' through the International Classification of Impairments, Disability and Handicaps (ICIDH), which is a manual of classification relating to the consequences of diseases. According to ICIDH-

**Impairment:** Impairment is any type of loss or abnormality of a psychological, physiological, or anatomical structure or functions, generally taken at the organ level. Impairment is damage to tissue due to any disease or any trauma. A person who has poor vision or no vision due to damage to the retina or his/her optic nerve may be considered to have an impairment related to vision.

**Disability:** Disability has been defined as any restriction or absence of ability that is resulting from an impairment to accomplish an activity in the manner or within the range considered normal for a human being, normally taken to be at the level of any individualized. Disability indicates the consequences of impairment in terms of functional performance and activity y the individual. A person who has optic nerve or retina damage would have limitations in performing those tasks requiring eyesight.

**Handicap:** Handicap is a disadvantage for any person resulting from an impairment or disability that ceilings or prevents the accomplishment of a normal role (depending on age, sex, and social, cultural factors) for that individual.

**Hearing Impairment:** There are many definitions and classification systems of hearing impairment. By far most common division is between deaf and hard of hearing.

According to Hallahan & Kauffman (1991), children who cannot hear sounds at or above a certain intensity (loudness) level are classified as deaf; others with a

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hearing loss are considered hard of hearing. Hearing sensitivity is measured in decibels (unit of relative loudness of sounds); zero decibels (0 dB) delegate the point at which people with normal hearing can detect the faintest sound. Each successive number of decibels indicates a certain degree of hearing loss.

**Brill, McNeil, & Newman (1986)** have provided separate definitions of hearing impairment, deafness, and hard of hearing. According to them, hearing impairment is a generic term indicating a severity from mild to profound; hearing impairment includes the subsets of deaf and hard of hearing. A deaf person is one whose hearing impairment precludes successful processing of linguistic information through audition, with or without a hearing aid. A hard of hearing person is one who, normally with the use of a hearing aid, has residual hearing adequate to enable successful processing of linguistic information.

According to RPWD Act 2016, Hearing impairment is a partial or total inability to hear. It is a disability sub-divided into two categories deaf and hard of hearing.

- "Deaf" means a person having 70 dB hearing loss in normal speech frequencies in both the ear.
- "Hard of hearing" means a person having 60 dB to 70 dB hearing loss in speechfrequencies in both ears. (RPWD Act, 2016)

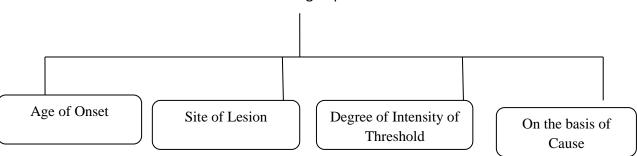
#### **1.6 Characteristics of Hearing Impaired Children:**

- Delayed language development.
- Minimal use of spoken language, and also very un-intelligible speech.
- Concentration on the lips of the speakers as an attempt to listen.
- The student turns his head towards the speaker to listen or cups his ears.
- No response when called from the back.

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- Tuning the volume high while watching TV or listening to the radio.
- Frequent complaints of ear aches, ear discharges, or ear infections.
- A problem in interpersonal relations because of communication problems.
- Lack of fluency in language comprehension and expression affects his cognitive processes like assimilation, abstraction categorization, and generalization.
- Problems in social adjustment.

# 1.7 Classification of Hearing Impairment-



## **Classification of Hearing Impairment**

# 1.7.1 Age of Onset:

- Congenital Hearing Loss: It refers to any hearing loss occurring prior to birth or at the time of birth.
- Acquired Hearing Loss: It refers to any hearing loss developed at a later stage due to some severe illness, accidents etc.
- Pre-Lingual Hearing Loss: Hearing loss occurs before language is developed.
- Post-lingual Hearing Loss: Hearing loss occurs after language has begun to develop.

# **1.7.2 Site of Lesion:**

- Conductive Hearing Loss: outer and middle ear affected, most causes are treatable.
- Sensory Neural Hearing Loss: inner ear affected causing permanent hearing loss.

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- Mixed Hearing Loss: Mixed Hearing Loss involves a combination of a conductive and sensory neural hearing loss.
  - Central Auditory Disorder: Central Auditory Disorders team from problems within the central auditory system, caused by damage that occurs somewhere along the auditory nerve or within the cochlear nuclei.

## **1.7.3 Degree of Intensity of Threshold**

The classification of Hearing Impairment based on the degree of hearing loss is as

follows-

## W.H.O. Classification-

• 10 dBHL to 25 dBHL - Normal Hearing Sensitivity 26 dBHL to 40 dBHL -

Mild Hearing Impairment

- 41 dBHL to 55 dBHL Moderate Hearing Impairment
- 56 dBHL to 70 dBHL Moderately Severe Hearing Impairment 71 dBHL to 90

dBHL – Severe Hearing Impairment

• 91 dBHL and above	– Profound Hearing Impairment
According to Goodman	

• 10 dBHL to 15 dBHL - Normal Hearing Sensitivity 16 dBHL to 25 dBHL -

Minimal Hearing Sensitivity26 dBHL to 40 dBHL – Mild Hearing Impairment

- 41 dBHL to 55 dBHL Moderate Hearing Impairment
- 56 dBHL to 70 dBHL Moderately Severe Hearing Impairment 71 dBHL to 90

dBHL – Severe Hearing Impairment

• 91 dBHL and above – Profound Hearing Impairment

Mild Hearing Loss:

- They range between 26 db to 40 db
- Speech and language development are within normal limits.
- May have difficulty in hearing faint speech and distant speech.

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- Sometimes may exhibit problem in auditory perception.
- Hearing aid is beneficial.
- No difficulty in school situation.

Moderate Hearing Loss:

- They range between 41 db to 55db.
- Speech and language developments are little affected.
- Difficulty with rarely used words.
- Minor differences in meaning of words.
- Defective in articulation.
- Reading and writing are delayed.
- Voice quality is normal.
- Need early speech and language training.

Moderately Severe Hearing Loss:

- They range between 56db to 70db
- Grammar, vocabulary, articulation and voice are affected.
- Only loud speech can understood.
- Show difficulty in understanding.
- Needs special assistance in reading and writing.
- Needs individual attention.

Severe Hearing Loss:

- They range between 71db to 90 db
- Speech and language may be impaired.
- High-pitch voices.
- Articulation disordered.
- May able to identify environmental sounds.

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Needs special schooling.

Profound Hearing Impairment:

- They range between 91db and above
- Cannot hear conversational speech.
- Communication mostly through gestures.
- Voice and articulation are greatly affected.
- They hear only high pitched sound like thunder, explosion etc.
- Required regular speech and language training.
- Needs special schooling and vocational guidance.

## 1.7.4 On the basis of cause:

- Exogenous Hearing Impairment: This type of hearing impairment occurs due to all factors except or other than heredity. The factors are-
  - (a) Prenatal causes
  - (b) Natal causes
  - (c) Postnatal causes
  - (d) Infections
  - (e) Noise
  - (f) Aging
- Endogenous Hearing Impairment: This type of hearing impairment occurs due to heredity factors.
- Idiopathic Hearing Impairment: This type of hearing impairment occurs due to unknown factors.

Every child has a right to education. This has been affirmed by all countries in the East Asia and Pacific Region as signatories in one convention, namely the

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United Nations Convention on the Rights of the Child and several other critical international agreements. Quality education is a crucial component of child development and a means of self-empowerment, Independence, and social integration. Children with special needs are no exception.

Children with Special Needs need and deserve educational opportunities as other normal children. In fact, without educational opportunities, Children with Special Needs face many barriers to mainstreaming. Creating a more inclusive education system requires a new conceptual approach, recognizing that schools need to accommodate the natural diversity of student needs and abilities. Simply "integrating" children with special needs in mainstream classes will not lead to meaningful inclusion unless the focus is shifted from problem identification within the child toward understanding and changing the problem within an unwelcoming, inflexible school system.

The Salamanca Statement and framework for action (1994) provides a detailed frame work for inclusive education. The conference recommended that "Those who have special educational needs must have access to normal schools which should accommodate them within a student-centered pedagogy capable of meeting these needs."

## **1.8 Inclusive Education:**

Inclusive education is an approach to educating Divyangjan. Under the inclusion model, Divyangjans spend most or all of their time with non-disabled students. When children with special needs (CWSN) learn in the same school as their non-disabled colleagues with the support necessary for them to succeed there, society is said to be "inclusive." All students in a school, anyhow of their strengths

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and weaknesses in any area, become part of the school association.

A "team approach" is very pivotal for inclusion. Some of the leading players could be regular school teachers, parents, community, resource teachers, normal children, Divyangjan, and so on. Inclusive Education helps Divyangjan to prepare for full participation in community life. Inclusion settings allow children with and without impairment to play and interact every day, even when receiving therapeutic services. When a child displays fine motor difficulty, his ability to fully participate in common classroom activities, such as cutting, coloring, and zipping a jacket, may be hindered.

UNESCO defines **inclusive education** as a procedure of conveying and acknowledging the diversity of needs of all students through expanding the participation in learning, cultures, and communities and decreasing debarring within and from education. Inclusive education implies changes and modifications in content, approaches, structures, and strategies, with a shared vision that covers all children of the applicable age range and an assurance that it is the duty of the state government to educate all children. **Inclusive education is not a slight issue but is central to achieving high-quality education for all students and the development ofmore inclusive societies.** 

The term "Integration" and "Inclusion" in the education of children with disabilities comes mainly from a concern for the right of education and young people with special educational needs. Paradoxically, the moment we think of providing resources for equal access, it inevitably results in identification leading to segregation of these children who are different and have special educational needs. The concept of inclusion has emerged from the idea of providing equal

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opportunities to 'all' children. Providing equal opportunities does not mean providing 'similar' things to all children. It means providing equal opportunities keeping in mind the diverse nature of their individual needs. We need to acknowledge the responsiveness to the diverse need of 'all' children are standard, and others are lacking and therefore need to be repaired in some ways is still an attendant of a society that values consistency rather than diversity.

Meaningful inclusion cannot be accomplished by special education teachers working alone. It also does not help to have a temporary 'deal' with the regular school teachers to 'take care' of their students. The new school policy is also referred to as the social or environmental model and rests on the theory that the child is a product of his/her experiences and interventions with various environments that impinge upon him/her. Thus to a great stretch, a child's growth and development depend upon this.

- Educating children with disabilities (Divyangjan) in the schools they would take part in ifthey did not have impairment.
- Furnish services and support that parents and children with disabilities need to be in acommon setting.
- Supporting general education teachers and administrators.
- Children with disabilities follow the same timetable as other children encourage friendship between children with disabilities and their classmates/peers without disabilities.
- Teachers and administrators take these scrutinize solemnly.
- Teaching all students to understand and accept differences. (UNESCO- as the UN- Committee on Rights of the Child, October 6, 1997- Centre for Human Rights, Geneva)

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In particular, four key elements have tended to feature strongly in the conceptualization of inclusion. The four elements are as follows:-

- Inclusion is a process. That is to say, inclusion has to be discerning as an endless search to find better procedures for answering diversity. Inclusion is about learning how to live with dissimilarity and learning from differences. In this way, the difference comes to be seen more positively as a stimulus for fostering learning amongst children and adults.
- Inclusion is concerned with the recognization and discarding of barriers. Thus, it involves collecting, collating, and evaluating information from various sources to plan for improvements in policy and practice. It is about using affirmation of various kinds to stimulate creativity and problemsolving.
- Inclusion is about the presence, Participation, and achievements of all learners. Here 'presence' is bothered with where children are educated and how reliability and punctually they attend; " participation" relates to the quality of their experience while they are there and, therefore, must assimilate the commands of the learners themselves, and "achievement" is about the outcomes of learning across the curriculum, not merely test or examination result.
- Inclusion involves a particular emphasis on learners at risk of marginalization, exclusion, or underachievement. This stipulates the moral responsibility to ensure that those statistically most "at-risk" groups are carefully monitored and that, where requisite, steps are taken to ensure their presence, participation, and achievement in the education system. It is

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essential to highlight that a holistic view of the education system, encompassing both the private and public systems, must consider adopting an inclusive approach.

## **1.9 Quality of Life:**

Quality of life is a highly subjective measure of happiness essential to many financial decisions. Factors that play a role in the quality of life vary according to personal preferences, but they often include financial security, job satisfaction, family life, health, and safety. Financial decisions usually involve a tradeoff where the quality of life is decreased to save money or, conversely, quality of life is increased by spending more money.

Quality of Life is an individual's perception of their position in life in the context of the culture and value systems in which they live and their goals, expectations, standards, and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships, and their relationship to salient features of their environment. (WHO)

The World Health Organization describes QOL as a broad-ranging concept that incorporates an individual's physical health, psychological state, level of independence, social relationships, personal beliefs, and their association to salient environment features. Quality of life (QOL) is the general well-being of any individual and society, outlining negative and positive characteristics of life. It observes life enjoyment, including everything from physical health, family, education, employment, wealth, religious beliefs, finance, and the environment.

According to Janssen Quality-of life Studies- QOL may be defined as subjective well- being. Recognizing the subjectivity of QOL is key to understanding this construct. QOL reflects the gap between the aspirations and expectations of an

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individual and their exhibit experience.

Human adaptation is such that life expectations are normally adjusted to lie within the realm of what the individual recognizes to be possible. This quality people who have difficult life circumstances to maintain a reasonable QOL.

According to *the Quality of Life Research Unit, the University of Toronto*, Quality of life is the degree to which any person enjoys the significant possibilities of his/her life. Possibilities result from each person's opportunities and limitations in his/her life and reflect the interaction of personal and environmental factors. Enjoyment has two elements: the experience of satisfaction and the occupancy or achievement of some feature, as decorate by the expression: "She enjoys good health." Three crucial life domains are identified: Being, Belonging, and Becoming. The approach of Being, Belonging, and Becoming as the domains of quality of life were developed from the insights of various writers.

According to Quality-of-Life Research Center, Denmark- In quality of life research, one often differentiates between the subjective and objective quality of life. The subjective quality of life is about good feeling and being satisfied with things in general. Objective quality of life fulfills the societal and cultural demands for material wealth, social status, and physical well- being.

## **1.10 Interaction:**

Every day, teachers make uncountable real-time decisions and facilitate many interactions between themselves and their students. Although they share this commonality, educators all over the country often talk about these decisions and interactions in different ways.

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**Student interaction factors:** -As a teacher, it is the need to know some fundamental factors asfollows -

- Know our learners. Additionally, to their names and experiences, determine their skillsand knowledge.
- Create a welcoming learning environment. Make students feel comfortable andmeaningful.
- Set and communicate assumptions.
- Inspire students to interact positively with one another.

Interaction is the activity of being with and talking to other people and how people react to each other.

Social interaction is a fundamental kind of interaction that includes many behaviors, so many that in sociology. Interaction is usually divided into five categories. These are exchange, competition, cooperation, conflict, and coercion. In statistics, an interaction may arise when considering the relationship among three or more variables and describes a situation in which the effect of one causal variable on an outcome depends on the state of a second causal variable (that is, when effects of the two causes are not additive).

## **1.11 Participation:**

Participation is sharing in the activities of a group by any individual; it is also known as Joint consultation in decision making, setting of goals, and other teamwork. Participation or "involvement in life situations" is a crucial outcome. Participation may take place anywhere. School participation includes unstructured activities (e.g., friendships, play), organized activities (e.g., sports, clubs, arts),

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classroom-based activities (e.g., group work, study), and engagement in social roles. Children with impairment are at significant risk for limited Participation in school. Such restrictions have significant life outcomes for achievement, quality of life, and well-being. Several issues influence the Participation of Divyangjan. Attendance for Divyangjan is reduced compared to peers. Students with disabilities participate less in structured and unstructured activities and experience reduced interaction and playground participation. Children with disabilities, in addition, show less engagement in the broader school world, including clubs and organizations.

Student Participation is an evaluation of a student's performance in a course outside of their evaluations. The items that might be evaluated in student participation are class discussions, online discussions, and student behavior in group settings. Classroom participation is an essential ingredient of learners' learning. When learner speaks up in class, they learn to express their ideas to understand. When the student asks questions, they learn how to obtain information to enhance their understanding of a topic. Classroom participation also is a valuable learning tool for teachers. Individual can learn what they do not understand through students' questions and adjust our instruction accordingly. Speaking in front of a category does not come easily to numerous adults, however, speaking up in class is difficult for numerous students. That contest might manifest itself in the classroom in various ways, like as- not step forwarding to question answers, not asking for help, not speaking up in small-group activities, or even not talking in class at all.

As a teacher, one needs greater success spurring a student to speak up if we can figure out why he is unwilling to engage. Whatever the reason for his withdrawal, our role is not to force him to speak; doing so will more likely make him clam up than open up. Our role is to provide a supportive, encouraging climate that

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helps him feel more comfortable, more confident, and less fearful of speaking up.

## **1.12 Rationale of the Study:**

Quality of Life (QoL) is a significant characteristic of every individual, QoL of every divyangjan has been affected due to his/her disability. For refining the Quality of Life of every specially-abled person, the Government of India emphasizes implementing an Inclusion policy. So every specially-abled child needs to be integrated into general schools, but in practice, students with Hearing Impairment have been facing many problems. Generally, they are using sign language for communication, which is difficult to understand by their classmates with normal hearing, teachers, other school authorities, and a society member. This communication gap creates many barriers in his/her quality of life due to lack of resources or support service, awareness, Govt. policies, etc. An investigation is needed on how the hearing impairment affects hearing-impaired individuals' quality of life in all aspects of life?

## **1.13 Statement of the Problem:**

The present study is titled:

"A study of quality of life of students with hearing impairment with reference to their interaction and participation in inclusive schools of Rajasthan"

## **1.14 Objectives of the Study:**

The goals of the present study were as follows:-

- To study the participation and interaction of students with Hearing Impairment ininclusive schools.
- To investigate the Quality of Life of students with Hearing Impairment,

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especially atschool.

- To identify barriers to improve the Quality of Life of students with Hearing Impairment.
- To suggest a model for improving the Quality of Life of students with HearingImpairment in an inclusive educational set-up.

# **1.15 Research Questions of the Study:**

The research questions of the present study were as follows:-

- How much do the students with Hearing Impairment participate and interact in inclusiveschools?
- Are the Quality of Life of students with hearing impairment similar to students withnormal hearing, especially at school?
- What are the barriers to improving the Quality of Life of students with HearingImpairment?
- What will be a model for improving the Quality of Life of students with HearingImpairment in an inclusive educational set-up?

# **1.16 Delimitation of the Study:**

- The Quality of Life (QoL) of every disabled child needs to be evaluated.
   The present study is delimited to the Quality of Life of children with hearing impairment.
- The study is delimited only to Inclusive Schools in Rajasthan.

# **1.17 Operational Definition of key terms:**

 Quality of Life:-Quality of life (QOL) is the general well beings of the individual and societies, outlining negative and positive characteristics of life. It keeps life satisfaction, including everything from physical health,

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family, education, employment, wealth, religious beliefs, finance, and the environment.

- Hearing Impairment:-Hearing impairment means loss of sixty decibels or more in the better ear in the conversational range of frequencies with a disability certificate issued by Government of India.
- Interaction:-Interaction is the activity of being with and talking to other people and the way that people react to each other.
- Participation:-Participation is the act of sharing in the activities of a group by any individual; it is also known as Joint consultation in decision making, setting of goals, and other teamwork.
- Inclusion: -Inclusion in education is an approach to educating students with special educational needs (CWSN). Under the inclusive education model, students with special needs spend a maximum or all of their time with non-disabled students. The Inclusion philosophy rejects the use of special schools or classrooms to separate students with disabilities from students without disabilities.

## **1.18 Conclusion:**

India is a developing country in which inclusive education is a developing concept. Classmates, inclusive school teachers and other personnel, parents, and policymakers are the key points to the success of the inclusion of every Divyangjan. The researcher's personal interest and experience are motivations for the study's exploration of the quality of life of students with hearing impairment in an inclusive school. The research was carried out in Rajasthan, the state of India. It is a mixed-method study with different sample sizes with the help of rating scales, semi- structured interviews, and government documents.

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# CHAPTER- 2 REVIEW OF RELATED LITERATURE

## **Reviews of Related Literature**

The introductory chapter explained that in our society, many children were born with Divyangta; this may occur before, during, and after birth. If Divyangta is identified with adequate intervention, the mainstreaming of Divyang child gets to succeed. The objectives of this study were-To study the participation and interaction of students with Hearing Impairment in inclusive schools. To investigate the Quality of Life of students with Hearing Impairment especially at school. To identify barriers to improve the Quality of Life of students with Hearing Impairment. To suggest a model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up. After formulating the objectives of the study researcher made some research questions on the basis of above objectives these are- How much the students with Hearing Impairment participate and interact in inclusive schools? Are the Quality of Life of students with Hearing Impairment is similar as students with normal hearing especially at school? What are the barriers to improve the Quality of Life of students with Hearing Impairment? What will be a model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up? Many types of research were held in different issues related to different types of Divyangta; some of them are as under-

Ling Qi et al. (2020) conducted a Cross-Sectional Study in Hubei Province, China, on the Quality of Life of students with hearing loss studying in middle school in Hubei Province, China. The objective of this study was to assess the self-perceived quality of life of middle school students with hearing impairment and identify the social-demographic and clinical factors that influence their quality of life in Hubei Province, China. This cross-sectional study was based on a school conducted in Hubei Province. Four hundred

thirty-seven students with hearing impairment were enrolled in the study using a stratified sampling method. The Quality of Life Scale for Children and Adolescents (QoLSCA) was used for data collection. Descriptive and inferential statistics were used for analyzing the data. The finding of this study shows that there are no significant differences in the overwhelming majority subscale and whole scale between students with hearing impairment and their hearing peers in their quality of life. Good peer relationships and school performance were significantly associated with a better quality of life; this study also suggested this. Moreover, receiving hearing rehabilitation was also significantly associated with a better quality of life. Overall, students with hearing impairment reported similar quality of life to their normal-hearing peers.

Damla Eyuboglu, Gul Caner Mercan, and Murat Eyuboglu (2019) studied psychosocial difficulties and quality of life in Divyangjan with hearing impairment and their association with parenting styles. The objective of the present study was to explore the relationship between psychosocial problems, quality of life, and parenting styles in Divyangjan with hearing impairment. Forty-two Divyangjan with hearing impairment and forty-two normal hearing with their parents were selected for this study as a sample. This study found that the emotional, behavioral, peer, and school-related problems were significantly higher, and self-esteem levels were significantly bottom in the case group than normal children. This study also suggests that the parents of Divyangjan with hearing impairment had overprotective and authoritarian parenting styles compared. Results also suggest a significant correlation between the emotional problems of children and the overprotective and authoritarian parenting style. These findings show that the intervention should not focus solely on the current disabilities of these children. It also pointed at the importance of parental attitudes in treating and protecting mental health.

Mofadeke and Adeyemo (2018) conducted a study in Ibadan metropolis, Nigeria, on the title Quality of life of students with hearing impairment. The objective of this study was to define the quality of life of students with hearing loss in the Ibadan metropolis, Nigeria. One hundred and ten students with hearing loss were selected for this crosssectional study as a sample. The 26 items Brief version of the WHO Quality of Life questionnaire was used for data collection. IBM SPSS Statistics version 20.0 was used for data analysis. This study suggests that the segment of students in the defined categories was analyzed using ANOVA, chi-square, and multiple regression tests. The majority of students with hearing loss had poor quality of life attending the special school for the students with hearing impairment. Seventeen and above-year- old upper socioeconomic status students with hearing loss are significantly associated with better quality of life. However, age of onset of hearing loss and gender had no significant influence on the quality of life.

Lesar & Smrtnik Vitulic (2014) conducted a study on the Self-esteem of deaf and hard of hearing students in regular and special schools. This study centers on the selfesteem of students with hearing impairment from Slovenia. Eighty students with hearing impairment from regular and special primary schools (class 6–9) and regular and special secondary schools (class 1–4) completed the Self-Esteem Questionnaire. For the entire group of students with hearing impairment, the outcomes of the dimensions of self-esteem, including socio-emotional and physical self and confidence, do not vary regarding their gender and degree of hearing impairment. Additionally, almost no differences in selfesteem were found in the students' age. Relative to the norms of hearing students, students with hearing impairment achieved average results in each self-esteem dimension. Students with hearing impairment from regular schools had higher self-esteem in emotional and physical self and confidence than those from special schools. The final grade in the

Slovene language was an essential predictor of DHH students' self-esteem in the dimension of confidence.

Yiu & Tang (2014) conducted a study on the Social Integration of Deaf and Hard of Hearing (DHH) Students in a Sign Bilingualism and Co-Enrollment (SLCO) Environment. This study investigates whether the DHH students in sign bilingualism and co-enrollment (SLCO) educational environment positively perceive their classroom participation compared to their hearing peers. The 28-item Classroom Participation Questionnaire (CPQ) was translated into Chinese and administered to 17 DHH and 62 hearing students studying from Primary 4-6 in an SLCO education setting. Co relational analyses were conducted to investigate the relationships between CPQ scores and their performance in literacy oral and signed language assessments. Results showed that both DHH and hearing students positively perceived their classroom communication with the teachers and peers. No significant differences between the CPQ scores of DHH and hearing students were found. Oral and signed language skills, in general, do not possess a strong association with DHH students' classroom participation. Instead, literacy skills in the setting seem to play a specific role that supports their classroom communication.

Marschark et al. (April 2014) conducted a study on Predicting the Academic Achievement of Hearing Impaired Students From his/her Individual, Household, Communication, and Educational Factors. This research suggests that the academic achievement of Hearing Impaired Students is a complex interplay in many factors. These factors include characteristics of the students like hearing thresholds, language fluencies, mode of communication, communication functioning, characteristics of their family environments like parent education level, socioeconomic status, and experiences inside and outside school, e.g., school placement, having been retained at grade level. This study

explores the relative importance of such characteristics to Hearing Impaired Students studying in secondary school in the U.S. student' academic achievement as indicated by the Woodcock-Johnson III subtests in passage comprehension, mathematics calculation, science, and social studies. Data were obtained for approximately five hundred hearing impaired secondary students who had attended regular secondary schools or state-sponsored special schools designed for students with hearing impairment. Across all subject areas, attending regular secondary schools and having better- spoken language were associated with higher test scores. The results have important implications for policy and practice in educating Hearing Impaired Students and interpreting previous research.

Patel et al. (2014), in the study the impact of hearing loss on daily lifestyle and schooling among students between five to fifteen years age group, found that the most common effect was that children were not admitted to school and children were lagging in studies. Among the parents of congenitally deaf children, the most common reason for not going to school was "not aware about the existence of a deaf & mute school." "Too young to go to school" was the following common reason. In children with acquired deafness, the most common reason was "recurrent episodes of illness." Among the congenitally deaf children, the quality of life was significantly better in those who attended these special schools.

Avramidis (2013) conducted a study on Self-concept, social position, and social participation of pupils with SEN in mainstream primary schools. This paper investigates the literature's dominant representation of children with special educational needs (SEN) holding anti perceptions of themselves and being socially isolated. The study explores dimensions of students' self-concept and their social position in their classroom. Contrary to previous research, students with SEN were found to hold pragmatic perceptions in

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all domains of life like self-concept, and, notably, they felt good about their academic performance and felt socially accepted by their classmates. Regarding their social position, children with SEN were found to be less popular and have fewer friends than their normal classmates. Nevertheless, they had formed some pragmatic relationship, they were equally become a member of a social cluster, and they were no more likely to be isolated than their normal friends. This evidence supplemented teacher accounts that provide a greater understanding of social interaction and the quality of friendships in their classes. Finally, the paper concludes that experiencing SEN alone is not a determining factor of social isolation and argues that schools should enhance the self-image and reduce the marginalization of all pupils regardless of their SEN or non-SEN classification.

Engel and Hamed (2013) conducted a study Comparing participation in out-ofschool activities between Divyangjan with visual impairments, Divyangjan with hearing impairments, and typical peers. The study's main objective was to assimilate the participation patterns of children with visual impairments to those with hearing impairments and typical peers and criticize the association between participation and sociodemographic parameters in each group. Participants were seventy children between the ages of 6–11. In these 70 children, Twenty-five with hearing impairments, twenty with visual impairments, and twenty-five typical peers were selected as a sample of the present study. All children filled out the Children's Assessment of Participation and Enjoyment (CAPE). This self-report refers to participation in daily out-of- school activities. Children with hearing or visual impairments showed significantly limited participation than typical peers, expressed in fewer activities, less participation intensity, more activities accomplished at home and with another person. The fewer participation was more emphasized among children with visual impairments. Socio-demographic variables were bound with participation dimensions in both study groups. Finally, children with hearing

or visual impairments may have restricted participation in out-of-school activities. Sociodemographic parameters may play a role in encouraging a child's participation. Participation among these populations should be further studied to assist service providers in creating intervention programs with the child to enhance his/her inclusion in the community.

Coster et al. (2013) conducted a study on School participation, supports, and barriers of students with and without disabilities. This study compared school participation patterns of five to seven-year-old students with and without impairment and explored whether features of the school environment were perceived to help or hinder their participation. Five hundred seventy- six parents from the USA and Canada completed the Participation and Environment Measure for Children and Youth (PEM-CY) through the internet. Parents of students with impairment disclosed that their children participated less habitually in school clubs and organizations and getting together with friends outside the classroom and that they were fewer who participated in all school activities. Parents of students with impairment are also significantly more likely to report that features of the environment inhibit school participation and that resources needed to support their child's participated less in major school activities. School participation includes physical and social environment, and limited resources are the barriers found in this study.

Lamichhane (2013) conducted a study on Disability and barriers to education: evidence from Nepal. This article discusses barriers faced by Nepalese with disabilities in obtaining a school education. Quantitative and qualitative methods analyzed the barrier using unique data collected from surveys and in-depth interviews. The study suggests that some barriers were impairment-specific, while some were faced commonly irrespective of

the type of impairments. People with visual and hearing impairments faced poor support systems in schools, whereas participants with physical impairments mostly faced difficulties caused by physical barriers, insufficiency of accessible buildings, and the absence of safe, accessible roads. In addition, the barriers faced in common by the participants were financial, this may result from parent's poverty, barriers also found from parents attitude, social barriers, insufficiency of parental awareness. Participants with hearing loss were found to be more unprotected from the barriers related to education, and this may result that the participants had fewer years of schooling than their peers with visual and physical impairments. Results found that Disability-related awareness issues at all levels are the first step toward implementing strategies and policies to combat other problems like poverty and the lack of resources. A more comprehensive understanding can effective policies to eliminate these barriers.

Shaira (2013) conducted a study on Effects of Inclusion on Language Development in Hearing-Impaired Students in Jeddah Schools: Perspectives of Teachers and Parents. This study investigates the effects of inclusion on the language development of Students with Hearing Impairment (HIS) from the perspectives of teachers and parents. Language Development Estimation List was developed to accomplish the aims of this study. This research tool consists of two main proportions first is the receptive language that consists of twenty-five items second is the expressive language, which consists of thirty-one items. A descriptive-comparative research approach was used to explore the differences between the teacher's and parent's assessments of students' language levels according to their special schools for deaf students or inclusive school settings. Purposive sampling was adopted to select a sample. Data was collected from two different groups.One hundred thirteen parents of HIS were included in the first group. Of these, 60 parents had a son or daughter at a secondary school for the hearing impaired, and 53 parents had a son or

daughter at a regular school. Forty-one teachers of HIS who taught all education subjects in secondary schools were comprised in the second group. Twenty of these teachers worked at schools for the deaf, and the other 21 taught HIS at regular schools. Parents & teachers had known the HIS for at least three years (7th, 8th, and 9th grade), which enabled the parents and teachers to estimate language levels of HIS according to the study tool. The teacher's assessments showed higher receptive language scores and total scores for the inclusive school students. However, the results of the parent's evaluation showed no statistically significant differences between the students at the inclusive school and those at school for the hearing impaired concerning expressive or receptive language abilities. That is, the inclusion effect remains less than desired.

Wu et al. (2013) studied academic achievements and classroom performance in Mandarin-speaking prelingually deafened school children with cochlear implants. The finding suggests that the academic achievements of Mandarin-speaking children who receive Cochlear implants from a young age and are integrated into mainstream elementary school systems appear to fall within the normal range of their age-matched hearing counterparts after 5–11 years of use. This study strongly suggests the need for future ongoing support for these children in the communication field.

Freeman (2013), in the study The relationship between optimism, adaptation to disability, and quality of life among college students with disabilities, found that there are no significant differences in confidence, adaptation to impairment, and quality of life between college students with low perceived severity of disability and high perceived severity of the disability. This research also indicated significant differences in optimism, adaptation to impairment, and quality of life between college students with low and high distinguishes the severity of the impairment. Present research bears the doctrine beyond

Bishop's Disability Centrality model and demonstrates the relationship and similarities between adaptation to impairment and quality of life. This study also supports the importance of continued research regarding functional limitations and the perceived severity of the impairment. Finally, this research provides evidence that further study of individual differences for college students with impairment is necessary to understand better how to foster successful adaptation to disability and increase the quality of life.

Wolters et al. (2012) conducted a study on the Impact of colleagues and Teacher Relations on the well-being of early adolescents hearing impaired: Comparisons Before and After a Major School Transition. This study engrossed in the colleague and teacher relationships of hearing-impaired students and the effects on school well-being throughout the transition from elementary school to junior high school. Gender and educational context-related differences were also considered. The study will completed in two phases. In Study one, the predictive effects of colleague's acceptance, popularity, and teacher support on well-being were observed cross-sectionally for early adolescents in Grade 6 (N = 759, 87 deaf) and Grade7 (N = 840, 104 deaf). Study two examined the effects of the same predictors on school well-being longitudinally during the transition to secondary school on a subsample of mem from Study one. Well-being in school was reliable during the transition for mainstream normal hearing children but not for hearing impaired children. In mainstreaming schools, school well-being increased for deaf boys but decreased for deaf girls. In contrast, school well-being increased for deaf girls in special education schools but decreased for hearing impaired boys. Colleague's acceptance, popularity, and relationship with the teacher had different effects on well-being for deaf early adolescents in mainstream schools than those in special education schools. Moderation by gender was also found.

Chung, Carter, and Sisco (2012) conducted a study on Social Interactions of Augmentative and Alternative Communication (AAC) used students with disability in Inclusive Classrooms. The purpose of this study was to examine the naturally occurring social interactions for students with impairments who use AAC in general education classrooms. The researcher observed 16 students who used AAC and received services under the autism or intellectual disability categories. Participants fundamentally interacted with their support personnel and infrequently conversed with peers despite being nearby. Few interaction episodes were initiated by students who used AAC, and initiations to peers and adults appeared to serve somewhat different functions. Students with disabilities relied more heavily on facial expressions and gestures than on their AAC devices. Recommendations for student interaction opportunities are offered, and future research directions are suggested.

Doherty (2012) conducted a study on inclusion and deaf education: the perceptions and experiences of young deaf people in Northern Ireland and Sweden. The objective of the present study was to explore what the concept of inclusion means and how it relates to hearing-impaired children. This study begins with a background to deaf education, followed by a specific reference to how inclusion is perceived in Northern Ireland and Sweden. It explores the experiences and opinions of students with hearing impairment in schools for the hearing impaired in both countries where different educational philosophies and forms of instruction persuade. A qualitative approach was embraced by conducting interviews with hearing-impaired students who were in their final school year & had left school recently or were in post-compulsory education. The results stipulated that Swedish respondents described their experiences more positively than Northern Ireland. The main cause for this was the encouragement of a hearing- impaired cultural environment where teachers and pupils used sign language for communication at school.

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Despite the fact that such a culture was not in evidence in Northern Ireland, positive experiences reported by respondents were associated with sign language and a deaf classroom assistant to facilitate comprehension between teachers and pupils. Implications are drawn for effective, inclusive practice in educational settings of deaf children.

Paez and Farber (2012) conducted a study on participation and desire: leisure activities among Canadian adults with disabilities. As an endorser of the compact on the Rights of Persons with Divyangjan, Canada has presumed the commitment to foster the fundamental right of individuals with impairments to participate in all normal activities and relationships of society. Presently, however, relatively some are known about the extent to which Canadians with disabilities are able to exercise this right. Previous research has supported the employment status and commute distance of persons with an impairment in Canada. In this study, the researcher used a two thousand six-member— Activity Limitation Survey to explore the outlook of Canadian adults with Divyangjan. The influencing factors are- their frequency of participation in different holiday and recreational activities, the role of transportation in activity participation, and the desire for more leisure and recreation activities during spare time. The latter question is closely associated with the participation of omission. The results of this study suggest that some factors that cultivate to reduce participation also relate to a desire for more holiday and recreation activities.

Mattevi et al. (2012), in the study Quality of care, quality of life, and attitudes toward impairment: perspectives from a qualitative focus group study in Porto Alegre, Brazil, found regarding the quality of life (QOL), important themes that emerged were: work, education, leisure, universal accessibility, integration in the society, and social inclusion. Concerning the quality of care (QOC), professional qualifications, disabilities-

related training for health and education professionals, and access to health services were considered important. Regarding attitudes toward disabilities, the participants perceived the attitudes of others, especially of caregivers, to significantly impact the QOL of people with disabilities.

Ciorba et al. (2012), in the study The impact of hearing loss on the quality of life of elderly adults, found that presbycusis is a complex disease, with a controversial physiopathology, which is influenced by genetic, environmental, and medical factors. It is an increasing public health problem that can lead to reduced quality of life, isolation, dependence, and frustration. In future, it will be required to improve our knowledge of this condition and its physiopathology in an attempt to remediate its progression. In addition, it will be of great importance to improve methods of identifying individuals with presbycusis and deteriorating QoL, thus improving services for providing hearing aids, assistive listening devices, and auditory rehabilitation. Identifying individuals with hearing loss, supplying appropriate hearing aids or other listening devices, and teaching coping strategies may have a pragmatic impact on the quality of life of older people.

Schick et al. (2012), in a study on Hearing impaired students' school placement and perceived Quality of Life. The findings suggest that in the education of students with hearing impairment, there is much debate about the effects of placement, educational outcomes, and quality of life. This study explored the relationship between quality of life and educational placement that include and do not include other hearing-impaired youth. Findings suggest that there were few differences in quality of life related to school placement. Both participation was an interaction between school placement and parent hearing status, with no single school placement showing the best results, and hearing impaired youth with hearing parents in schools specifically for hearing impaired students

scored lower than hearing impairment with hearing- impaired parents in some domains. When the hearing-impaired youth were compared with the general population, those in schools that included hearing-impaired students scored lower in some features of quality of life, particularly self and relationships. This study investigates that students with hearing impairment may not differ much in terms of quality of life across schools placements but that there may be differences in subsets of hearing-impaired youth.

Swan, Guy & Akeroyd (2012) conducted a study on health-related quality of life before and after management in adults referred to as otolaryngology. This study found that patients treated surgically or given a hearing aid reported a significant improvement in their health- related quality of life after treatment in otolaryngology departments. Normally, patients treated in other ways show no significant improvement. We discuss that future research should look carefully at patient groups where there is unexpectedly little benefit from current treatment methods and consider more effective methods of management.

Borton, Mauze & Lieu (2012) conducted a pilot study on Quality of Life in Children with Unilateral Hearing Loss: A Pilot Study. The purpose of this pilot study was to investigate the health-related quality of life (HRQOL) of children with unilateral hearing loss (UHL). A qualitative study was used to elicit the opinions and views of children and their parents on areas of concern that currently may be unknown regarding UHL. Focus group participants were recruited from an ongoing research study. This research was conducted in two stages among children aged 6–17 years. In stage oneresearcher conducted focus groups of children with unilateral hearing impairment and their parents to elicit perceptions of how hearing-impaired children affected the lives of these children. In stage two, a generic pediatric quality of life survey was used to assess health-

related quality of life quantitatively in children with normal hearing, unilateral hearing impairment, and bilateral hearing loss. Participants were recruited from an academic otolaryngology department's clinical and research populations. The focus groups disclosed that the children with UHL experienced barriers but learned to adapt due to their hearing loss. The quantitatively, statistically significant differences between groups were not perceived on the three main HRQOL scales (total, psychosocial and physical). Children with UHL had significantly more significant social functioning scores than children with normal hearing and bilateral hearing loss.

Nordstrom (2011) conducted a study on Inclusion and participation in peer relations. The study aimed to contrast interaction and relations among school children with intellectual impairment and the same children's interaction or relations with non-impaired colleagues. Twenty-four children with intellectual impairment between age group 7-16 years were selected in study group one. The children spent remarkably more time in active participation in parallel relations to peers with similar functional prerequisites than active participation in vertical relations to children without intellectual impairment. Together with the same age level with similar functional prerequisites, each contributes to everyday activity to about the same extent. They have equal everyday experiences and create a colleague culture based on acceptance, shared norms, and interests with children with different functional prerequisites, their influence on interaction conditions becomes minimal, and criticism grows. Colleague relations are subjectively experienced as deeply problematic, self-assessments as to peer relations are low- rated. Social exchanges in their own colleague culture seem to be enlarging. Data are debated in terms of school inclusion, participation in peer culture, and self-perception.

Kushalnagar et al. (2011) conducted a study on Mode of Communication, Perceived Level of Understanding, and Perceived Quality of Life in hearing-impaired youth. This study bears important implications for improving youth perceived quality of life and depressive symptoms of DHH youth who perceive parent communication to be complicated. It emphasizes that quality of communication among family members remains essential even when youth with hearing loss are in their adolescent years. In keeping with reports of the benefits of positive perception on parents' level of understanding and associated reduction in youth's depressive symptoms and an increase in perceived quality of life, an effort should be made to identify youth at risk for communication problems at home. An essential contribution of this study is that youth report of their perceived level of communication was related to their quality of life. This simple self-report should be an essential component in therapy, where providers may also need to ask about home communication and consider it an essential and malleable factor in the youth's life. By including parents and youth in therapy sessions, providers may empower both the parent and the youth to be active problem-solvers in preventing communication breakdowns. Whenever possible, measures (e.g., sign language, assistive hearing devices if beneficial to the youth, family counseling) should be taken to provide the youth with access to communication at home. Combined, these can help increase the youth's perception of self and the overall quality of life.

Hintermair (2011) conducted a study on Health-related quality of life and classroom participation of deaf and hard-of-hearing students in regular schools. A group of two hundred twelve deaf and hard-of-hearing (DHH) students at mainstream schools was selected as a sample. To appraise the health-related quality of life of children with the hearing-impairment questionnaire-based survey was used by using the Inventory of Life Quality of Children and Youth (ILC) and the Classroom Participation Questionnaire were

used. The ILC data for the DHH sample is, for the most part, comparable with the data from a normative hearing sample. Correlations displayed that the domains of school and social activities with colleagues were more dominant for the health-related quality of life of the hearing impaired students than for the normal hearing students. The results also suggest differences in the health-related quality of life levels of the two samples, with the hearing impaired sample having more scores for school experiences, physical and mental health, and overall health-related quality of life, though the effect sizes for the differences are small to moderate. Specific characteristics of the hearing impaired sample may be responsible for this outcome. Relationships were also seen in the in- between quality of life and perceived classroom participation in specific domains. Students who perceive classroom participation as satisfying have big scores for quality of life in school, social contact with colleagues, and mental health. This also appeals to the scores for global assessment and a summarized quality of life indicator.

Punch & Hyde (2011) conducted a study on cochlear implant user adolescents hearing impaired students social participation. The researcher interviewed 24 parents, 15 teachers, and 11 children and adolescents. The study reported here extends the primarily quantitative findings of previous research through a qualitative analysis of interviews with parents, teachers, and pediatrics cochlear implant users in three eastern states of Australia. The findings displayed commonalities across the three groups of participants, indicating positive experiences around the children's psychosocial development with their cochlear implants and ongoing difficulties communicating in groups of people and problems related to social skills. Some children had little contact with other deaf children (with or without cochlear implants) despite parents and teachers perceiving such contact as beneficial, children attending schools where other deaf children valued friendships with both deaf and hearing peers. Adolescence was challenging for some as they struggled with self-

consciousness about their deafness and external cochlear implant equipment and worries around friendships, dating, and their future place in the world.

Pereira et al. (2010) conducted a study on The Participation Experience of Children with Disabilities in Portuguese Mainstream Schools. This study aimed to chart the participation experiences of children with disabilities enrolled in mainstream schools. The participants were between 8-11 years old, fourteen students with impairment with good communication skills, and attending school in Portugal. The open-ended interview was conducted for collecting data and analyzed employing a psychological phenomenological method. The findings suggest that participation at school took three forms: equal participation, special task participation, and onlooker participation. Those three forms contrasted with situations of non-participation, in which the children felt excluded entirely. Each form of participation and non-participation presented different performance characteristics and influenced the social environment. Study findings provide insights that enhance the understanding of children's inclusion in mainstream schools and the individual's experience of participation.

Pijl and Frostad (2010) conducted a study on Peer acceptance and self-concept of students with disabilities in regular education. This study emphasizes the relationship between the peer acceptance of students with disabilities and their (social) self-concept. The sample was selected from all regular primary and lower secondary schools (*Grunnskoler*) in Trondheim (in central Norway). The literature overview showed that students with disabilities are generally less accepted by their typical peers and have a lower self-concept. This study's results also support these conclusions. The result shows that level of acceptance and self-concept are moderately related. Students with disabilities are not accepted by their peers in regular classrooms, thus risk developing less self-concept.

This is assumed that this does not apply to students with moderate to severe learning disabilities (LD) because they cannot fully understand their level of acceptance by typical colleagues. Consequently, they do not exposure negative feelings linked to an eventual isolated position and are less likely to develop a low self-concept. In total, Four hundred ninety-eight participants from seventh grade have participated in the study, of which thirty-seven were described as having a disability. The data showed a moderate relationship between acceptance and self-concept in the whole group. However, contrary to expectations, the students with moderate LD showed a significant relationship between colleague acceptance and self-concept. For these students, meaningful relations with colleagues are as important as for all students with and without special needs. Study results show the attention of parents and teachers of students with moderate to severe learning disabilities not to underestimate the relevance of being accepted and having friends in the peer group.

Koster et al. (2010) conducted a study on the Social Participation of Students with Special Needs in Regular Primary Education in the Netherlands. This study explores the social participation of young students with special needs in Dutch primary schools. More notably, the focus lies on four key themes related to social participation: friendships or relationships, contacts or interactions, students' social self-perception, and acceptance by classmates. The study outcomes explored that most students with special needs have a satisfactory degree of social participation. Although compared with students without special needs, a relatively significant portion of the students with special needs feel difficulties participating in society. Usually, students with special needs have significantly fewer peers and are members of a coherent subgroup less often than their typical colleagues. Additionally, students with special needs have fewer interactions with their

social self- perception of both groups of pupils does not differ. A contrast between students with different impairment categories regarding the four themes of social participation revealed no significant differences.

Toe and Paatsch (2010) conducted a study on communication skills used by hearing- impaired children and their normal-hearing colleagues in a Question-and-Answer Game Context. This study investigated the effectiveness of communication in dyads of hearing children with children who were deaf & hard of hearing in the context of a question-and-answer game. The first part of a two-part study investigated the practical skills of hearing and hearing-impaired children. The second part of this study investigated pragmatic skills in free conversations and is the subject of another paper. The purpose of the question-and-answer trivia game in this study was to ascertain how well children who were deaf & hard of hearing could understand their peers. More specifically, This study explores how well children who are deaf & hard of hearing and their hearing partners can accurately receive and transmit questions and provide accurate responses. Thirty-four children with normal hearing and thirty-four children with a hearing loss ranging from mild to profound (>90 dBHL) participated in this study. Each of the thirtyfour couples included one with normal hearing, and another one is a child with hearing impairment, matched by gender and grade level at school. Dyads were videotaped and analyzed. Pairs were compared in their capacity to repeat the question and strategies used to seek information and accuracy of responses. Results showed that the hearing children were able to repeat more questions verbatim compared to the deaf & hard of hearing children. The hearing-impaired group required a significantly greater number of repetitions, sought a more significant number of general clarifications, and correctly answered more questions than the hearing children group. The indications of these findings are discussed in terms of peer communication and pragmatic skill development.

Rajendran & Roy (2010) conducted a study comparing primary school children's health- related quality of life with hearing impairment and without motor impairment. The study found that children with both hearing and motor impairment are associated with significantly increased suboptimal levels of functioning and significantly lower Health Related Quality of Life (HRQOL). Children with hearing impairment alone without any motor involvement-do not show any statistically significant difference in physical and social health scores compared with their colleagues with normal hearing. Although, there was a statistically compelling difference in all four domains and the total score of HRQOL when hearing-impaired children and motor involvement were compared with children with hearing impairment without any motor involvement and with normal hearing children. The study's finding does not show a significant reduction in physical health in the hearing-impaired group.

Loy et al. (2010) conducted a study on the quality of life of pediatric cochlear implant users. The study aims to investigate the results of health-related quality-of-life questionnaire scores from profoundly hearing-impaired children fitted with a minimum of one cochlear implant (CI) and compare their responses with those of normal-hearing peers of similar age and their parents. A cross-sectional study utilizing a generic quality-of-life questionnaire designed to be completed by both parents and children independently of each other. The researcher completed Questionnaires at various summer camps designed for children with CIs in Texas and Colorado. Eighty-eight families from sixteen states were divided into two subgroups by the age of cochlear implantation: one was 8 to 11year-old group, and the other was 12 to 16-year-old group. The KINDL-R Questionnaire for Measuring Health-Related Quality of Life in Children and Adolescents was distributed, and CI participants completed the questionnaire independently of their participating family members. The study revealed that CI users in both age groups scored

similarly to their normal-hearing peers and their parents. Younger CI users scored their family domain lower compared with their normal-hearing peers. Teen CI users scored the school domain lower compared with their parents. Earlier implantation and more extended CI use among CI participants resulted in higher quality-of-life scores.

Yu (2009) conducted a study on the social participation of youth with disability in HILDA. This research explores the impact of disability on the social participation of youth in Australia. It aims to give the evidence base for the social inclusion agenda of the Australian Government using the first seven signals of the Household, Income, and Labour Dynamics in Australia (HILDA) Survey. HILDA is an extensive, nationally representative Australian panel survey with affluent information on participation in society. This research selects active club membership, attendance at religious services, and social interaction with friends or relatives as crucial indicators of social participation. In addition, two comprehensive indices, involvement in group activities and personal contact - are derived from twelve items regarding participation in the community using factor analysis. In the present study, impairment is defined as having any long-term health condition, impairment, or disability that restricts one's day-to-day activities and has lasted or is likely to last for six months or more. On average, youths with impairment had fewer levels of participation in society, as indicated by a fewer probability of being an active club member, less frequent contact with colleagues or relatives, and less personal contact. Although, after controlling for other observed factors and unobserved heterogeneity, differences in participation in society by the incidence, type, onset, and severity of impairment were not significant. Concerning social participation outcomes, disability was correlated and interacted with other aspects of drawback, such as less income. As such, the research raises problems about whether young people with disability are at risk of multiple disadvantages. Personality is also an influential factor for participation in society,

suggesting that controlling for unobserved heterogeneity when data on personality is not available should be an essential consideration when examining this issue.

Tangen (2009) conducted a study on conceptualizing the quality of school life from pupils' perspectives. A Four-dimensional, dynamic model of students' subjective quality of school life was presented by this study. This model is based on the author's and colleagues' studies of the experiences and perspectives of students in regular schools who have been assessed as special educational needs. The conceptualization of quality of school life proposed here serves as a direction indicator for where to look and how to listen to students, not at giving detailed definitions or prescriptions. The model may also serve as a tool for studying and discussing the quality of school life in terms of overall educational goals and schooling conditions offered by national school systems and individual schools. A few aspects of relations between subjective quality of school life and 'objective' conditions, which are very complex, are discussed. It is concluded that pupils' experiences and perspectives, especially those whose voices are seldom heard, can make a decisive contribution to developing a better understanding of how equality, inclusion, and quality of school life can be achieved.

Lutfi (2009) conducted a study on attitudes toward including children with special needs in regular schools. This case study aims to determine parents' attitudes towards mainstreaming children with special needs into two regular private elementary schools in Sidon-Lebanon. A total of 15 parents were interviewed, purposive sampling was used. The case study method was used as a primary research instrument because the two elementary schools in Sidon city adopted an inclusion policy. The principals of these two schools work to align inclusive education practices with school-wide reform efforts. The researcher used standard techniques for posing research questions and defining the

unit analysis because the study centers on exploratory and description. The emphasis was placed on the purpose and aims of the study and not on formulating propositions. Based on the responses from the interview questions, the findings can be grouped into the following categories; (a) attitudes towards inclusion, (b) attitudes towards types of inclusion, and special needs to be included. This study indicated a positive attitude towards inclusion by the parents of children in the two schools. Their attitudes towards inclusion, legislation, academic improvement, social adaptation, and cooperation reveal that the parents see providing their children with inclusive education as equivalent to providing high-quality education for all. In general, respondents showed a positive attitude towards the aspects of inclusion, namely academic improvement, social adaptation, and cooperation and cooperation between teachers. As for the type of inclusion. Mild mental retardation and motor handicaps are the two types of special needs. Respondents reflect a positive attitude towards inclusion in all grade levels in terms of acceptance of children with special needs in the different grade levels with some caution in upper-level classes.

Simeonsson et al. (2009) conducted a survey on students with disabilities to assess participation in school activities. The study explored the nature and extent of participation in schools by students with disabilities in the context of the physical, social and psychological features of the school environment. This study was completed by 1180 teachers of students with disabilities in the US, describing student participation in school activities encompassing involvement in social activities, sports, academic and artistic/creative endeavors. Multivariate analysis revealed that school life in elementary, middle, and high school could be defined by six distinct factors describing individual and group roles. Structural equation modeling yielded a second-order latent variable that captured the complex and multi-dimensional aspect of participation, accounting for availability, eligibility, student characteristics/status, and student choice within a larger framework of participation.

Antia et al. (2009) conducted a study in the USA on the academic status and progress of hearing-impaired students in general education classrooms. The study participants were 197 hearing students with mild to profound hearing loss who attended general education classes for two or more hours per day. Scores obtained on standardized achievement tests of math, reading, and language/writing, and standardized teacher's ratings of academic competence annually, for five impaired years, together with other demographic and communication data. Outcomes on standardized achievement tests indicated that, over the five years, 63%-79% of participants outcomes in the average or above-average range in mathematics, 48%-68% in reading, and 55%-76% in writing. The standardized test scores shown for the group were, on average, half an SD below hearing norms. Mean student progress in each subject area was consistent with or better than that of the norm group of hearing students, and 79%-81% of students made one or more years' progress annually. Teachers rated 69%-81% of students as average or above average in academic competence over the five years. The teacher's ratings also indicated that 89% of students made average or above-average progress. Student's expressive and receptive communication, classroom participation, communication mode, and parental participation inschool were significantly, but moderately, related to academic outcomes.

Reed, Antia, and Kreimeyer (2008) conduct a study on the Academic Status of students with hearing impairment in public schools: Student, Home, and Service Facilitators and Detractors. The researcher investigated facilitators and detractors of academic success of twenty- five hearing impaired. These twenty-five students were selected from a pool of 187 students attending general education classes and enrolled in a

study of academic progress. Interviews with their teachers of DHH, general education teachers, principals, parents, interpreters, and students themselves were analyzed for the child, family, and school facilitators and detractors of academic status. Facilitators included student self-advocacy and motivation, high family and school expectations, families' ability to help with homework, and good communication between professionals. Detractors included additional disabilities and low-income family–school communication. Comparing above- and below-average students revealed no single distinguishing facilitator or detractor. Each above-average student had many facilitators, whereas each one had several significant detractors.

Wendelborg and Tossebro (2008) conducted a study on School placement and classroom participation among children with impairment in primary school in Norway. The aim of this study was to change school placement and classroom participation concerning children with disabilities of primary school age in Norway and examine the factors that explain variation in school placement and participation in the classroom. Placement in school refers to whether children with impairments attend a normal school, while classroom participation refers to time spent in normal school classrooms. The investigation was based on longitudinal data drawn from surveys undertaken in 2003 and 2006 of parents of children with impairment. Present findings suggest no significant changes in school placement during primary school years, which is contrary to earlier findings. Although, the number of times children with impairment are absent from regular classes does increase significantly as the children become older. The size of the municipality population, type of disability, and degree of impairment are the main factors that impact school placement. Additionally to these, the amount of special education also impacts classroom participation. There are slight mechanisms that lead children out of regular schools and classrooms during their primary school years. However, some of the

identified factors strengthen importance as the children become older. The distinct policy change for senior students, from placement in a special school to an "out of class" practice, is debated. It could be seen as normal schools' adaptation to the tension between the prevailing ideology of inclusion and schools' maintenance of existing practice.

Fuller et al. (2007) conducted a study on- Barriers to learning: a systematic study of the experience of disabled students in one university. Recent legislation has made discussion about the inclusion of disabled students topical in the UK. However, despite growing interest in inclusion issues, the voice of disabled students themselves has hardly been heard. The initial phase of a project focuses upon students' experience of learning in higher education is one of the first systematic analyses of the experience that disabled students in higher education have of barriers to learning. The researcher reports both statistical data about the quality and variety of 173 students' learning experience and qualitative comments from the students about learning and assessment. Analysis of this survey points to the need for attention to be paid to parity and flexibility of provision and to development of staff in making the 'reasonable adjustments required by recent Divyangjan legislation.

Mugno et al.(2007) conducted a study on the impairment of quality of life in parents of children and adolescents with pervasive developmental disabilities. The aims of the present study were: to evaluate Quality of Life (QoL) in parents of Divyangjan affected by Pervasive Development Disorder (PDDs), Cerebral Palsy (CP), or Intellectual Disability (ID) as compared to a control group (CG); to evaluate Quality of Life of parents of patients with different types of PDDs. The sample consisted of 212 parents of 135 children or adolescents affected by PDDs, ID, or CP. An additional sample of 77 parents of 48 healthy children was also included and used as a control group. The WHOQOL-BREF

questionnaire assessed the quality of life. The result shows Compared with parents of healthy children, parents in the PDDs group reported impairment in physical activity and social relationships and worse overall perception of their QOL and health. Scores in the physical, psychological, and social relationships domains and in the physical and social relationships domains were lower compared to the ID group CP group, respectively. Little differences were observed between ID, CP, and control groups. The level of impairment of physical and psychological well-being was higher in mothers than in fathers in the PDDs and CP groups, respectively, in the other groups, and across all the other domains of QoL disability was alike. There were no reliably significant differences in the scores between the AD, HFA/AS, and PDD-NOS sub-groups, but parents in the HFA/AS sub-group seemed to display a lower QoL compared to the AD sub-group. The study concludes that Parents of children with PDDs seem to display a soaring burden, probably for a combination of environmental and genetic factors. Within this group of parents, those of HFA or AS people have higher stress. These finding must be considered in policymaking to providing better and more specific supports and interventions for this group of diseases.

Petrou et al. (2007) oversee a study on health status and health-related Quality of Life. The researchers studied 120 children aged 7 to 9 years with bilateral permanent childhood hearing impairment of moderate or greater severity using the Health Utilities Index Mark III questionnaire for proxy-assessed regular health status assessment. Levels of function within each of the eight attributes of the Health Utilities Index Mark III were recorded. This study revealed that Bilateral permanent childhood Divyangjan with hearing impairment is associated with significantly increased part of suboptimal levels of function and significantly fewer single- impute utility scores in six of the eight utilities of the Health Utilities Index Mark III, e.g., vision, hearing, speech, ambulation, dexterity, and cognition were compared with the normal-hearing children. The mean

multiattribute utility score for the hearing impaired children was significantly lower for the full group and the moderate, severe, and profound subgroups. The differences in the issuance of the multiattribute avail scores between the children with hearing impairment and the normal-hearing children and between each of the severity subgroups and the children with normal hearing were statistically significant.

Stacey et al. (2006) conducted a study on Hearing-Impaired Children in the United Kingdom-based on their Auditory Performance, Communication Skills, Educational Achievements, Quality of Life, and Cochlear Implantation. Findings suggest that when rigorous statistical control is exercised in comparing implanted and non implanted children, pediatric cochlear implantation is associated with reported improvements in spoken communication skills and some features of educational achievements and quality of life, deliver that children receive cochlear implants before five years of age.

Lachapelle et al. (2005) conducted a study on relationship between quality of life and self-determination. In this study, the researcher included 182 adults with mild Intellectual Disabled persons living in families, living independently, or in supported living environments. Quality of Life was investigated with the *Quality of Life Questionnaire*. Self-determination was investigated using the Adult version of *The Arc's Self-Determination Scale*. Discriminate function and co-relational analyses were conducted. Findings are Discriminate function analysis indicated that essential characteristics of self-determination predicted membership in the high Quality of Life group and that overall self-determination and Quality of Life were significantly correlated, as were sub-scale scores. The study reproduces findings from a previous study with an international sample and confirms the importance of self-determination to enhance Quality of Life. Consequent research should examine the direction of the relationship between

self- determination and Quality of Life and examine the relationship of essential characteristics of self-determined behavior and core domains of Quality of Life in greater detail.

Carter and Hughes (2005) conducted a study on Increasing Social Interaction among Adolescents with Intellectual Disabilities and Their General Education Peers: Effective Interventions. This research indicates that peer interaction can substantially impact the lives of adolescents with impairments. Although, social interaction among adolescents with intellectual disabilities and their general education colleagues infrequently happens in secondary schools. This study provides a critical analysis of twenty-six practical interventions promoting social interaction among adolescents with mental retardation and their general education peers in middle and high school settings. Findings are analyzed concerning intervention components, student characteristics, interaction settings, measures of interaction; observation procedures; experimental designs; intervention components; and measures of generalization, social validity, and treatment integrity. Based upon findings from this literature, we present recommendations to guide future research and the development of effective social interaction interventions for adolescents with intellectual disabilities in middle and high schools.

Beadle et al. (2005) conducted a study on long-term functional outcomes and academic- occupational status in cochlear implanted children after ten to fourteen years of cochlear implant use. The study aimed to assess a group of consecutively implanted children over ten years after implantation concerning implant device use and function, speech perception, and speech intelligibility outcomes and to document current academic or occupational status. because of achieving the objective A prospective longitudinal study design for assessing device function, device use, speech perception, speech intelligibility,

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and academic/occupational status of implanted deaf children was used. The acoustic performance and speech intelligibility development of 30 profoundly deaf children were rated before cochlear implantation at 5 and 10 years after implantation using the Categories of Auditory Performance and the Speech Intelligibility Rating. The participants' academic and occupational status after ten years of implant experience was documented. All children received a Nucleus multichannel cochlear implant between the ages of 2.5 and 11 years (mean age at implantation, 5.2 yr). Implant experience ranged from 10 to 14 years of use. After ten years of implant experience, out of a total of 30, 26 subjects (87%) reported that they always wore their device, two subjects (7%) frequently, and one subject (3%) occasionally. Only one child had discontinued the use of his device. After ten years of implant use, 26 (87%) of the children understood a conversation without lip-reading, and 18 (60%) used the telephone with a familiar speaker. Ten years after implantation, 23 (77%) subjects used speech intelligible to an average listener or a listener with little experience of a deaf person's speech. Conclusion all cochlear implantation provides long- term communication benefits to profoundly deaf children.

Kelman and Branco (2004) conducted a study- Deaf Children in Regular Classrooms: A Sociocultural Approach to a Brazilian Experience. This article shows how communicative and meta communicative strategies used in teacher(s)-deaf students(s) interactions may facilitate inclusion. A fourth-grade classroom was investigated where a co-teaching approach—a master teacher working with a teacher trained in Brazilian Sign Language (BSL)—was used. The class, seven deaf and 19 hearing students, was selected because of the teacher dyad's effectiveness. The teachers' interactive styles and strategies are highlighted, along with communicative and meta- communicative processes between them and the deaf students. The study shows that meanings are co-constructed through

words or BSL and nonverbal actions. Relational meta-communicative strategies make integration more effective and learning more accessible and more pleasant. Therefore, dialogue with deaf children entails more than the mere use of words, either vocally or with signs.

Cohen et al. (2004) conducted a study on quality of life in hearing-impaired adults: The role of cochlear implants and hearing aids the objective of this study was to contrast the quality- of-life (QoL) well-being received from cochlear implants (CIs) and hearing aids (HAs) among adults with hearing impairment. The health-related questionnaire was used to achieve this objective. Twenty-seven CI users compared to the control group of fifty-four hearing aid users, both older than forty-nine. Questionnaires for the prerehab state and post-rehab state were mailed two weeks apart. The result supports that Twenty-six CI and 30 HA users responded, chi-square. Compared to HA patients, CI users showed over again as much overall QoL improvement as hearing aid users. Multicomponent analysis of variance showed greater QoL benefit in CI than HA users across the physical, psychological, and social subdomains. This study highlighted that Cochlear implants provide at least comparable benefit for those with profound hearing loss as hearing aids bring for those with less severe hearing loss.

Dalton et al. (2003) conducted a study on The Impact of Hearing Loss on Quality of Life in Older Adults. The study investigates the impact of hearing loss on quality of life in a large population of older adults. Difficulties with communication were assessed using the Hearing Handicap for the Elderly—Screening version (HHIE-S), with additional questions regarding difficulties in communication in specific situations. Health-related quality of life was investigated by calculated by activities of daily living (ADLs), instrumental ADLs (IADLs), and the Short Form thirty-six Health Survey. In this study,

28% of participants had a mild hearing loss, and 24% had a moderate to severe hearing loss. The severity of hearing loss was significantly associated with having a hearing handicap and with self-reported communication difficulties. Individuals with moderate to severe hearing impairment were more likely than individuals without hearing loss to have impaired ADLs and IADLs. The severity of hearing loss was significantly associated with decreased function in both the physical component summary score & mental component summary score of six of the eight individual domain scores. This study suggests that hearing loss is associated with reduced quality of life in older adults.

Edwards, Patrick & Topolski (2003) conducted a study on the Quality of Life of Adolescents with Perceived Disabilities. The study was to compare the self-perceived quality of life (QoL) of adolescents with and without impairment. This school-based study was conducted with 2,801 7th to 12th-grade students in the United States rural area. The youth quality of life instrument-observation module and the youth quality of life groupdisability screener were administered. The study revealed twenty-one percent of all students surveyed reported having one or more physical, emotional, or learning disabilities. Adolescents with Divyangjan reported lower Quality of Life (QoL) than adolescents without impairment. Although, self-rated health, depressive symptoms, and contextual variables were significant covariates in the relationship between disability and QoL. The study suggests channels to improve the QoL of adolescents with Divyangjan. Specifically, reducing the barriers from social and environmental to promote the inclusion of adolescents with impairments in school, family, and community is one practical direction for reducing disparities in QoL.

Simeonsson et al. (2001) conducted a study on students with disabilities in school activities. This study explored the nature and area of participation in schools by students

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with disabilities in the context of the physical, social and psychological features of the school environment. This study was completed by 1180 teachers of students with disabilities in the US, describing student participation in school activities encompassing involvement in social activities, sports, academic and artistic/creative endeavors. Multivariate analysis revealed that school life in elementary, middle, and high school could be defined by six distinct factors describing individual and group roles. Structural equation modeling yielded a second-order latent variable that captured the complex and multi-dimensional aspect of participation, accounting for availability, eligibility, student characteristics/status, and student choice within a larger framework of participation.

**Conclusion:** The summary of this chapter indicates that many researches have been conducted in many aspects of life of Divyangjan, like the area related to health, psychological aspects and so on. After going through reviews of related literature and to achieve the objectives of present study, the methodological part will discuss in next chapter.

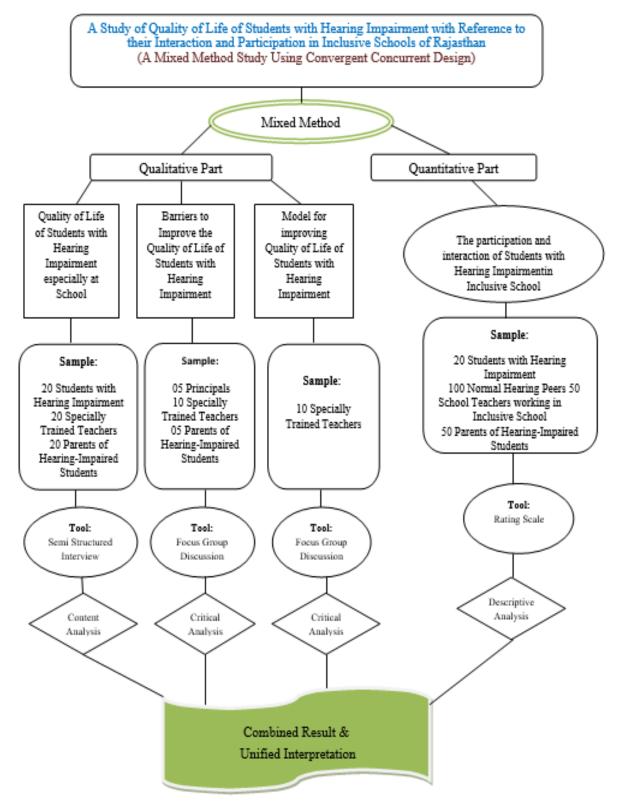
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# CHAPTER- 3 RESEARCH METHODOLOGY

# **Chapter-3**

# Methodology

# 3.1 Methodology Snapshot



# **3.2: Methodology Used:**

Research methodology is a way to systematically solve the research problems. It may be better understood as a science of studying how research is done scientifically. It records various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them. It is necessary for the researcher to know not only the research methods/techniques but also the methodology.

Researchers not only need to know how to develop certain indices or tests, how to apply the statistics techniques, how to apply particular research techniques, but they also need to know which of these methods or techniques, are relevant and which are not, and what would they mean and indicate and why. Researcher also need to understand the assumptions underlying various techniques and they need to know the criteria by which they can decide that certain techniques and procedures will be applicable to certain problems and others will not. All this means that it is necessary for the researcher to design his/her methodology for his/her problem as the same may differ from problem to problem. For example an architect, who designs a building, has to consciously evaluate the basis of his/her decisions, i.e., he/she has to evaluate why and on what basis he/she selects particular size, number and location of doors, windows and ventilators, uses particular materials and not other and the like. Similarly, in research the scientist has to exposé the research decisions to evaluate before they are implemented. He/she has to specify very clearly and precisely what decisions he/she selects and why he selects them so that they can be evaluated by others also.

Research methodology has many dimensions and research methods do constitute a part of the research methodology. The scope of research methodology is

wider than that researchmethod. When we talk about research methodology we not only talk of the research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself/herself or by others. Why a research study has been undertaken, how the research problem has been defined, in what way the hypothesis or research questions has been formulated, what data have been collected and what particular method has been adopted, why particular technique of data analysis been used and a host of similar other questions are usually answered when we talk about research methodology concerning a research problem or study.

Research methodology gives us the necessary training in gathering material and arranging or card-indexing them, participation in the field work when required, and also training in techniques for the collection of data appropriate to particular problems, in the use of statistics, questionnaires and controlled experimentation and in recording evidence, sorting it out and interpreting it. The importance of knowing research methodology for one who is preparing himself/ herself for a career of carrying out research. The importance of knowing research methodology and research techniques is obvious since the same constitute the tools of his trade. The knowledge of methodology provides good training especially to the new research worker and enables him/her to do better research. It helps him/her to develop disciplined thinking or a bent of mind to observe the field objectively. Knowing of how to do research will inculcate the ability to evaluate and use research results with reasonable confidence. In other words, we can state that the knowledge of research methodology is helpful in various fields such as government or business administration, community

development and social work where persons are increasingly called upon to evaluate and use research results for action. When one knows how research is done, then one may have the satisfaction of acquiring a new intellectual tool which can come a way of looking at the world and of judging every day experience. Accordingly it enables use to make intelligent decisions concerning problems facing us in practical life at different points of time. Thus, the knowledge of research methodology provides tools to took at things in life objectively.

In this scientific age, all of us are in many ways consumers of research results and we canuse them intelligently provided we are able to judge the adequacy of the methods by which they have been obtained. The knowledge of methodology helps the consumer of research results to evaluate them and enables him to take rational decisions.

The quality of life of every individual plays a vital role to establish him/her as an idealin his society. The main focus of this study is to know interaction and participation of children with hearing impairment with his/her classmates and other school authorities. The research was carried out in inclusive schools of Rajasthan, the state of India. The study was conducted with different number of sample size depending upon objectives of study. Ideally, this type of study will also help the teachers working in inclusive schools to make a proper strategy for Divyangjan to make them a part of his/her society.

The objectives of this study were - To study the participation and interaction of students with Hearing Impairment in inclusive schools. To investigate the Quality of Life of students with Hearing Impairment especially at school. To identify barriers to improve the Quality of Life of students with Hearing Impairment. To suggest a

model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up. After formulating the objectives of the study researcher made some research questions on the basis of above objectives these are- How much the students with Hearing Impairment participate and interact in inclusive schools? Are the Quality of Life of students with Hearing Impairment is similar as students with normal hearing especially at school? What are the barriers to improve the Quality of Life of students with Hearing Impairment? What will be a model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up?

The present study is primarily based upon rating scale on interaction and participation of Students with Hearing Impairment in Inclusive Schools of Rajasthan. An attempt has been made to assess the quality of life of Students with Hearing Impairment studying in Inclusive Schools of Rajasthan.

Review of literature reveals positive relationships between quality of life and perceived classroom participation in certain domains. Students who perceive classroom participation as satisfying have higher scores for quality of life in school, social contact with peers, and mental health. A lot of research has been undertaken to study the quality of life of children with special need in Indian and Western context. But the information like interaction, participation of student with special need in Inclusive school is lacking in Indian context.

# **3.2.1 Method:**

This study has been conducted using a Mix Methodology; convergent concurrent design. The study was conducted in two parallel phases. Mixed methods researchers use and often make explicit diverse philosophical positions. These positions often are referred to as dialectal stances that bridge post positivist and social constructivist worldviews, pragmatic perspectives, and transformative perspectives

(Greene, 2007). For example, researchers who hold different philosophical positions may find mixed methods research to be challenging because of the tensions created by their different beliefs (Greene, 2007). However, mixed methods research also represents an opportunity to transform these tensions into new knowledge through a dialectical discovery. A pragmatic perspective draws on employing "what works," using diverse approaches, giving primacy to the importance of the research problem and question, and valuing both objective and subjective knowledge (Morgan, 2007). A transformative perspective suggests an orienting framework for a mixed methods study based on creating a more just and democratic society that permeates the entire research process, from the problem to the conclusions, and the use of results (Mertens, 2009).

# **3.2.2** Convergent or parallel or concurrent designs:

When the intent is to merge, Creswell (2009) suggested quantitative and qualitative data consequently to address study aims, the investigator combines both quantitative and qualitative research. This design is known as a convergent design. The data analysis consists of mergingdata and comparing the two sets of data and results.

Current study is divided in to two parallel phases. Qualitative as well as quantitative data were collected simultaneously as researcher adopted convergent concurrent design.

# **3.3 Geographical location of the Study:**

Ajmer and Jaipur district in Rajasthan State of India have been taken for the study of quality of life of students with hearing impairment in inclusive school. Both were purposively selected for the area of the study.

3.3.1 Criteria for selecting location of the study: As the non availability of data

related to hearing impaired students studying in inclusive schools the researcher follow the criteria of very old schools and availability of multi disabled students. Jaipur is a multicultural and large population state of Rajasthan and have institutions working before the independence of India. In Jaipur the oldest institution for children with hearing impairment was established in the year 1945. Ajmer is also a multicultural state of Rajasthan and has very old institutions working in rehabilitation of Divyangjan. In Ajmer the oldest institution was established in the year 1961,and thus being leading district for children with hearing impairment was selected purposively.

**3.3.2 Criteria for selecting the schools/institutions:** Problem faced by the researcher was that the change of legal definition of Hearing Impairment in RPWD Act, 2016 during the research. Many of the Children with Hearing Impairment (CWHI) had their disability certificate issued upon the older criteria upon Person with Disability (PWD) Act-1995, after enactment Rights of Person with Disability (RPWD) Act-2016, a still many CWHI had their disability certificate on the older criteria.

Schools for CWHI are very less in number in Rajasthan and the representation of CWHI ininclusive schools were found very less. In reason to complete data of CWHI attending the particular school was not available in such a case due to very scattered population about which least information was available random sampling was selected apart from these. For selecting theschools/ institutions for collecting the data researcher visited such schools are-

- Garima Special School Samiti, Jamroli, Jaipur
- Sambam Samiti, Jagatpura, Jaipur
- Monsoon Anubodh School, Triveni Nagar, Jaipur
- Prayas Sansthan, Jhalana, Jaipur
- Gurukul Sapastic Society, Benar road, Jaipur
- Navchetna Mansik Viklang Evam Mook Badhir Vidyalaya, Shanti Nagar,

Jaipur

- Sweet Voice Welfare and Shiksha Samiti, Govindgarh, Jaipur
- Netraheen Vikas Sansthan, Jodhpur
- Chaitanya Sewa Sansthan, Karoli
- Dashrath Manovikas Sansthan, Sikar
- Badhit Bal Vikas Samiti, Ajmer
- Rajasthan Mahila Kalyan Mandal, Chachiyawas, Ajmer
- Badhir Vidyalaya, Ajmer

After visiting such schools and follow the criteria, seven schools from

Jaipur and threeschools from Ajmer were selected for the purpose of data collection.

# 3.4 Samples & Sampling:

Samples were selected as per the need of each objective as follows:-

- for objective no. I- 20 Students with Hearing Impairment, 100 Normal Hearing peers, 50 School Teachers working in inclusive school, 50 Parents of Hearing Impaired student were taken purposively.
- for objective no. II 20 students with Hearing Impairment 20 Specially Trained Teacher, 20 Parents of Hearing Impaired student were taken on the basis of purpose.
- for objective no. III- 05 Principal, 10 Specially Trained Teacher and 05
   Parents ofHearing Impaired student were selected on the basis of purpose.
- for objective no. IV- 10 Specially Trained Teachers were taken on the basis of purpose.

# **3.4.1 Criteria for Selecting Samples:**

Criteria for Students with Hearing Impairment-

- Studying in class 6 to 12
- Having valid disability certificate

Don't have additional disability

Criteria for Normal Hearing peers-

- Studying in class 6 to 12 with Students with Hearing Impairment
- Best friend of Students

with Hearing Impairment

Criteria for Inclusive School

Teachers:

- Minimum two years of teaching experience to Students with Hearing Impairment
- Teaching

Academic/ Non academic

subjectsCriteria for

Specially Trained

Teachers:

• Completed a Rehabilitation Council of India (RCI) approved

diploma/degree course withspecialization area hearing

impairment

- Have a valid RCI registration certificate
- Minimum three years teaching experience to Students with Hearing Impairment

# 3.5 Tools:

In this study following tools were used-

 To fulfill the need of first objective "to study the participation and interaction of students with hearing impairment in inclusive schools" three point rating scales Interaction of Hearing Impaired Student in Inclusive School (IHISIS) and Participation of Hearing Impaired Student in Inclusive School (PHISIS) were used.

- To fulfill the need of second objective "to investigate the quality of life of students with hearing impairment especially at school" semi structured interview was conducted. This semi structured interview was conducted between different stakeholders like as student with hearing impairment, specially trained teachers and parents of hearing impaired students.
- To fulfill the need of third objective "to identify barriers to improve the quality of life of students with hearing impairment" focus group discussion was conducted. This focus group discussion was conducted between principals of inclusive schools, specially trainedteachers and parents of hearing impaired students.
- To fulfill the fourth objective "to suggest a model for improving quality of life ofstudents with hearing impairment in an inclusive educational set-up" discussion wasmade with specially trained teachers.

# 3.6 Objective wise Sample and Sampling Method

# 3.6.1 Objective No. 1

"To study the participation and interaction of students with Hearing Impairment ininclusive schools" was intended to the following samples:-

# 3.6.1.1 Sample and Sampling Method:

20 Students with Hearing Impairment, 100 Normal Hearing peers, 50 School Teachers working in inclusive school, 50 Parents of Hearing-impaired student were taken purposively. For sampling process the researcher go through all sampling process and as the nature of present study purposive sampling process was selected. First the researcher was

approached to inclusive schools situated in Jaipur Rajasthan but the samples available here was so less than researcher went to another nearest area Ajmer Rajasthan for selecting the samples. While selecting 20 students with Hearing Impairment as a sample of present study researcher visited inclusive schools in Jaipur and got 18 students with Hearing impairment out of these 18 samples researcher selected 14 as a sample, out of rest 04 students 02 students were irregular in class and 02 have additional disability including hearing impairment. For selecting more samples researcher went inclusive schools in Ajmer and got 08 students with Hearing impairment out of rest 2 students 1 has additional disability including hearing impairment and other 1 is not shown interest.

While selecting 100 normal hearing peers in inclusive school as a sample of present studyresearcher was selected same class where the hearing-impaired sample was selected. By using several criteria one hundred normal hearing peers of hearing-impaired students were selected. In order to select 100 normal hearing peers, the researcher asked to each selected hearing-impaired student sample to tell his/her 5 best friends name studying in his/her class and have normal hearing. By adopting this norm100 normal hearing peers were selected as a sample of present study, out of these 100 normal hearing peers 70 were selected from Jaipur district and 30 normal hearing peers were selected from Ajmer district.

While selecting 50 School Teachers working in inclusive school as a sample of present study researcher was discussed with 50 school teachers working in various inclusive school of Jaipur, out of above 50 teachers 15 were not shown interest due to his/her personal reason.For selecting rest of 15 school teachers working in inclusive school researcher went to same inclusive school of Ajmer where the hearing impaired and normal hearing peer groups were taken and selected purposively. All selected 50 teachers have minimum three years teaching experience in inclusive school.

While selecting 50 parents of hearing-impaired students as a sample of present study researcher was discussed with 40 parents of hearing-impaired students of Jaipur whose hearing-impaired child was taken as a sample of present study out of those 40 parents 08 parents has not shown interest due to their personal reason.18 parents of hearing impaired student was selected from the same inclusive schools of Ajmer district where the hearing impaired and normal hearing sample was selected.

Sample	Male	Female	Total	
Students with	12	08	20	
Hearing Impairment				
(SwHI)				
Normal Hearing	60	40	100	
Peers (NHP)				
Inclusive School	21	29	50	
Teacher (IST)				
Parents of Hearing	12	38	50	
Impaired Students				
(PHIS)				

# Table 3.1 Distribution of Samples on the basis of Gender

Table 3.1 shows that the 12 Male & 08 Female SwHI, 60 Male & 40 Female NHP, 21 Male & 29 Female IST and 12 Male & 38 Female PHIS, samples were selected on the basis of Gender.

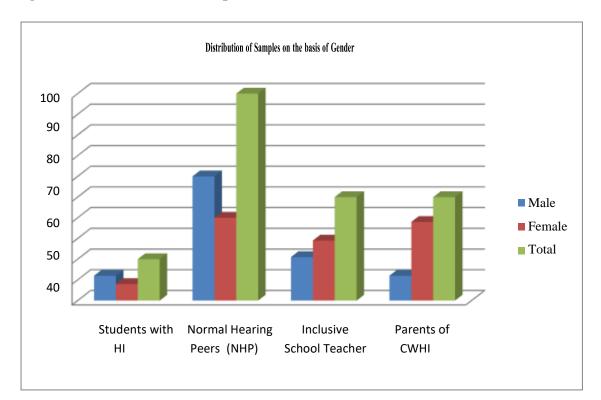


Figure 3.2 Distribution of Samples on the basis of Gender

# 3.6.1.2 Tool:

 To fulfill the need of first objective "to study the participation and interaction of students with hearing impairment in inclusive schools" three point rating scales "Interaction of Hearing Impaired Student in Inclusive School" (IHISIS) and "Participation of Hearing Impaired Student in Inclusive School" (PHISIS) were used.

For developing tool for first objective to assess interaction of hearing impaired student in inclusive school broad discussion was made with experts working in the field of rehabilitation and education. After receiving the suggestions from experts researcher select three major areas where interaction may be assessed these were interaction during curricular activities, interaction during co-curricular activities and interaction during social activities. After finalizing area of interaction area wise three-point rating scale was made by

researcher. Primarily 15 statements were framed in each three area of interaction. For knowing the validity of this tool researcher called 18 experts working in related field in different states of India. Out of 18 experts 15 were given acceptance to check the validity of this tool 03 was not shown interest due to their personal reason. The tool "Interaction of Hearing-impaired Students in Inclusive School" (IHISIS) was sent to above 15 experts they all have given their comments and after incorporate them IHISIS was reframed. Finally, in IHISIS area 'interaction during curricular activities' 10 items, 'interaction during co-curricular activities' 10 items and 'interaction during social activities' 12 items were approved by experts.

# **3.6.1.2.1 Interaction of Hearing Impaired Student in Inclusive School (IHISIS):**

This research tool was developed by the researcher to evaluate interaction of hearing impaired student in inclusive school. Statements on interaction related with curricular activities, co-curricular activities and social activities were added in this research tool. Some statements of IHISIS is as under-

Interaction of Hearing Impaired Student in Inclusive School (IHISIS):-

# (Interaction during Curricular Activities)

- Your hearing impaired friend tries to tell you about a teacher by looking at them.
- When a free period your hearing impaired friend tries to inform the principal.

# (Interaction during Co-Curricular Activities)

- Your hearing impaired friend also shows interest in sports and discusses them with you.
- Your hearing impaired friend discusses with you about indoor games.

# (Interaction during Social Activities)

• Your hearing impaired friend greets you when you come to school in the

morning.

• Your hearing impaired friend talks with you about your family members easily.

# **3.6.1.2.2** Participation of Hearing Impaired Student in Inclusive School (PHISIS):

This research tool was developed by the researcher to assess participation of

hearing impaired student in inclusive school. Statements on participation related

with academicactivities and social activities were included in this research tool.

Some statements of PHISIS is as under-

Participation of Hearing Impaired Student in Inclusive School (PHISIS) (Participation during Curricular Activities)

- This hearing impaired student performs in the classroom like other students.
- This hearing impaired student is interested in debating any academic topic in class.

# (Participation during Social Activities)

- Before starting today's topic, this hearing impaired student tells the previous day's and today's topic.
- This hearing impaired student gives you a happy post on your birthday.

Interaction of Hearing Impaired Student in Inclusive School (IHISIS) tool consists of three major areas:- Interaction during Curricular Activities, Interaction during Co-Curricular Activities and Interaction during Social Activities. The tool related to Participation of Hearing Impaired Student in Inclusive School (PHISIS) was made for teachers. PHISIS consists of the area related to participation during curricular activities and participation during social activities. The researcher not included the area related to co-curricular activities in PHISIS because all the teachers of any school were not involved the co-curricular activities conducted by particular school. This tool was constructed in English

language butconvenient to samples tool was translated in Hindi language.

3.6.2 Objective No. 2

# "To investigate the Quality of Life of students with Hearing Impairment especially atschool" was intended to the following samples: -

# 3.6.2.1 Sample and Sampling Method

**Sampling 1:** In order to fulfill above objective all selected 20 Students with Hearing Impairmentfor objective no. one were also selected for this objective.

Sampling 2: In order to fulfill above objective 20 Specially Trained Teachers trained in special education in specialization area hearing impairment were selected. These special educators must have completed his/her diploma, degree or master in respective area of specialization, For sampling process the researcher go through all sampling process and as the nature of present study purposive sampling process was selected. While selecting 20 specially trained teacher as a sample of present study discussion was made by researcher with the samples as selected to fulfill the objective number two. First the researcher was approached to inclusive schools in Jaipur, Rajasthan but the less willingness of samples the researcher approached to another nearest geographical area Ajmer Rajasthan for selecting the samples. Researcher discussed with 25 samples in Jaipur but out of above 25 samples 13 were not shown interest so 12 sample were selected from Jaipur area of study. For selecting 08 more samples as the need of present study researcher discussed with the samples from his second area of study Ajmer district in Rajasthan and they were accepted to give responses as a sample of this study. Finally out of 20 specially trained teachers 13 were taken from different inclusive schools from Jaipur district and rest 08 specially trained teachers were taken purposively from different inclusive schools from Ajmerdistrict in

Rajasthan a state of India.

Geographical Area	Male	Female	Total
Jaipur	03	09	12
Ajmer	02	06	08
Total	05	15	20

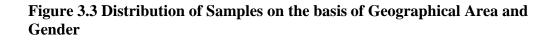
 Table 3.2 Distribution of Samples on the basis of Geographical Area and

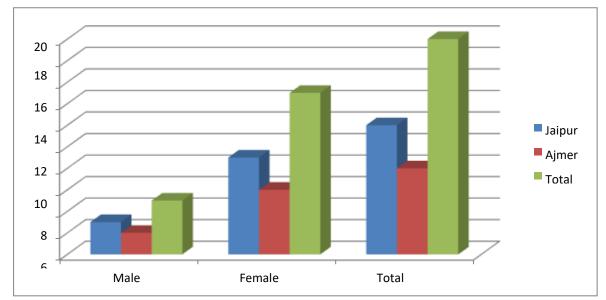
 Gender

Table 3.2 shows that the 03 Male & 09 Female Specially Trained Teachers from Jaipur

and 02 Male & 06 Female Specially Trained Teachers from Ajmer were selected as

samples on the basis of Geographical Area and Gender.



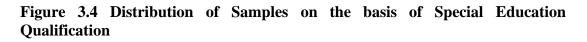


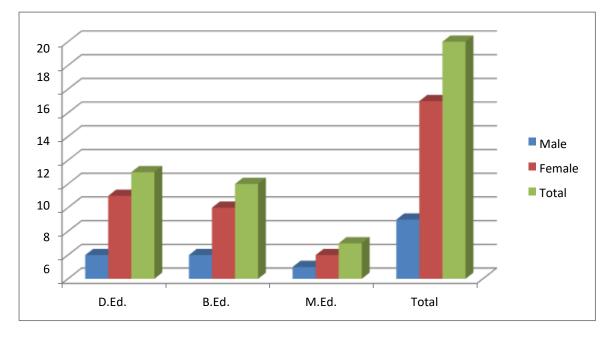
Graph 3.3 shows that out of 12 Specially Trained Teachers: 03 Male & 09 Female Specially Trained Teachers from Jaipur and out of 08 Specially Trained Teachers: 02 Male & 06 Female Specially Trained Teachers from Ajmer were selected as samples on the basis of Geographical Area and Gender.

	D.Ed.	B.Ed.	M.Ed.	Total
Male	02	02	01	05
Female	07	06	02	15
Total	09	08	03	20

# Table 3.3 Distribution of Samples on the basis of Special EducationQualification

Table 3.3 shows that the 02 Male qualified in D.Ed. 02 Male qualified in B.Ed. & 01 Male qualified in M.Ed. and 07 Female qualified in D.Ed. 06 Female qualified in B.Ed. & 02 Female qualified in M.Ed. were selected as samples on the basis of Special Education Qualification.





Graph 3.4 shows that out of 05 Male: 02 Male qualified in D.Ed. 02 Male qualified in B.Ed. & 01 Male qualified in M.Ed. and out of 15 Female: 07 Female qualified in D.Ed. 06 Female qualified in B.Ed. & 02 Female qualified in M.Ed. were selected as samples on the basis of Special Education Qualification.

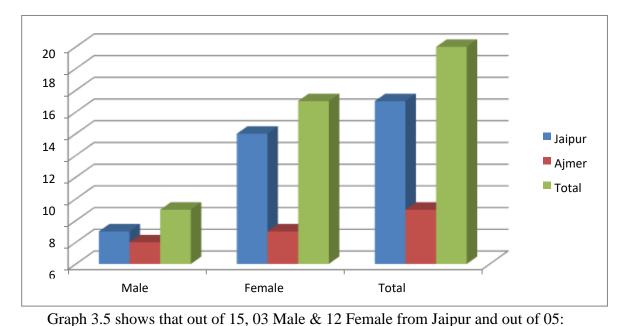
Sampling 3: In order to fulfill above objective 20 Parents of Hearing Impaired student

were also selected on the basis of purpose. The child of these parents must fit any type of hearing aid like- behind the ear (BTE) hearing aid, cochlear implant (CI) and admitted in inclusive school. While selecting 20 parents of hearing impaired students as a sample of present study discussion was made by researcher with the samples as selected to fulfill the objective number two. First the researcher was approached to parents of hearing impaired students whose children were studyingin inclusive school in Jaipur, Rajasthan but the less willingness of samples the researcherapproached to another nearest geographical area Ajmer Rajasthan for selecting the samples. Researcher discussed with 28 samples in Jaipur but out of above 28 samples 13 were not shown interest so 15 sample were selected from Jaipur area of study. For selecting 05 more samples as the need of present study researcher discussed with the samples from his second area of study Ajmer district in Rajasthan and they were accepted to give responses as a sample of this study. Finally out of 20 parents of hearing impaired students 15 were taken from different from Jaipur district and rest 05 parents of hearing impaired students were taken purposively from Ajmer district in Rajasthan a state of India.

Geographical Area	Male	Female	Total
Jaipur	03	12	15
Ajmer	02	03	05
Total	05	15	20

Table 3.4 Distribution of Samples on the basis of Geographical Area and Gender

Table 3.4 shows that the 03 Male & 12 Female from Jaipur and 02 Male & 03 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender. Figure 3.5 Distribution of Samples on the basis of Geographical Area and Gender



02 Male & 03 Female from Ajmer were selected as samples on the basis of

Geographical Area and Gender.

Table 3.5 Distribution of Samples on the basis of Hearing Aid used by their	
child	

	B.T.E.	C.I.	Total
Male	03	02	05
Female	11	04	15
Total	14	06	20

Table 3.5 shows that the 03 B.T.E. user Male parents & 02 C.I. user Male parents and 11 B.T.E. user Female parents & 04 C.I. user Female parents were selected as samples on the basis of Hearing Aid used by their child.

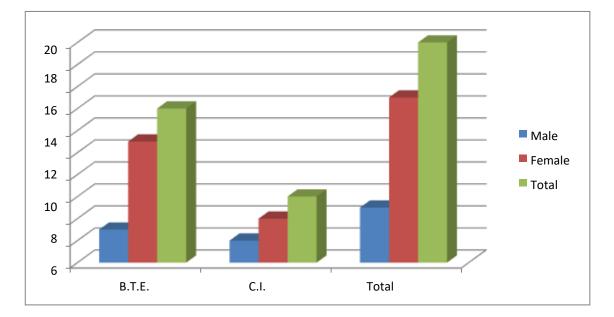


Figure 3.6 Distribution of Samples on the basis of Hearing Aid used by their child

Graph 3.6 shows that out of 05: 03 B.T.E. user Male parents & 02 C.I. user Male parents and out of 15: 11 B.T.E. user Female parents & 04 C.I. user Female parents were selected as samples on the basis of Hearing Aid used by their child.

# 3.6.2.2 Tools used:

**3.6.2.2.1 Interview 1:** A semi structured interview was conducted with specially trained teachers. Some items included in the semi structured interview were- Kindly state something about the school arrival and departure of these Divyangjan with hearing impairment. Please say something about an interest of Divyangjan with hearing impairment in curricular activities. What about the leadership quality of Divyangjan with hearing impairment in different activities; and so on. Transcripts of their responses was prepared and given to them for their consent. Each one was asked if he/she is interested to disclose their names. All the participants were informed about the purpose of interview and allowed to be comfortable with. Also, only upon their willingness to participate they were interviewed.

**3.6.2.2.2 Interview 2:** A semi structured interview was conducted with parents of hearing impaired students. Some items included in the semi structured interview were- Kindly state something about your family. Please share about communication skill used by your hearing impaired child. How does your hearing impaired child help in household chores; and so on. Transcripts of their responses was prepared and given to them for their consent. Each one was asked if he/she is interested to disclose their names. All the participants were informed about the purpose of interview and allowed to be comfortable with. Also, only upon their willingness to participate they were interviewed.

# 3.6.3 Objective No. 3

# "To identify the barriers to improve the Quality of Life of students with Hearing Impairment" was intended to the following samples:-

# 3.6.3.1 Sample and Sampling Method

**3.6.3.1.1 Sampling 1:** In order to fulfill above objective 05 principals of inclusive school were selected. These samples were selected from these inclusive schools where the students with hearing impairment have already enrolled and samples have feel flexible to communicate with them. For sampling process the researcher go through all sampling process and as the nature of present study purposive sampling process was selected. While selecting 05 principals of inclusive schoolas a sample of present study discussion was made by researcher with the samples as selected to fulfill the objective number three. First the researcher was approached to inclusive schools in Jaipur, Rajasthan but the less willingness of samples the researcher approached to another nearest geographical area Ajmer Rajasthan for selecting the samples. Researcher discussed with 06 samples in Jaipur but out of above 06 samples 03 were not shown interest so 03 sample were selected from Jaipur area of study. For selecting

02 more samples as the need of present study researcher discussed with the samples from his second area of study Ajmer district in Rajasthan

and they were accepted to give responses as a sample of this study. Finally out of 05 principalsof inclusive school 03 were selected from different inclusive schools from Jaipur district and rest02 principals of inclusive school were taken purposively from different inclusive schools from Ajmer district in Rajasthan a state of India.

 Table 3.6 Distribution of Samples on the basis of Geographical Area and Gender

Geographical Area	Male	Female	Total
Jaipur	02	01	03
Ajmer	01	01	02
Total	03	02	05

Table 3.6 shows that the 02 Male & 01 Female from Jaipur and 01 Male & 01 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender.

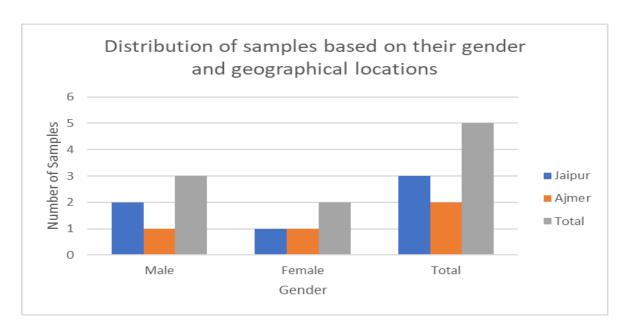


Figure 3.7 Distribution of Samples on the basis of Geographical Area and Gender

Graph 3.7 shows that out of 03: 02 Male & 01 Female from Jaipur and out of 02: 01 Male & 01 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender.

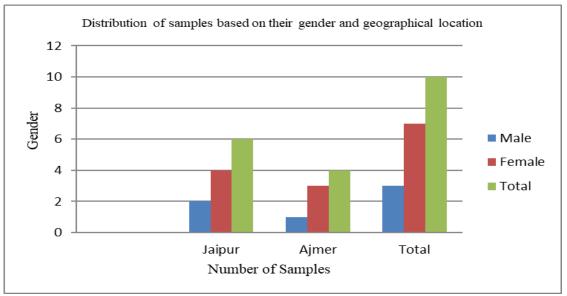
**3.6.3.1.2 Sampling 2:** In order to fulfill above objective 10 Specially Trained Teachers trained in special education in specialization area hearing impairment were selected. These special educators must have completed his/her diploma, degree or master in respective area of specialization, For sampling process the researcher go through all sampling process and as the nature of present study purposive sampling process was selected. While selecting 10 specially trained teacher as a sample of present study discussion was made by researcher with the samples as selected to fulfill the objective number three. The researcher was approached those samples who are already willing for objective number two. First the researcher approached all 12 selected samples those who have given willingness for objective number two as the convenience for researcher. Out of theses 12 samples 06 were not shown interest so 06 sample were selected from Jaipur area of study. For selecting 04 more samples as the need of present study researcher discussed with the samples from his second area of study Ajmer district in Rajasthan and they were accepted to giveresponses as a sample of this study. Finally out of 10 specially trained teacher 06 were selected from the samples who already given willingness for objective number two from Jaipur district and rest 04 specially trained teacher were selected purposively from the samples who already given willingness for objective number two from Ajmer district in Rajasthan a state of India.

Geographical Area	Male	Female	Total
Jaipur	02	04	06
Ajmer	01	03	04
Total	03	07	10

Table 3.7 Distribution of Samples on the basis of Geographical Area and Gender

Table 3.7 shows that the 02 Male & 04 Female from Jaipur and 01 Male & 03 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender.

Figure 3.8 Distribution of Samples on the basis of Geographical Area and Gender



Graph 3.8 shows that out of 06: 02 Male & 04 Female from Jaipur and out of 04: 01 Male & 03 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender.

**3.6.3.1.3 Sampling 3:** In order to fulfill above objective 05 Parents of hearingimpaired student were also selected on the basis of purpose. The child of these parents must fit any type of hearing aid like- behind the ear (BTE) hearing aid, cochlear implant (CI) and admitted in inclusive school. While selecting 05 parents of hearingimpaired students as a sample of present study discussion was made by researcher

with the samples as selected to fulfill the objective number three. The researcher was approached to parents of hearing-impaired students from Jaipur who already given willingness for objective number two and they were accepted to give responses as a sample of this study. Finally, all 05 parents of hearing impaired students were selected from Jaipur district in Rajasthan a state of India.

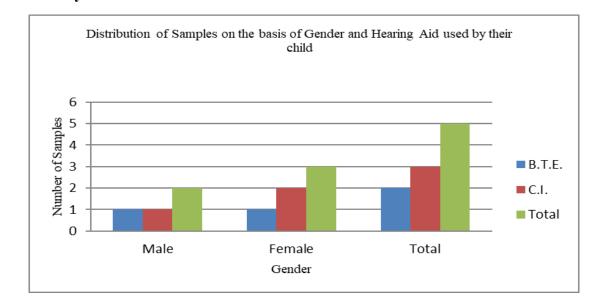
 Table 3.8 Distribution of Samples on the basis of Gender and Hearing Aid

 used by theirchild

	B.T.E.	C.I.	Total
Male	01	01	02
Female	01	02	03
Total	02	03	05

Table 3.8 shows that the 01 B.T.E. user Male parents & 01 C.I. user Male parents and 01 B.T.E. user Female parents & 02 C.I. user Female parents were selected as samples on the basis of Hearing Aid used by their child.

# Figure 3.9 Distribution of Samples on the basis of Gender and Hearing Aid used by theirchild



Graph 3.9 shows that out of 02: 01 B.T.E. user Male parents & 01 C.I. user Male parents and out of 03: 01 B.T.E. user Female parents & 02 C.I. user Female parents were selected as samples on the basis of Hearing Aid used by their child.

# **3.6.3.2** Tools used:

**3.6.3.2.1 Focus Group Discussion:** A focus group discussion was conducted with inclusive school principals. Some responses of focus group discussion were- Overall the participation of parents in academic and non-academic activities is average. Students with hearing impairment face difficulties in speech and audiology-related clinical services. Students with hearing impairment face problems in understanding the teacher's lecture. Problems in communication with peers.; and so on. Transcripts of their responses was prepared and given to them for their consent. Each one was asked if he/she is interested to disclose their names. All the participants were informed about the purpose of focus group discussion and allowed to be comfortable with. Also, only upon their willingness to participate they were discussed.

# 3.6.4 Objective No. 4

"To suggest a model for improving Quality of Life of Students with Hearing Impairment in an inclusive educational set-up, was intended to the following samples:-

**3.6.4.1 Sample and Sampling Method:** In order to fulfill above objective 10 Specially Trained Teachers trained in special education in specialization area hearing impairment were selected. These special educators must have completed his/her diploma, degree or master in respective area of specialization and have minimum three years teaching experience to Divyangjan with Hearing Impairment, For sampling process the researcher go through all sampling process and as the nature of

present study purposive sampling process was selected. While selecting 10 specially trained teacher as a sample of present study discussion was made by researcher with the samples as selected to fulfill the objective number three. The researcher was approached those samples who are already willing for objective number three and they were agreed.

Geographical Area	Male	Female	Total
Jaipur	02	04	06
Ajmer	01	03	04
Total	03	07	10

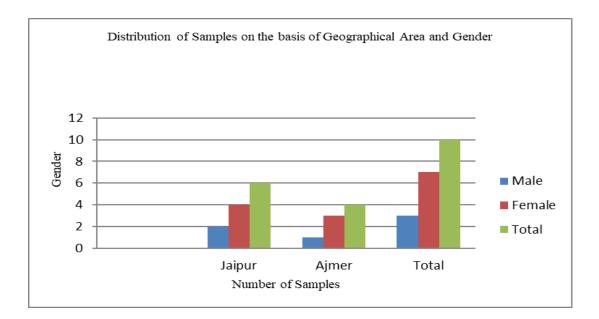
 Table 3.9 Distribution of Samples on the basis of Geographical Area and

 Gender

Table 3.9 shows that the 02 Male & 04 Female from Jaipur and 01 Male & 03 Female

from Ajmer were selected as samples on the basis of Geographical Area and Gender.

# Figure 3.10 Distribution of Samples on the basis of Geographical Area and Gender



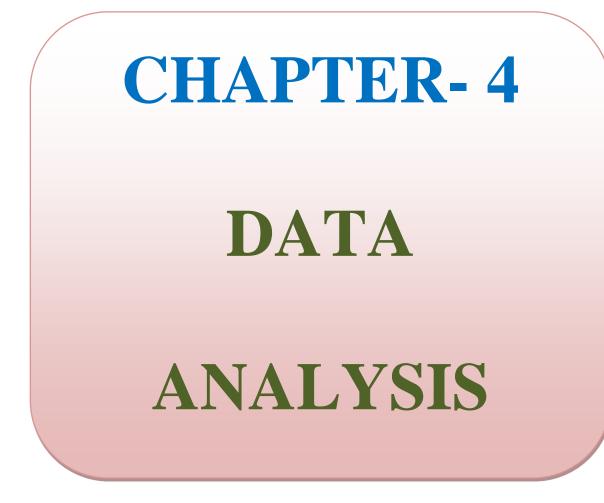
Graph 3.10 shows that out of 06: 02 Male & 04 Female from Jaipur and out of 04: 01 Male & 03 Female from Ajmer were selected as samples on the basis of Geographical Area and Gender.

# **3.6.4.2** Tools used:

**3.6.4.2.1 Focus Group Discussion:** A focus group discussion was conducted with specially trainedteachers trained in specialization area hearing impairment. Some responses of focus groupdiscussion were-

- Early identification and intervention of hearing impairment is needed.
- Need to provide advanced and appropriate hearing aid like cochlear-implant.
- Need to aware the population about Divyangta.
- Parent's participation in academic and non-academic activities.
- Appropriate speech therapy/auditory verbal therapy by expert.

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# Chapter-4 Data Analysis

# 4.1 Data Analysis of Present Study:

Chapter no. 3 explained in detail that how the researcher selects the research method, sampling method, research tools etc. After going through all strategies as selected above, objective wise data were collected from samples.

The objectives of this study were- To study the participation and interaction of students with Hearing Impairment in inclusive schools, to investigate the Quality of Life of students with Hearing Impairment especially at school, to identify barriers to improve the Quality of Life of students with Hearing Impairment, to suggest a model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up. After formulating the objectives of the study researcher made some research questions on the basis of above objectives The research questions of this study were- How much the students with Hearing Impairment participate and interact in inclusive schools? Are the Quality of Life of students with Hearing Impairment is similar as students with normal hearing especially at school? What are the barriers to improve the Quality of Life of students with Hearing Impairment? What will be a model for improving Quality of Life of students with Hearing Impairment in an inclusive educational set-up?

**4.2 Objective wise Data Collection and Analysis:** The details of data collection and analysis was as under-

# 4.2.1 Objective No. 1

**"To study the participation and interaction of students with Hearing Impairment in inclusive schools"-** To achieve this objective three-point rating were returned from the selected samples and the responses are as follows-

# Data Analysis

# **4.2.1.1** Responses on the rating scale from Colleagues of Children with Hearing Impairment

Table 4.2.1.1: Interaction during Curricular Activities

	Interaction during Curricular			
	Activities			
Item No.	Item Description	Yes	Some Time	No
01	आपका यह श्रवण बाधित मित्र किसी टीचर को देखकर उनके बारे में आपको बताने का प्रयास करता है	60%	30%	10%
02	आपका यह श्रवण बाधित मित्र टीचर के कक्षा में आने पर सभी बच्चों को सतर्क करता है	55%	25%	20%
03	आपका यह श्रवण बाधित मित्र टीचर द्वारा पढाते समय बीच-बीच में प्रश्न पूछता है	40%	30%	30%
04	आपका यह श्रवण बाधित मित्र विषय-वस्तु समझ न आने पर टीचर को पुनः समझाने के लिये कहता है	30%	30%	40%
05	टीचर के कक्षा से जाते समय आपका यह श्रवण बाधित मित्र उनसे Bye या धन्यवाद (Thanks) कहता है	50%	25%	25%
06	एक कालांश समाप्त होने पर आपका यह श्रवण बाधित मित्र आपसे अगले कालांश के बारे में चर्चा करता है	60%	20%	20%
07	कोई कालांश खाली होने पर आपका यह श्रवण बाधित मित्र प्राचार्य को सूचित करने का प्रयास करता है	45%	30%	25%
08	प्राचार्य के कक्ष में जाने में आपका यह श्रवण बाधित मित्र स्वयं को सहज महसूस करता है	60%	25%	15%
09	आपका यह श्रवण बाधित मित्र निःसंकोच अपनी बात प्राचार्य से करता है	50%	30%	20%
10	आपका यह श्रवण बाधित मित्र परीक्षा के बारे में आपसे चर्चा करता है	55%	25%	20%

# Data Analysis

# Table 4.2.1.2: Interaction during Co-curricular Activities

	Interaction during Co-Curricular Activities				
Item No.	Item Description	Yes	Some Time	No	
01	आपका यह श्रवण बाधित मित्र खेल में भी रूचि दिखाता है और उनके बारे में आपसे चर्चा करता है	50%	25%	25%	
02	आपका यह श्रवण बाधित मित्र कमरे के अन्दर खेले जाने वाले खेलों (Indoor games) के बारे में आपसे चर्चा करता है	55%	30%	15%	
03	आपका यह श्रवण बाधित मित्र बाहरी खेलों (Outdoor games) के बारे में आपसे चर्चा करता है	60%	30%	10%	
04	आपका यह श्रवण बाधित मित्र आपसे गीत, संगीत, नृत्य इत्यादि विषयों पर चर्चा करता है	30%	40%	30%	
	आपका यह श्रवण बाधित मित्र शारीरिक शिक्षा, व्यायाम एवं योग सम्बन्धी क्रियाओं पर आपसे चर्चा करता है	45%	25%	30%	
06	आपका यह श्रवण बाधित मित्र अपने एवं आपके शौक (Hobbies)पर आपसे चर्चा करता है	60%	30%	10%	
07	आपका यह श्रवण बाधित मित्र किसी टॉपिक पर आपके एवं अन्य मित्रों के साथ अपने विचार निःसंकोच साझा करता है	45%	25%	30%	
08	आपका यह श्रवण बाधित मित्र विभिन्न राष्ट्रीय एवं धार्मिक त्योहारों की चर्चा आपसे करता है	55%	25%	20%	
09	आपका यह श्रवण बाधित मित्र चित्रकारी, पेन्टिंग आदि से सम्बन्धित चर्चा आपसे करता है	60%	30%	10%	
10	आपका यह श्रवण बाधित मित्र नवीन गतिविधियों को करने में आयी चुनौतियों के समाधान के बारे में आपसे पूछता है	45%	25%	30%	

# Data Analysis

# Table 4.2..1.3: Interaction during Social Activities

	Interaction during Social Activities			
Item No.	Item Description	Yes	Some Time	No
01	आपका यह श्रवण बाधित मित्र सुबह स्कूल आने पर आपको अभिवादन करता है	65%	25%	10%
02	जब आप आपके इस श्रवण बाधित मित्र से हेलो बोलते हैं तो वह उसका उत्तर देता है	60%	30%	10%
03	आपको देखकर आपका यह श्रवण बाधित मित्र मुस्कुराता है	65%	20%	15%
04	आपका यह श्रवण बाधित मित्र आपसे अपने सुबह के नाश्ते की बातें करता है	50%	35%	15%
05	आपका यह श्रवण बाधित मित्र आपके परिवार के लोगों से सहजता से बातें करता है	50%	30%	20%
06	स्कूल में कभी किसी अतिथि के आने पर आपका यह श्रवण बाधित मित्र उनसे बात करने की इच्छा रखता है	60%	30%	10%
07	आपका यह श्रवण बाधित मित्र अपने से बड़ों का आदर करता है	50%	35%	15%
08	आपका यह श्रवण बाधित मित्र अपने दोस्तों से वाद-विवाद करता है	40%	40%	20%
09	आपका यह श्रवण बाधित मित्र अपने दुखों को आपके साथ बांटता है	45%	30%	25%
10	आपका यह श्रवण बाधित मित्र आपको जन्मदिन और अन्य उत्सवों पर मुबारकबाद देता है	50%	35%	15%
11	आपका यह श्रवण बाधित मित्र आपके घर के कार्यक्रमों जैसे जन्मदिन या अन्य कार्यक्रमों में बुलाने पर सम्मिलित होता है	55%	25%	20%
12	आपका यह श्रवण बाधित मित्र आपको अपने घर अपने जन्मदिन या अन्य कार्यक्रमों में बुलाता है	60%	20%	20%

# Data Analysis

Table 4.2.1.4 Rating Scale Responses from Inclusive School Teachers: Participation during Curricular Activities

	Participation during Curricular Activities			
Item No.	Item Description	Yes	Some Time	No
01	यह श्रवण बाधित विद्यार्थी आपके द्वारा पढ़ाई जा रही विषय-वस्तु पर सामान्य बच्चों की तरह रूचि लेता है	40%	25%	35%
02	यह श्रवण बाधित विद्यार्थी सामान्य बच्चों की तरह आपके व्याख्यान पर ध्यान देता है	50%	15%	35%
03	यह श्रवण बाधित विद्यार्थी आपके शिक्षण कार्य के समय बीच-बीच में प्रश्न पूछता है	45%	30%	25%
04	यह श्रवण बाधित विद्यार्थी आपके शिक्षण कार्य के समय आपसे आँख मिलाकर बात करता है	40%	30%	30%
05	आपके द्वारा कक्षा में दिये जाने वाले कार्य को पूरा करने के लिये यह सामान्य बच्चों की तरह रूचि लेता है	55%	25%	20%
06	यह श्रवण बाधित विद्यार्थी अपने गृहकार्य को समय पर पूरा कर लेता है	45%	25%	30%
07	इस श्रवण बाधित विद्यार्थी का कक्षा में प्रदर्शन (performance) अन्य बच्चों जैसा होता है	45%	30%	25%
08	यह श्रवण बाधित विद्यार्थी कक्षा परीक्षण में उत्सुकता दिखाता है?	50%	25%	25%
09	यह श्रवण बाधित विद्यार्थी कक्षा टेस्ट समय पर पूरा कर लेता है	40%	20%	40%
10	यह श्रवण बाधित विद्यार्थी सामान्य बच्चों की तरह लेखन तथा पठन कार्य करता है	35%	15%	50%
11	आपके द्वारा प्रति-प्रश्न करने पर यह श्रवण बाधित विद्यार्थी संतोषजनक उत्तर देता है	30%	20%	50%
12	पढाते समय अचानक कुछ प्रश्न पूछने पर यह श्रवणबाधित विद्यार्थी  संतोषजनक उत्तर दे पाता है	40%	20%	40%
13	कल हमने क्या पढ़ा था? इस प्रकार का प्रश्न पूछने पर यह श्रवणबाधित विद्यार्थी जवाब देता है	35%	20%	45%
14	यह श्रवण बाधित विद्यार्थी कक्षा में किसी भी प्रकार के प्रस्तुतिकरण के लिये उत्सुकता दिखाता है	40%	25%	35%
15	यह श्रवणबाधित विद्यार्थी कक्षा में किसी भी शैक्षणिक विषय पर वाद-विवाद करने में रूचि रखता है	35%	25%	40%
16	यह श्रवणबाधित विद्यार्थी किसी समस्या पर अपने तर्क प्रस्तुत करता है	40%	25%	35%

# Data Analysis

Table 4.2.1.5 Rating Scale Responses from Inclusive School Teachers Participation during Social Activities

	Participation during Social Activities				
Item No.	Item Description	Yes	Some Time	No	
01	शिक्षण कार्य शुरू करने के पहले ही यह श्रवण बाधित विद्यार्थी पिछले दिन के प्रकरण तथा आज के प्रकरण को बताता है	35%	25%	40%	
02	यह श्रवणबाधित विद्यार्थी अपने जन्मदिन पर आपको अपने घर बुलाने की इच्छा रखता है	50%	25%	25%	
03	यह श्रवणबाधित विद्यार्थी आपके जन्मदिन पर आपको मुबारक-बाद देता  है	55%	25%	20%	
04	कक्षा में किसी का स्वास्थ्य खराब हो जाने पर यह श्रवणबाधित विद्यार्थी उसके लिये कुछ करता है	40%	20%	40%	
05	स्कूल छोड़कर जाने वालों छात्रों के लिये यह श्रवण बाधित विद्यार्थी बिदाई समारोह मनाने की इच्छा रखता है	50%	25%	25%	
06	यह श्रवणबाधित विद्यार्थी स्कूल के सभी सांस्कृतिक कार्यक्रमों में सक्रिय सहभागिता निभाने की इच्छा रखता है	40%	30%	30%	
07	स्कूल में कभी किसी आगंतुक (visitor) के आने पर यह श्रवणबाधित विद्यार्थी उसके बारे में आपसे जानने की इच्छा रखता है	55%	30%	15%	
08	यह श्रवणबाधित विद्यार्थी कक्षा के बाकी बच्चों के बारे में आपसे चर्चा करता है	50%	20%	30%	
09	खाली कालांश होने पर यह श्रवणबाधित विद्यार्थी तुरंत आपको सूचित करता है	45%	35%	20%	
10	अपने किसी मित्र की गलतियों को माफ करने सम्बन्धी सिफारिश आपसे करता है	55%	35%	10%	

# 4.2.2 Objective No. 2

**"To investigate the Quality of Life of students with Hearing Impairment especially at school" -**To achieve this objective semi-structured interview is conducted and the transcripts are as follows-

Subject 1 was interviewed on the date 08/09/2021 at her school. Subject 1 had 12 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject one if

# Data Analysis

she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 1**

**Statement:** Kindly share something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** They are more excited to reach school before school time compared with normal hearing students and show interest in spending more time at school.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

# Data Analysis

**Statement:** Madam, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Sadly share and blamed to their impairment.

Subject 2 was interviewed on the date 09/09/2021 at her school. Subject 2 had 20 years of experience working with Divyangjan with Hearing Impairment and had a qualification Diploma in Special Education (Hearing Impairment) and Auditory Verbal Therapy course. It was asked to subject two if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 2**

**Statement:** Please say something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** They are more punctual and excited to reach school before school time compared with normal hearing students and enjoy in school environment till the school gets over.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Including profound hearing loss, students have actively participated in academic activities in the classroom.

# Data Analysis

**Statement:** Kindly share something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Madam, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** Please share how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Sadly share and blamed to their impairment.

Subject 3 was interviewed on the date 09/09/2021 at her school. Subject 3 had 15 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject three if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# Data Analysis

# **Transcript of Interview with Subject 3**

**Statement:** Kindly share something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** On average, all Divyangjan with Hearing Impairment was punctual for arrival and departure from school time.

**Statement:** Kindly say about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have early identified and intervened also using proper hearing aid have actively participated in academic activities held in the classroom.

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** Most of the students are less interested in doing curricular activities individually; some are interested in doing these activities with their normal-hearing peer group.

**Statement:** Please say something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Madam, say about the leadership quality of Divyangjan with Hearing Impairment in different activities.

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# Data Analysis

Answer: Due to hearing impairment, they have low leadership quality in verbal activities.

**Statement:** Madam, how do these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

**Answer:** Inconsolably share and blame their impairment.

Subject 4 was interviewed on the date 10/09/2021 at his school. Subject 4 had 14 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject four if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 4**

**Statement:** Please state something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** On average, all Divyangjan with Hearing Impairment was punctual for arrival and departure from school time.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

**Statement:** Kindly bring out something about an interest of Divyangjan with Hearing Impairment in curricular activities.

# Data Analysis

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peer group.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Sir, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Hardly share and blame their impairment.

Subject 5 was interviewed on the date 10/09/2021 at his school. Subject 5 had 15 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject five if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 5**

# Data Analysis

**Statement:** Kindly bring out something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** On average, all Divyangjan with Hearing Impairment was punctual for arrival and departure from school time because school authority strictly follows these norms.

**Statement:** Please say about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities using oral language, profound hearing-impaired students are using sign language during participation in academic activities in the classroom.

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peer group.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Sir, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

# Data Analysis

**Answer:** They have low leadership quality in academic activities, but in non-academic activities, they have more leadership quality.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Sorely shared and blamed their impairment.

Subject 6 was interviewed on the date 11/09/2021 at her school. Subject 6 had 13 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject six if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 6**

**Statement:** Kindly share something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** They are more excited to reach school on time compared with normal hearing students and show interest in spending more time at school.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

#### Data Analysis

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are slightly interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Madam, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Sadly share and blamed to their impairment.

Subject 7 was interviewed on the date 11/09/2021 at her school. Subject 7 had 08 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject seven if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# Data Analysis

# **Transcript of Interview with Subject 7**

**Statement:** Kindly say something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** Divyangjan with Hearing Impairment are more excited to reach school before school time compared with normal hearing students and show interest in spending more time at school.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** All Divyangjan with Hearing Impairment have actively participated in academic activities in the classroom.

**Statement:** Please speak something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Madam, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

# Data Analysis

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** Madam, how do these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Un-happily shares and blamed for their impairment.

Subject 8 was interviewed on the date 13/09/2021 at her school. Subject 8 had 06 years of experience working with Divyangjan with Hearing Impairment and having a qualification Diploma in Education Special Education (Hearing Impairment). It was asked to subject eight if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 8**

**Statement:** Please share something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** Divyangjan with Hearing Impairment are more punctual in reaching school compared with normal hearing students and show interest in spending more time at school.

**Statement:** Please tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

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# Data Analysis

**Statement:** Kindly say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are more interested in doing these activities with their hearing-impaired friends.

**Statement:** Please share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** Divyangjan with Hearing Impairment has averagely participated in school cocurricular activities.

**Statement:** Madam, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

**Answer:** The leadership quality of Divyangjan with Hearing Impairment is affected due to hearing impairment, family background, and lack of support services.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

Answer: Unhappily share and blame their impairment.

Subject 9 was interviewed on the date 13/09/2021 at his school. Subject 9 had 06 years of experience working with Divyangjan with Hearing Impairment and having a qualification Diploma in Education Special Education (Hearing Impairment). It was asked to subject nine if he agreed to disclose his name in this research, and he denied it. The communicational

# Data Analysis

language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 9**

**Statement:** Kindly say something about the school arrival and departure of these Divyangjan with Hearing Impairment.

**Answer:** They are more excited to reach school on time compared with normal hearing students and show interest in spending more time at school.

**Statement:** Kindly tell about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired friends.

**Statement:** Kindly share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- drawing, painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, dancing, etc.

# Data Analysis

**Statement:** Sir, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

**Answer:** The leadership quality of Divyangjan with Hearing Impairment is affected due to many domains of human life like the socio-economical status of the family, own disability, intelligence, etc.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

**Answer:** Sadly share and blamed to their impairment, lack of implementation of government policies, etc.

Subject 10 was interviewed on the date 13/09/2021 at his school. Subject 10 had 06 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject ten if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 10**

**Statement:** Kindly bring out something about the school arrival and departure of these Divyangjan with Hearing Impairment.

# Data Analysis

**Answer:** They are more excited to reach school before school time compared with normal hearing students and show interest in spending more time at school.

**Statement:** Please say about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom.

**Answer:** Those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom.

**Statement:** Please say something about an interest of Divyangjan with Hearing Impairment in curricular activities.

**Answer:** They are less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.

**Statement:** Kindly share some information about the participation of Divyangjan with Hearing Impairment in school co-curricular activities.

**Answer:** They have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc.

**Statement:** Sir, what about the leadership quality of Divyangjan with Hearing Impairment in different activities.

Answer: Due to hearing impairment, they have low leadership quality in all activities.

**Statement:** How these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers.

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# Data Analysis

Answer: Unhappily share and blame their impairment.

# **Common Findings:**

- Divyangjan with Hearing Impairment is more punctual in reaching school than normal hearing students and shows interest in spending more time at school.
- Mild, Moderate, and Severe hearing impaired Divyangjan have actively participated in academic activities in the classroom.
- Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.
- Divyangjan with Hearing Impairment has actively participated in non-verbal activities like- drawing, painting, crafting, etc., and is less interested in those activities that need to use more oral language like debate, singing, dance, music, etc.
- Divyangjan with Hearing Impairment sadly shares his/her educational progress, especially with normal-hearing peers, and is blamed for their impairment.

# **Unique Findings:**

- Divyangjan with Hearing Impairment who has profound hearing impairment has also actively participated in some academic activities at school.
- Divyangjan with Hearing Impairment has low leadership quality in academic activities and has more leadership quality in non-academic activities. The leadership quality of Divyangjan with Hearing Impairment is affected due to Type & Degree of Hearing Impairment, intelligence, family background, lack of support services, and other domains.

# **Transcripts from Parents of Hearing Impaired Students-**

# Data Analysis

Subject 1 was interviewed on the date 06/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduate qualification. Subject one is working as an assistant teacher at a special school for Divyangjan with Hearing Impairment. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 1**

**Statement:** Kindly state something about your family.

**Answer:** We have four family members. I am post graduate in general education and working as an assistant teacher in a special school. Husband has a private job. We have two children; one is hearing-impaired, and another is normal-hearing.

Statement: Please share about communication skills used by the hearing-impaired child.

Answer: In school, he uses more oral language comparatively at home.

**Statement:** Please speak about your hearing-impaired child's family and social participation.

**Answer:** He always wants to know what is going on in our family and is less interested in participating in social activities.

Statement: How does your hearing-impaired child help in household chores?

Answer: He helps us with less risky and easy household chores

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# Data Analysis

**Statement:** Please say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is more interested in mobile-based recreational activities and attends family functions but shortly, he feels boring in social function.

**Statement:** How does your Divyang child seek the help of his sister and parents to complete his school homework?

**Answer:** Every time he needs to help others to complete school homework, mainly he seeks his mother's help; he discusses with his sister and father to complete his school homework

Statement: If he faces any problem in school, how does he share that problem with you?

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 2 was interviewed on the date 06/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 2**

Statement: Kindly state something about your family.

# Data Analysis

**Answer:** We have three family members. I have done B.Ed. in general education and working as a teacher in an inclusive school. Husband has a government job. We have only one child, and he is hearing-impaired.

Statement: Kindly share about communication skills used by the hearing-impaired child.

**Answer:** As his hearing impairment is early identified and he got a cochlear implant, he uses more oral language during communication.

**Statement:** Please speak about your hearing-impaired child's family and social participation.

**Answer:** He is always participating in family work and is interested in participating in social activities.

Statement: How does your hearing-impaired child help in household chores?

Answer: He helps us all household work and is interested in doing these works himself.

**Statement:** Kindly say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is more interested in doing group recreational activities and thinks to attend all family functions with great enjoyment. He is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete his school homework?

**Answer:** Mostly, he completes school homework himself, but when he faces some problem, he immediately discusses this issue with his peers, parents, or neighbors.

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# Data Analysis

Statement: If he faces any problem in school, how does he share that problem with you?

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation and is interested in removing this problem himself.

Subject 3 was interviewed on the date 07/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 3**

**Statement:** Kindly say something about your family.

**Answer:** We have four family members. I have done B.Ed. in general education and I am a house wife. Husband has a private job. We have two children & both are hearing impaired.

Statement: Please share about communication skills used by the hearing-impaired children.

**Answer:** Mostly, they use sign language during communication, but sometimes they follow total communication, especially with their therapy teacher.

**Statement:** Please speak about your hearing-impaired children's family and social participation.

Answer: They are less interested in participating in the family and society.

Statement: How does your hearing-impaired child help in household work?

Answer: Sometimes they help us an easy household work.

# Data Analysis

**Statement:** Kindly say something about the participation of your hearing-impaired children in different recreational activities.

**Answer:** They are more interested in Television & mobile-based recreational activities, and they attend family functions, but shortly, they feel segregated in social function.

**Statement:** How do your children seek the help of their parents to complete their school homework?

**Answer:** Every time they need to help others to complete school homework, mainly they seek their mother's help to complete their school homework

Statement: If they face any problem in school, how do they share that problem with you?

**Answer:** If they face any problem in school or feel uncomfortable, he immediately shares with us without any hesitation.

Subject 4 was interviewed on the date 07/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduation qualification. Subject two is working as a helper teacher in a special school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 4**

Statement: Kindly say something about your family.

# Data Analysis

**Answer:** We have four family members. I have done post-graduation and worked as a helper teacher in a special school. Husband has a clerical job in a private company. We have two children; one of them is hearing impaired.

Statement: Kindly share about communication skills used by the hearing-impaired child.

**Answer:** Mostly, he uses sign language during communication, but sometimes he follows total communication, especially with his therapy teacher.

**Statement:** Please speak about your hearing-impaired child's family and social participation.

Answer: He is less interested in participating in the family and society.

Statement: How does your hearing-impaired child help in household work?

Answer: Sometimes he helps us an easy household work.

**Statement:** Kindly say something about the participation of your hearing-impaired children in different recreational activities.

**Answer:** He is more interested in mobile-based recreational activities and less interested in attending family functions. He feels segregated in social function.

**Statement:** How does your child seek the help of his parents to complete his school homework?

**Answer:** For completing his homework every time he needs others' help, he mainly seeks his mother's help to complete his school homework.

Statement: If he faces any problem in school, how does he share that problem with you?

#### Data Analysis

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 5 was interviewed on the date 08/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a helper teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 5**

Statement: Please state something about your family.

**Answer:** We have four family members. I have done B.Ed. in general education and working as a helper teacher in an inclusive school. Husband has a government job. We have two children. One of them is hearing-impaired.

Statement: Kindly share about communication skills used by the hearing-impaired child.

**Answer:** As his hearing impairment is early identified and he got a cochlear implant, he uses more oral language during communication.

**Statement:** Please speak about the family and social participation of your hearing-impaired child.

Answer: He is always participating in family work and is interested in social activities.

Statement: How does your hearing-impaired child help in household work?

# Data Analysis

Answer: He helps us all household work and is interested in doing these works himself.

**Statement:** Kindly say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is more interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete his school homework?

**Answer:** Mostly, he completes school homework himself, but when he faces some problem, he immediately discusses this issue with his sister, peers, parents, or neighbors.

Statement: If he faces any problem in school, how does he share that problem with you?

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation and is interested in removing this problem himself.

Subject 6 was interviewed on the date 08/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

# **Transcript of Interview with Subject 6**

Statement: Kindly say something about your family.

# Data Analysis

**Answer:** We have three family members. I am a housewife and have graduation qualification. Husband has a government job. We have only one child, and he is hearing impaired.

Statement: Please share about communication skills used by the hearing-impaired child.

**Answer:** As his hearing impairment is early identified and he got a cochlear implant in his critical age, he uses more oral language during communication.

**Statement:** Please speak about the family and social participation of your hearing-impaired child.

Answer: He is always participating in family work and is interested in social activities.

Statement: How does your hearing-impaired child help in household work?

Answer: He helps us all household work and is interested in doing these works himself.

**Statement:** Please say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete his school homework?

**Answer:** Mostly, he completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors.

Statement: If he faces any problem in school, how does he share that problem with you?

### Data Analysis

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation and is interested in removing this problem himself.

Subject 7 was interviewed on the date 09/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduate qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

### **Transcript of Interview with Subject 7**

Statement: Kindly say something about your family.

**Answer:** We have three family members. I am a housewife and have post-graduation qualifications. Husband has a government job. We have only one child, and he is hearing impaired. His impairment was diagnosed at the age of two & a half years.

Statement: Please share about communication skills used by the hearing-impaired child.

**Answer:** As his hearing impairment is early identified and intervened with a cochlear implant in his critical age, he uses more oral language during communication.

**Statement:** Kindly speak about the family and social participation of your hearing-impaired child.

Answer: He is always participating in family work and is interested in social activities.

Statement: How does your hearing-impaired child help in household chores?

Answer: He helps us all household work and is interested in doing these works himself.

#### Data Analysis

**Statement:** Please say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete his school homework?

**Answer:** Mostly, he completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors.

Statement: If he faces any problem in school, how does he share that problem with you?

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 8 was interviewed on the date 09/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

### **Transcript of Interview with Subject 8**

Statement: Kindly say something about your family.

**Answer:** We have three family members. I am a housewife and have graduation qualifications. Husband has a government job. We have only one child, and he is hearing

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#### Data Analysis

impaired. His impairment was diagnosed at the age of three years, and immediately he got a cochlear implant, support from an auditory-verbal therapist, and other support services.

Statement: Please share about communication skills used by the hearing-impaired child.

**Answer:** As his hearing impairment is early identified and intervened with a cochlear implant in his critical age, he uses more oral language during communication. He asks for oral communication if anyone communicates with him in sign language.

**Statement:** Kindly speak about your hearing-impaired child's family and social participation.

Answer: He is always participating in family work and is interested in social activities.

Statement: How does your hearing-impaired child help in household chores?

Answer: He helps us all household work and is interested in doing these works himself.

**Statement:** Please say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is interested in doing group recreational activities, enjoys dance & music, and thinks to attend all family functions. He is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete his school homework?

**Answer:** Mostly, he completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors.

Statement: If he faces any problem in school, how does he share that problem with you?

### Data Analysis

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 9 was interviewed on the date 10/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

### **Transcript of Interview with Subject 9**

Statement: Kindly say something about your family.

**Answer:** We have five family members. I am a housewife and have graduation qualifications. Husband has a private job. We have three children, and one is hearing impaired.

Statement: Please share about communication skills used by the hearing-impaired children.

**Answer:** He primarily uses sign language during communication, but sometimes he follows total communication, especially with their therapy teacher.

**Statement:** Kindly speak about your hearing-impaired child's family and social participation.

**Answer:** He is less interested in participating in the family and society.

Statement: How does your hearing-impaired child help in household work?

Answer: Sometimes he helps us an easy household work.

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### Data Analysis

**Statement:** Kindly say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** He is more interested in mobile-based recreational activities and attends family functions but shortly, he feels segregated in social function.

**Statement:** How does your child seek the help of their parents to complete his school homework?

**Answer:** Every time he needs to help others to complete school homework, mainly he seeks his sister and mother's help to complete their school homework

Statement: If he faces any problem in school, how does he share that problem with you?

**Answer:** If he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 10 was interviewed on the date 10/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

### **Transcript of Interview with Subject 10**

Statement: Please state something about your family.

#### Data Analysis

**Answer:** We have three family members. I have done B.Ed. in general education and working as a teacher in an inclusive school. Husband has a government job. We have only one child, and she is hearing-impaired. She got a cochlear implant, speech & language therapy from experts, and other support services during her critical age.

Statement: Kindly share about communication skills used by the hearing-impaired child.

**Answer:** As her hearing impairment is early identified and she got a cochlear implant, she uses more oral language during communication.

**Statement:** Please speak about your hearing-impaired child's family and social participation.

Answer: She is always participating in family work and is interested in social activities.

Statement: How does your hearing-impaired child help in household chores?

Answer: She helps us all household work and is interested in doing these works himself.

**Statement:** Kindly say something about the participation of your hearing-impaired child in different recreational activities.

**Answer:** She is more interested in doing group recreational activities like dance & music and thinks attending all family functions with great enjoyment. She is also interested in attending social functions.

**Statement:** How does your child seek the help of parents and other neighborhoods to complete her school homework?

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#### Data Analysis

**Answer:** Mostly, she completes school homework herself, but when she faces some problem, she immediately discusses this issue with her peers, parents, or neighbors.

Statement: If she faces any problem in school, how does she share that problem with you?

**Answer:** If she faces any problem in school or feels uncomfortable, she immediately shares with us without any hesitation and is interested in removing this problem himself.

### **Common Findings:**

- Early identified & intervened Divyangjan with Hearing Impairment who got Cochlear Implant (CI) in his/her critical age have uses more oral language during communication.
- CI user Divyangjan with Hearing Impairment has better participation skills in family and society than other hearing aid users.
- CI user Divyangjan with Hearing Impairment is more interested in helping in household chores comparatively and uses other hearing aid types.
- CI user Divyangjan with Hearing Impairment has participated in recreational activities where more oral language will be used.
- Other than CI user Divyangjan with Hearing Impairment has participated in mobile used recreational activities where the minimum use of oral language will be used.
- CI user, Divyangjan with Hearing Impairment, seeks less help from others to complete his/her homework.
- A family with two or more children, including Divyangjan with Hearing Impairment (DWHI), and parent's education is graduation level and doing a private job, DWHI seeks more help to family members to complete his/her homework.

### Data Analysis

• If DWHI faces any problem in school or feels uncomfortable, they immediately share it with parents without any hesitation.

## **Unique Findings:**

• Early identified and intervened DWHI with a cochlear implant user from their critical age and belongs from ideal family, he uses more oral language during communication. They ask for oral communication if anyone communicates with him in sign language.

## 4.2.3 Objective No. 3

## "To identify the barriers to improve the Quality of Life of students with Hearing

**Impairment":** To achieve this objective focus group discussion is conducted and the transcripts are as follows-

### Table 4.3 Transcripts from Principals-

Participant	Responses
Participant 1	<ul> <li>Participation of parents in academic and non-academic activities is unsatisfactory.</li> <li>Lack of hearing assessment clinics.</li> <li>Lack of speech therapists for speech correction for the student with hearing impairment.</li> <li>Transport-related barriers to reach school.</li> <li>Students with hearing impairment were facing problems understanding the teacher's lectures.</li> </ul>
Participant 2	<ul> <li>Problems in communication with peers.</li> <li>Problems to remove trouble shootings occurred in hearing aid.</li> <li>The student with hearing impairment were facing speech correction and hearing assessment-related issues.</li> <li>Lack of trained special educators.</li> <li>Our teachers often face difficulties collecting teaching-learning materials according to our Divyangjan with hearing impairment.</li> </ul>
	• Some parents of hearing-impaired students show record participation in all academic and non-academic activities; the rest have averagely participated.

## Data Analysis

Participant 3	<ul> <li>Students with hearing impairment face difficulties in speech and audiology-related clinical services.</li> <li>We face difficulties in the appointment of specially trained educators in our school.</li> <li>Students with hearing impairment cannot convey their issues to subject teachers appropriately.</li> <li>Students with hearing impairment face problems in understanding the teacher's lecture.</li> </ul>
Participant 4	<ul> <li>Parents have averagely participated in academic and non-academic activities.</li> <li>Lack of speech therapists for speech correction for hearing impaired students.</li> <li>Our teachers have faced issues in selecting more effective methods and techniques according to the content.</li> <li>Divyangjan with hearing impairment, feels segregated in the school environment.</li> <li>Students with hearing impairment cannot convey their issues to subject teachers appropriately.</li> </ul>
Participant 5	<ul> <li>Participation of parents in academic and non-academic activities is average.</li> <li>We are facing problems in regular hearing assessment and speech correction-related activities.</li> <li>Unable to make proper communication with their colleagues.</li> <li>Problems to remove trouble shootings occurred in hearing aid.</li> <li>We face difficulties in the appointment of specially trained educators.</li> </ul>

## Table 4.4 Transcripts from Specially Trained Teachers-

Participant	Responses
Participant 1	<ul> <li>Students with hearing impairment show less participation in academic and non-academic activities.</li> <li>Unable to represent themselves in the classroom.</li> <li>Unable to read complex sentences.</li> <li>Problems in proper pronunciation.</li> <li>They have hesitation in sharing their learning materials.</li> <li>Faces problems in understanding new concepts.</li> <li>Faces problems in recalling any concept.</li> </ul>
Participant 2	<ul> <li>Participation of students with hearing impairment in school curricular activities is unsatisfactory.</li> <li>Students with hearing impairment feel segregated in school co-curricular activities.</li> <li>Poorly express their ideas.</li> <li>Unable to read complex sentences.</li> <li>Problems in proper pronunciation.</li> <li>Problems in communication with peers.</li> <li>Faces problems in understanding teacher's lecture.</li> </ul>

## Data Analysis

Participant 3	<ul> <li>Have minimum participation in classroom activities.</li> <li>Students with hearing impairment have low interest in school co- curricular activities.</li> <li>Students with hearing impairment face problems in representing themselves in the classroom.</li> <li>Unable to read complex sentences.</li> <li>Problems in communication with peers.</li> <li>Faces problems in understanding new concepts.</li> <li>Faces problems in recalling any concept.</li> <li>They have very little interest in academic and non-academic activities.</li> </ul>
Participant 4	<ul> <li>They have very fittle interest in academic and hon-academic activities.</li> <li>Unable to represent themselves in the classroom.</li> <li>Problems in proper pronunciation.</li> <li>Problems in communication with peers.</li> <li>Faces problems in understanding new concepts.</li> <li>Their written work, including classwork and homework, was generally incomplete.</li> <li>Faces problems in recalling any concept.</li> </ul>
Participant 5	<ul> <li>Unable to represent themselves in the classroom.</li> <li>Unable to read complex sentences.</li> <li>Problems in proper pronunciation.</li> <li>Problems in communication with peers.</li> <li>Faces problems in understanding mathematical concepts.</li> <li>Their written work, including classwork and homework, was generally incomplete.</li> <li>Faces problems in recalling any concept.</li> </ul>
Participant 6	<ul> <li>Participation of students with hearing impairment in academic activities is unsatisfactory.</li> <li>Unable to communicate with teachers.</li> <li>Unable to read sentences.</li> <li>Problems in pronunciation.</li> <li>Problems in communication with peers.</li> <li>Their written work, including classwork and homework, was generally incomplete.</li> <li>Faces problems in retaining and recalling any concept.</li> </ul>
Participant 7	<ul> <li>Unable to express his/her views in the classroom.</li> <li>Unable to read complex sentences.</li> <li>Mistakes in pronunciation.</li> <li>Problems in communication with peers.</li> <li>They have hesitation in sharing their learning materials.</li> <li>Faces problems in recalling any concept.</li> <li>Feel segregated in the school environment.</li> </ul>
	<ul> <li>Less interested in academic and non-academic activities.</li> <li>Problems in pronunciation</li> <li>Students with hearing impairment were making grammatical errors in sentence framing and writing.</li> </ul>

## Data Analysis

Participant	• Problems in communication with peers.
8	<ul> <li>They have hesitation in sharing their learning materials.</li> </ul>
-	<ul> <li>Faces problems in understanding new concepts.</li> </ul>
	• Their written work, including classwork and homework, was
	generally incomplete.
	• Participation of students with hearing impairment in academic and
	non-academic activities is unsatisfactory.
	• Students with hearing impairment feel segregated in school co-
	curricular activities.
Participant	<ul> <li>Problems in communication with peers.</li> </ul>
9	• They have hesitation in sharing their learning materials.
	• Faces problems in understanding new concepts.
	• Their written work, including classwork and homework, was
	generally incomplete.
	• Faces problems in recalling any concept.
	Less interested in academic activities.
	• Participation of students with hearing impairment in non-academic
	activities is unsatisfactory.
Participant 10	• Students with hearing impairment feel segregated in school co-
	curricular activities.
	• Unable to represent themselves in the classroom.
	<ul> <li>Unable to read complex sentences.</li> </ul>
	<ul> <li>Problems in communication with peers.</li> </ul>
	-
	• Faces problems in understanding new concepts.

# Table 4.5 Transcripts from Parents of Hearing Impaired Students-

Participant	Responses
	• The child faces problems in oral communication.
	• Unable to express himself adequately.
	• The child is less interested in household work.
Participant 1	• Due to the communication gap child is less interested in participating in social activities.
	• Lower self-help skill.
	• The child prefers sign language instead of oral language for communication.
	• He likes mobile-based recreation instead of television.
Participant 2	• He faces problems in completing his homework always needs someone's help.
	• Due to the communication gap child is less interested in participating in social activities.
	• He faces problems in expressing himself.
	• Faces problems in retaining and recalling things.

### Data Analysis

Participant 3	<ul> <li>The child has less interested in participating in family and social activities.</li> <li>Problems in understating new concepts need to repeat the same again and again.</li> <li>Lower interest to attend social functions.</li> <li>Problems in speech and language therapy due to less availability of experts.</li> <li>The child is less interested in household work.</li> </ul>
Participant 4	<ul> <li>The child needs some gestures with oral language for communication.</li> <li>He is interested in attending social functions but has few duration functions.</li> <li>Confusion in discriminating concepts.</li> <li>In school examination time, he feels that he has too much load, and this time, he has a low confidence level.</li> <li>He is interested in attending non-academic activities with normal hearing friends.</li> </ul>
Participant 5	<ul> <li>Unable to express himself adequately.</li> <li>Due to the communication gap child is less interested in participating in social activities.</li> <li>Lower interest to attend social functions.</li> <li>The child faces problems in completing school homework.</li> <li>Problems in understating new concepts need to repeat the same again and again.</li> </ul>

## 4.2.4 Objective No. 4

## "To suggest a model for improving Quality of Life of Students with Hearing

Impairment in an inclusive educational set-up:- To achieve this objective focus group

discussion is conducted and the transcripts are as follows-

## Table 4.6 Transcripts of Focus Group Discussion:

Participant	Suggestions
	• Need to aware the population about Divyangta.
	• Need to remove the barrier between the able and disabled.
Participant 1	<ul> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the student's level.</li> <li>Parent's participation in academic and non-academic activities.</li> </ul>

## Data Analysis

	<ul> <li>Motivation them to represent themselves.</li> <li>Reinforcement will be given against each activity.</li> <li>Early identification and intervention of hearing impairment.</li> </ul>
Participant 2	<ul> <li>Need to provide advanced and appropriate hearing aid.</li> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the student's level.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> </ul>
Participant 3	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> <li>An inclusive school must have a friendly and accepting environment.</li> </ul>
Participant 4	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid.</li> <li>Need to be aware the population about Divyangta and remove misconceptions.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interesting and according to the student's level.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy by expert.</li> </ul>
Participant 5	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff need to add more exciting activities that make teaching and non-teaching work more interested and according to students level.</li> <li>Parent's participation in academic and non-academic activities.</li> </ul>

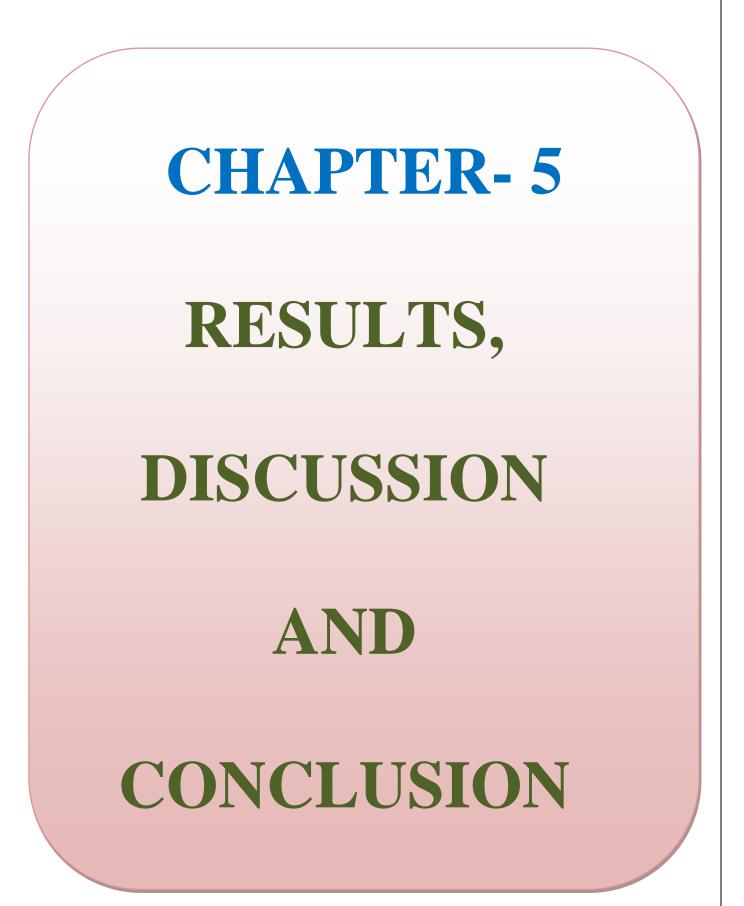
## Data Analysis

	• Appropriate speech therapy/auditory verbal therapy by
	expert.
	Acceptance by inclusive school teachers and colleagues.
Participant 6	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate support services.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by</li> </ul>
	expert.
Participant 7	<ul> <li>Socially acceptance environment.</li> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> <li>Motivation and reinforcement will be given as needed.</li> </ul>
Participant 8	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the students level.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> <li>Acceptance by society.</li> </ul>
Participant 9	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level.</li> <li>Parent's participation in academic and non-academic activities.</li> </ul>

## Data Analysis

	<ul> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> <li>Acceptance by inclusive school teachers and colleagues.</li> </ul>
Participant 10	<ul> <li>Early identification and intervention of hearing impairment.</li> <li>Need to provide advanced and appropriate hearing aid like cochlear-implant.</li> <li>Need to aware the population about Divyangta.</li> <li>Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level.</li> <li>Parent's participation in academic and non-academic activities.</li> <li>Appropriate speech therapy/auditory verbal therapy by expert.</li> <li>An inclusive school must have a friendly and accepting environment.</li> </ul>

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Result, Discussion and Conclusion

### Chapter-5

#### **Result, Discussion and Conclusion**

### 5.1 Results, Discussion and Conclusion of Present Study:

On the rise of various complicated civilizations at the bank of different rivers of the world, knowledge was very complicated to transfer people to people, and from generation to generation, drilling and memorization of truths, sentences, and vocabulary were the most approved methods of learning until children understand. It was when John Amos Comenius showed interest like a child and the actual perception of things. He favored and revolutionized the teaching of the Latin language. At the time, most of the followers of 'Stoicism' and 'Peripatetic' (School of philosophy was originated from the ideology of Aristotle), and later Locke suggested that the mind like a 'blank state' (Tabula Rasa) from birth and knowledge is God-given. Locke believed that knowledge depends on the exercise of faculties on raw senses from the external world when the mind receives senses, its faculty's work of discrimination, sifting with sorting till knowledge appears.

At the starting of the eighteenth century, Rousseau appeared as a naturalistic teacher and an educator who visualized the nurturing of the body and the senses in place of the intellect. He forces on the exercise of mind. The predecessor or followers of Rousseau tries to create schools with the natural environment and according to the needs of children with controlled environment guided by the teacher.

India is a country of diversity; numerous diverse populations live together here. Rights of Person With Disability (RPWD) Act 2016 recommended twenty-one types of

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Divyangta. Hearing Impairment, Visual Impairment, Intellectual & Developmental Disability, Autism, Learning Disability are the common types of Divyangta. Hearing Impairment is an invisible disability. Divyangjan, with hearing impairment, looks like a normal human being. The education of Divyangian with hearing impairment has a deep-rooted history. In the olden days, children with hearing impairment were considered retarded. They were isolated from society and were denied their rights. No special effort was taken to educate them. It was only in the 16<sup>th</sup>- century pioneers like Pedro Ponse De Leon of Spain attempted to educate the deaf. The first school in this socalled new field at that time had started in France during the early 18th century. In India, the scenario was different. It was only in the year 1884 that the first special school, 'Bombay Institute for Deaf and Mutes,' was established in Mazagaon Mumbai. The National Policy of Education (1986) stressed the need for 'education of all' and the Person with Disabilities (Equal Opportunities, Protection of Rights and Full Participation), Act of 1995 promises of liberty humanity of its prejudices and also to remove barriers that have crippled the disabled for centuries. Generally, many children with hearing impairment are intervened in segregated set-ups. Once they develop a fair understanding of language and have developed literacy skills, they can be placed in regular schools. The placement in regular schools for instructional purposes is hence referred to as educational integration. Integration suggests preparing children with disabilities, including those with hearing impairment, for mainstream education. Integration includes training the child to fit the regular school system and be a part of it. The preparation includes special training for the child in language, speech reading, auditory training, literacy skills (reading and writing) also involves motivating the child

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and his parents. On the other hand, inclusion stresses to include children with disabilities like any other child of the regular school. It recommends the education of children with special needs in the overall general educational structure. Apart from the provision of a barrier-free environment and education in the least restrictive environment, the philosophy of inclusion also stresses the need for the removal of attitudinal barriers. Hence, it proposed mass sensitization programs for regular school teachers, parents, and other allied professionals to make the general education system disabled-friendly. Divyangian with hearing impairment usually only have hearing and speech- related issues, and if they identify and get appropriate support services, it is easy to do inclusion in normal society. Keeping the aim of inclusion of Divyangjan with hearing impairment and their participation and interaction in inclusive school present study is entitled-" A study of quality of life of students with hearing impairment with reference to their interaction and participation in inclusive schools of Rajasthan." After reviewing related literature, this study has been conducted using a Mix Methodology; convergent concurrent design. To fulfill the aims of the present study, purposive sampling is used, and the geographical location for data collection is selected purposively, Ajmer and Jaipur district in the Rajasthan State of India. Structured of four primary objectives, the research has used several qualitative and quantitative methods of data collection and analyzed it by computing relevant statistics.

5.2.1 Objective No. 1

"To study the participation and interaction of students with Hearing Impairment ininclusive schools"

**<sup>5.2</sup> Objective wise Findings:** Findings for each one of the objectives are described as below:

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In rating scale responses of the colleagues of Children with Hearing Impairment (CWHI) in the items of interaction during curricular activities, common findings are reported as follows-

- The interaction of CWHI is better when he/she sees any teacher, during the changes of classroom period and interaction with school Principal.
- CWHI is average interaction while clearing doubts during any lecture, and if any periodis free in class, report it to the Principal.
- CWHI is poorly interactive in asking the queries if any content he/she is not understood.

In rating scale responses of the colleagues of Children with Hearing Impairment (CWHI) in the items of the area, interaction during co-curricular activities such common findings are reported as follows-

- The interaction of CWHI is better in outdoor games, sharing hobbies, and interaction during drawing, painting, crafting, etc.
- CWHI is averagely interacting during the discussion on music & dance-related activities.
- CWHI is poorly interacting while asking if any issues occurred in new activities.

In rating scale responses of the colleagues of Children with Hearing Impairment (CWHI) in the items of the area, interaction during social activities such common findings arereported as follows-

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- The interaction of CWHI is better in respecting others, social smiles, party interaction, etc.
- CWHI is averagely interacting in social debates.
- CWHI is poorly interacting while sharing painful experiences.

Overall the interaction of CWHI is better in co-curricular activities, and some are of social interactions. The CWHI is poorly interacting in school curricular activities. In rating scale responses of the inclusive school teachers in the items of the area, participation during curricular activities such common findings are reported as follows-

- The participation of CWHI is better in-class work/homework as assigned by the teacher.
- Average participation of CWHI in classroom performances.
- CWHI has poorly participated in reading, writing, and answering the questions.

In rating scale responses of the inclusive school teachers in the items of the area, participation during social activities such common findings are reported as follows-

- The participation of CWHI is better in any social activity like a birthday celebration, asking something about visitors, and forgetting requests to others.
- CWHI has averagely participated in free period work in the classroom
- CWHI is poorly participated in recalling activities and risky work.

Overall the participation of CWHI is better in social activities comparatively curricularactivities.

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### 5.2.2 Objective No. 2

# To investigate the Quality of Life of students with Hearing Impairment, especially atschool.''

Subject 1 was interviewed on the date 08/09/2021 at her school. Subject 1 had 12 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject one if she agreed to disclose her name in this research, and she denied it. The communicational language to be used for the

interview, which was preferred, was the native language of the interviewee, that is, the Hindi language.

When asked about the school arrival and departure of these Divyangjan with Hearing Impairment, she says that they are more excited to reach school before school than normal hearing students and show interest in spending more time at school. After giving thanks to her when asked about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom, she stated that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When asked about an interest of Divyangjan with Hearing Impairment in curricular activities, she says that Divyangjan with hearing impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. After giving thanks to her when asked about the participation of Divyangjan with Hearing Impairment in school co- curricular activities, she replies that Divyangjan with hearing impairment have actively

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participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, she says that due to hearing impairment, they have low leadership quality in all activities. When asked about how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, she says that they sadly share his/her educational progress and blame their impairment.

Subject 2 was interviewed on the date 09/09/2021 at her school. Subject 2 had 20 years of experience working with Divyangjan with Hearing Impairment and had a qualification Diploma in Special Education (Hearing Impairment) and Auditory Verbal Therapy course. It was asked to subject two if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When asked about the school arrival and departure of Divyangjan with Hearing Impairment, she says that they are more punctual and excited to reach school before school time than normal hearing students and enjoy the school environment until the school gets over. When asked about the participation of Divyangjan with Hearing Impairment in academic activities in the classroom, she replies that including profound hearing loss, students have actively participated in academic activities in the classroom. When requested to share something about an interest of Divyangjan with Hearing Impairment in curricular activities, she said that they are less interested in doing

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curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. When about the participation of Divyangjan with Hearing Impairment in school co-curricular activities, she says that they have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When requested to say something about the leadership quality of Divyangjan with Hearing Impairment in different activities, she said that due to hearing impairment, they have low leadership quality in all activities. When asked to share how Divyangjan with Hearing Impairment shares his/her educational progress, especially with normal-hearing peers, she says that they sadly share his/her educational progress and blame their impairment.

Subject 3 was interviewed on the date 09/09/2021 at her school. Subject 3 had 15 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject three if she agreed to disclose her name in this research, andshe denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to say something about the school arrival and departure of Divyangjan with Hearing Impairment, she says that on average, all Divyangjan with Hearing Impairment was punctual for arrival and departure from school time. When asked about the participation of Divyangjan with Hearing Impairment in academic activities in the classroom, she firmly says that those who have early identified and

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intervened also using proper hearing aid have actively participated in academic activities held in the classroom. When requested to say something about an interest of Divyangjan with Hearing Impairment in curricular activities, she says that most of the students are less interested in doing curricular activities individually; some are interested in doing these activities with their normal-hearing peer group. When asked about the participation of Divyangjan with Hearing Impairment in school co-curricular activities, she says that they have actively participated in non-verbal activities likepainting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When requested to say about the leadership quality of Divyangjan with Hearing Impairment in different activities, she says that due to hearing impairment, they have low leadership quality in verbal activities. When asked about how to do these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, she says they inconsolably share and blame their impairment.

Subject 4 was interviewed on the date 10/09/2021 at his school. Subject 4 had 14 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject four if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When asked about the school arrival and departure of these Divyangjan with Hearing Impairment, he says that on average, all Divyangjan with Hearing Impairment

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was punctual for arrival and departure from school time. When asked about the participation of these Divyangian with Hearing Impairment in academic activities in the classroom, he says that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When asked about the interest of Divyangian with Hearing Impairment in curricular activities, he says that Divyangian with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peer group. When requested to share something about the participation of Divyangian with Hearing Impairment in school co-curricular activities, he says that they have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, he says that due to hearing impairment, they have low leadership quality in all activities. When asked how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, he says that Divyangjan with Hearing Impairment hardly shares and blame their impairment.

Subject 5 was interviewed on the date 10/09/2021 at his school. Subject 5 had 15 years of experience working with Divyangjan with Hearing Impairment and having qualification MEDSEHI. It was asked to subject five if he agreed to disclose his name in this research, and hedenied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

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When asked about the school arrival and departure of these Divyangian with Hearing Impairment, he says that on average, all Divyangjan with Hearing Impairment was punctual for arrival and departure from school time because school authority strictly follows these norms. When requested to say about the participation of these Divyangian with Hearing Impairment in academic activities in the classroom, he says that those who have moderate and severe hearing impairment have actively participated in academic activities using oral language, profound hearing impaired students are using sign language during participation in academic activities in the classroom. When asked about the interest of Divyangian with Hearing Impairment in curricular activities, he says that Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearingimpaired peer group. When asked to share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities, he says that they have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of Divyangian with Hearing Impairment in different activities, he says that Divyangian with Hearing Impairment has low leadership quality in academic activities, but in non-academic activities, they have more leadership quality. When requested to say how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, he says that Divyangjan with Hearing Impairment sorely shared and blamed their impairment.

Subject 6 was interviewed on the date 11/09/2021 at her school. Subject 6 had

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13 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject six if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When asked about the school arrival and departure of these Divyangjan with Hearing Impairment, she says that Divyangjan with Hearing Impairment is more excited to reach school on time compared with normal hearing students and shows interest in spending more time at school. When requested to tell about the participation of these Divyangian with Hearing Impairment in academic activities in the classroom, she says that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When asked to say something about an interest of Divyangian with Hearing Impairment in curricular activities, she said that Divyangian with Hearing Impairment is slightly interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. When asked about the participation of Divyangian with Hearing Impairment in school co-curricular activities, she says that Divyangjan with Hearing Impairment has actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, he says that due to hearing impairment, they have low leadership quality in all activities. When asked about how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers,

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she says that Divyangjan with Hearing Impairment sadly share and blame their impairment.

Subject 7 was interviewed on the date 11/09/2021 at her school. Subject 7 had 08 years of experience working with Divyangian with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject seven if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-. When requested to say something about the school arrival and departure of these Divyangjan with Hearing Impairment, she says that Divyangjan with Hearing Impairment is more excited to reach school before school time than normal hearing students show interest in spending more time at school. When asked about the participation of these Divyangian with Hearing Impairment in academic activities in the classroom, she says that all Divyangjan with Hearing Impairment has actively participated in academic activities in the classroom. When requested to speak something about an interest of Divyangjan with Hearing Impairment in curricular activities, she says that Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearingimpaired peers. When requested to share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities, she says that Divyangjan with Hearing Impairment have actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of

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Divyangjan with Hearing Impairment in different activities, she answered that due to hearing impairment, they have low leadership quality in allactivities. When asked about how to do these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, she says that Divyangjan with Hearing Impairment un-happily shares and blamed for their impairment.

Subject 8 was interviewed on the date 13/09/2021 at her school. Subject 8 had 06 years of experience working with Divyangjan with Hearing Impairment and having a qualification Diploma in Education Special Education (Hearing Impairment). It was asked to subject eight if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to share something about the school arrival and departure of these Divyangjan with Hearing Impairment, she says that Divyangjan with Hearing Impairment are more punctual in reaching school compared with normal hearing students and show interest in spending more time at school. When asked about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom, she says that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When requested to say something about an interest of Divyangjan with Hearing Impairment in curricular activities, she says that Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are more interested in doing these activities with their hearing-impaired friends. When requested to share something about the

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participation of Divyangjan with Hearing Impairment in school co-curricular activities, she says that Divyangjan with Hearing Impairment has averagely participated in school co-curricular activities. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, she says that the leadership quality of Divyangjan with Hearing Impairmentis affected due to hearing impairment, family background, and lack of support services. When asked about how these Divyangjan with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, she says that Divyangjan with Hearing Impairment.

Subject 9 was interviewed on the date 13/09/2021 at his school. Subject 9 had 06 years of experience working with Divyangjan with Hearing Impairment and having a qualification Diploma in Education Special Education (Hearing Impairment). It was asked to subject nine if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to say something about the school arrival and departure of these Divyangjan with Hearing Impairment, he says that Divyangjan with Hearing Impairment is more excited to reach school on time than normal hearing students interest in spending more time at school. When asked about the participation of these Divyangjan with Hearing Impairment in academic activities in the classroom, he says that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When requested to say something about an

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interest of Divyangian with Hearing Impairment in curricular activities, he says that Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired friends. When requested to share something about the participation of Divyangjan with Hearing Impairment in school co-curricular activities, he says that Divyangian with Hearing Impairment has actively participated in non-verbal activities like- drawing, painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, dancing, etc. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, he says that the leadership quality of Divyangian with Hearing Impairment is affected due to many domains of human life like the socio-economical status of the family, own disability, intelligence, etc. When asked about how these Divyangian with Hearing Impairment share his/her educational progress, especially with normal-hearing peers, he says that Divyangjan with Hearing Impairment sadly share and blame their impairment, lack of implementation of government policies, etc.

Subject 10 was interviewed on the date 13/09/2021 at his school. Subject 10 had 06 years of experience working with Divyangjan with Hearing Impairment and having qualification B.Ed. Special Education (Hearing Impairment). It was asked to subject ten if he agreed to disclose his name in this research, and he denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When asked about the school arrival and departure of these Divyangjan with

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Hearing Impairment, he says that they are more excited to reach school before school time compared with normal hearing students and show interest in spending more time at school. When requested to say about the participation of these Divyangian with Hearing Impairment in academic activities in the classroom, he says that those who have moderate and severe hearing impairment have actively participated in academic activities in the classroom. When requested to say something about an interest of Divyangjan with Hearing Impairment in curricular activities, he says that Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. When requested to share some information about the participation of Divyangian with Hearing Impairment in school co-curricular activities, he says that Divyangian with Hearing Impairment has actively participated in non-verbal activities like- painting, crafting, etc., and are less interested in those activities that need to use more oral language like debate, singing, etc. When asked about the leadership quality of Divyangjan with Hearing Impairment in different activities, he says that due to hearing impairment, they have low leadership quality in all activities. When asked about how these Divyangian with Hearing Impairment share his/her educational progress, especially with normalhearing peers, he says that Divyangjan with Hearing Impairment unhappily shares and blame their impairment.

### **Common Findings:**

 Divyangjan with Hearing Impairment is more punctual in reaching school than normal hearing students and shows interest in spending more time at school.

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- Mild, Moderate, and Severe hearing impaired Divyangjan have actively participated in academic activities in the classroom.
- Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers.
- Divyangjan with Hearing Impairment has actively participated in non-verbal activities like- drawing, painting, crafting, etc., and is less interested in those activities that need to use more oral language like debate, singing, dance, music, etc.
- Divyangjan with Hearing Impairment sadly shares his/her educational progress, especially with normal-hearing peers, and is blamed for their impairment.

### **Unique Findings:**

- Divyangjan with Hearing Impairment who has profound hearing impairment has also actively participated in some academic activities at school.
- Divyangjan with Hearing Impairment has low leadership quality in academic activities and has more leadership quality in non-academic activities. The leadership quality of Divyangjan with Hearing Impairment is affected due to Type & Degree of Hearing Impairment, intelligence, family background, lack of support services, and other domains.

### **Transcripts from Parents of Hearing Impaired Students-**

Subject 1 was interviewed on the date 06/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduate qualification. Subject one is working as an assistant teacher at a special school for Divyangjan with Hearing

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Impairment. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-

When requested to state something about her family, she says they have four family members. She has a graduate degree in general education and works as an assistant teacher in a special school. Her husband has a private job. They have two children; one is hearing-impaired, and another is normal-hearing. When asked about communication skills used by the hearing- impaired child, she says in school, he uses more oral language comparatively at home. When asked about the hearing-impaired child's family and social participation, she says her hearing- impaired child always wants to know what is going on in our family and is less interested in participating in social activities. When asked about hearing-impaired child's help in household chores, she says that her child helps her in less risky and easy household chores. When requested to say something about the participation of the hearing-impaired child in different recreational activities, she says that her child is more interested in mobile-based recreational activities and attends family functions. However, shortly, he feels boring in social function. When asked about how does Divyang child seek the help of his sister and parents to complete his school homework, she says that every time he needs to help others to complete school homework, mainly he seeks his mother's help; he discusses with his sister and father to complete his school homework. When asked about any problem faced in school, how does he share that problem with you her, she says that when her child faces any problem in school or feels uncomfortable, he immediately

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shares with us without any hesitation.

Subject 2 was interviewed on the date 06/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to state something about her family, she says three family members. She has done B.Ed. in general education and working as a teacher in an inclusive school. Husband has a government job. They have only one child, and he is hearingimpaired. When requested to share the communication skills used by the hearingimpaired child, she says that her child's hearing impairment was early identified, and he got a cochlear implant and used more oral language during communication. When asked about the hearing-impaired child's family and social participation, she says that her child is always participating in family work and is interested in social activities. When asked about how does her hearing-impaired child help in household chores, she says that her child helps her in all household work and is interested in doing these works himself. When requested to say something about the participation of the hearing-impaired child in different recreational activities, she says her child is more interested in doing group recreational activities and thinks to attend all family functions with great enjoyment. He is also interested in attending social functions. When asked about how her child seeks the help of parents and other neighborhoods to complete his school homework, she says

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that mainly, her child completes school homework himself, but when he faces some problem, he immediately discusses this issue with his peers, parents, or neighbors. When asked about any problem feces in school by her child, how does he share that problem with her, she says that if her child faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation and is interested in removing this problem himself.

Subject 3 was interviewed on the date 07/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to say something about her family, she says we have four family members. She has done B.Ed. in general education, and she is a housewife. Husband has a private job. They have two children & both are hearing impaired. When requested to share the communication skills used by the hearing-impaired children, she says that they mostly use sign language during communication, but sometimes they follow total communication, especially with their therapy teacher. When asked about hearingimpaired children's family and social participation, she says they are less interested in participating in the family and society. When asked about how hearing-impaired children help in household work, she says sometimes they help us with easy household work. When requested to say something about the participation of hearing-impaired children in different recreational activities, she says they are more interested in

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Television & mobile-based recreational activities and attend family functions. However, shortly, they feel segregated in social function. When asked about how do her children seek the help of their parents to complete their school homework, she says every time they need to help others to complete school homework, they mainly seek their mother's help to complete their school homework. When asked about any problem faced in school how do they share that problem with her, she says if they face any problem in school or feel uncomfortable, he immediately shares with us without any hesitation.

Subject 4 was interviewed on the date 07/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduation qualification. Subject two is working as a helper teacher in a special school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview isas under-.

When requested to say something about her family, she says that they have four family members. She has done post-graduation and worked as a helper teacher in a special school. Husband has a clerical job in a private company. They have two children; one of them is hearing impaired. When requested to share about communication skills used by the hearing-impaired child, she says that mainly, her child uses sign language during communication, but sometimes he follows total communication, especially with his therapy teacher. When asked about the hearingimpaired child's family and social participation, she says that her child is less interested in participating in the family and society. When asked about how does her

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hearing-impaired child help in household work, she says that sometimes he helps us an easy household work. When requested to say something about the participation of hearing-impaired children in different recreational activities, she says her child is more interested in mobile-based recreational activities and less interested in attending family functions. He feels segregated in social function. When asked about how her child seeks his parents' help to complete his school homework, she says for completing his homework every time he needs others' help, and he mainly seeks his mother's help to complete his school homework. When asked if her child faces any problem in school, how does he share that problem with her? She says if her child faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 5 was interviewed on the date 08/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a helper teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to state something about her family, she says they have four members. She has done B.Ed. in general education and working as a helper teacher in an inclusive school. Husband has a government job. They have two children; one is hearing-impaired. When requested to share about communication skills used by the hearing-impaired child, she says that as her child's hearing impairment is early identified and he got a cochlear implant, he uses more oral language during

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communication. When requested to speak about the family and social participation of a hearing-impaired child, she says her child is always participating in family work and is interested in social activities. When asked about her hearing-impaired child's help in household work, she says that her child helps us all household work and is interested in doing these works himself. When requested to say something about the participation of hearing-impaired children in different recreational activities, she says that her child is more interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions. When asked about her child seeking the help of parents and other neighborhoods to complete his school homework, she says her child mainly completes school homework himself, but when he faces some problem, he immediately discusses this issue with his sister, peers, parents or neighbors. When asked if her child faces any problem in school, how does he shares that problem with her? She says if her child faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation and is interested in removing this problem himself.

Subject 6 was interviewed on the date 08/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under

When requested to say something about her family, she says three family members. She is a housewife and has graduation qualifications. Husband has a government job.

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They have only one child, and he is hearing impaired. When requested to share about communication skills used by the hearing-impaired child, she says as her child's hearing impairment is early identified and he got a cochlear implant in his critical age; he uses more oral language during communication. When asked about the family and social participation of the hearing-impaired child, she says that

her child is always participating in family work and is interested in social activities. When asked about her hearing-impaired child's help in household work, she says her child helps in all household work and is interested in doing these works himself. When requested to say something about the participation of hearing-impaired children in different recreational activities, she says that her child is interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions. When asked about her child's seeking the help of parents and other neighborhoods to complete his school homework, she says mostly her child completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors.

Subject 7 was interviewed on the date 09/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a post-graduate qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under

When requested to say something about her family, she says they have three members. She is a housewife and has post-graduation qualifications. Husband has a

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government job. They have only one child, and he is hearing impaired. His impairment was diagnosed at the age of two & a half years. When requested to share about communication skills used by the hearing-impaired child, she says that her child's hearing impairment is early identified and intervened with a cochlear implant in his critical age; he uses more oral language during communication. When requested to speak about the family and social participation of a hearing-impaired child, she says that her child is always participating in family work and is interested in social activities. When asked about how does her hearing-impaired child help in household chores, she says that her child helps us all household work and is interested in doing these works himself. When requested to say something about hearing-impaired child's participation in different recreational activities, she says that her child is interested in doing group recreational activities and thinks to attend all family functions. He is also interested in attending social functions. When asked about how her child seeks the help of parents and other neighborhoods to complete his school homework, she says mostly her child completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors. When asked if her child faces any problem in school how does he share that problem with her, she says if he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 8 was interviewed on the date 09/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language

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of the interviewee, that is, the Hindi language; the transcript of the interview is as under-

When requested to say something about her family, she has three family members. She is a housewife and has graduation qualifications. Husband has a government job. They have only one child, and he is hearing impaired. His impairment was diagnosed at the age of three years, and immediately he got a cochlear implant, support from an auditory-verbal therapist, and other support services. When requested to share about communication skills used by the hearing- impaired child, she says that as her child's hearing impairment is early identified and intervened with a cochlear implant in his critical age, he uses more oral language during communication. He asks for oral communication if anyone communicates with him in sign language. When asked to speak about the hearing-impaired child's family and social participation, she says her child is always participating in family work and is interested in social activities. When asked about how her hearing-impaired child helps in household chores, she says her child helps her in all household work and is interested in doing these works himself. When requested to say something about the participation of the hearing-impaired child in different recreational activities, she says her child is interested in doing group recreational activities, enjoys dance & music, and thinks to attend all family functions. He is also interested in attending social functions. When asked about how her child seeks the help of parents and other neighborhoods to complete his school homework, she says mostly her child completes school homework himself, but when he faces some problem, he immediately discusses this problem with his peers, parents, or neighbors. When asked if her child faces any problem in school, how does he share that problem with her? She says if her child faces any problem in school or feels uncomfortable, he

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immediately shares with us without any hesitation.

Subject 9 was interviewed on the date 10/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a graduation qualification. Subject two is a housewife. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under

When requested to say something about her family, she says they have five family members. She is a housewife and has graduation qualifications. Husband has a private job. We have three children, and one is hearing impaired. When requested to share the communication skills used by the hearing-impaired children, she says that her child primarily uses sign language during communication, but sometimes he follows total communication, especially with their therapy teacher. When asked about the hearingimpaired child's family and social participation, she says her child is less interested in participating in the family and society. When asked about how her hearing-impaired child helps in household work, she sometimes says her child helps us an easy household work. When requested to say something about the participation of your hearingimpaired child in different recreational activities, she says her child is more interested in mobile-based recreational activities and attends family functions. However, shortly, he feels segregated in social function. When asked about how her child seeks their parents' help to complete his school homework, she says every time he needs to help others to complete school homework, mainly he seeks his sister and mother's help to complete their school homework. When asked if her child faces any problem in school, how does

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he shares that problem with his parents, she says if he faces any problem in school or feels uncomfortable, he immediately shares with us without any hesitation.

Subject 10 was interviewed on the date 10/09/2021 at her home. She is a mother of Divyangjan with Hearing-Impairment and has a B.Ed. Qualification. Subject two is working as a teacher in an inclusive school. She asked if she agreed to disclose her name in this research, and she denied it. The communicational language used in the interview was the native language of the interviewee, that is, the Hindi language; the transcript of the interview is as under-.

When requested to state something about her family, she says they have three members. She has done B.Ed. in general education and working as a teacher in an inclusive school. Husband has a government job. They have only one child, and she is hearing-impaired. She got a cochlear implant, speech & language therapy from experts, and other support services during her critical age. When requested to share about communication skills used by the hearing-impaired child, she says as her hearing impairment is early identified and she got a cochlear implant; she uses more oral language during communication. When asked about her hearing-impaired child's family and social participation, she says her daughter is always participating in family work and is interested in social activities. When asked about how her hearing-impaired child helps in household chores, she says her daughter helps in all household work and is interested in doing these works himself. When requested to say something about the participation of your hearing- impaired child in different recreational activities, she says her daughter is more interested in doing group recreational activities like dance & music

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and thinks attending all family functions with great enjoyment. She is also interested in attending social functions. When asked about how her child seeks the help of parents and other neighborhoods to complete her school homework, she says mainly she completes school homework herself, but when she faces some problem, she immediately discusses this issue with her peers, parents, or neighbors. When asked if she faces any problem in school how does she shares that problem with you, she says if she faces any problem in school or feels uncomfortable, she immediately shares with us without any hesitation and is interested in removing this problem himself.

## **Common Findings:**

- Early identified & intervened Divyangjan with Hearing Impairment who got Cochlear Implant (CI) in his/her critical age have uses more oral language during communication.
- CI user Divyangjan with Hearing Impairment has better participation skills in family andsociety than other hearing aid users.
- CI user Divyangjan with Hearing Impairment is more interested in helping in household chores comparatively and uses other hearing aid types.CI user Divyangjan with Hearing Impairment has participated in recreational activities where more oral language will be used.
- Other than CI user Divyangjan with Hearing Impairment has participated in mobile based recreational activities where the minimum use of oral language will be used.
- CI user, Divyangjan with Hearing Impairment, seeks less help from others to complete

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his/her homework.

- A family with two or more children, including Divyangjan with Hearing Impairment (DWHI), and parent's education is graduation level and doing a private job, DWHI seeks more help to family members to complete his/her homework.
- If DWHI faces any problem in school or feels uncomfortable, they immediately share it with parents without any hesitation.

## **Unique Findings:**

 Early identified and intervened DWHI with a cochlear implant user from their critical age and belongs from ideal family, he uses more oral language during communication. They ask for oral communication if anyone communicates with him in sign language.

## 5.2.3 Objective No. 3

**"To identify the barriers to improve the Quality of Life of students with Hearing Impairment":** To achieve this objective focus group discussion is conducted and the transcriptsare as follows-

## **Barriers according to Principals-**

## **Barriers according to Participant 1**

Participation of parents in academic and non-academic activities is unsatisfactory. Lack of hearing assessment clinics. Lack of speech therapists for speech correction for the student with hearing impairment. Transport-related barriers to reach

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school. Students with hearing impairment were facing problems understanding the teacher's lectures. Problems in communication with peers.

## **Barriers according to Participant 2**

Overall the participation of parents in academic and non-academic activities is average. Problems to remove trouble shootings occurred in hearing aid. The student with hearing impairment were facing speech correction and hearing assessment-related issues. Lack of trained special educators. Our teachers often face difficulties collecting teaching-learning materialsaccording to our Divyangjan with hearing impairment.

## **Barriers according to Participant 3**

Some parents of hearing-impaired students show record participation in all academic and non-academic activities; the rest have averagely participated. Students with hearing impairment face difficulties in speech and audiology-related clinical services. We face difficulties in the appointment of specially trained educators in our school. Students with hearing impairment cannot convey their issues to subject teachers appropriately. Students with hearing impairment face problems in understanding the teacher's lecture.

### **Barriers according to Participant 4**

Parents have averagely participated in academic and non-academic activities. Lack of speech therapists for speech correction for hearing impaired students. Our teachers have faced issues in selecting more effective methods and techniques according to the content. Divyangjan with hearing impairment, feels segregated in the school environment. Students with hearing impairment cannot convey their issues to subject teachers appropriately.

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## **Barriers according to Participant 5**

Participation of parents in academic and non-academic activities is average. We are facing problems in regular hearing assessment and speech correction-related activities. Unable to make proper communication with their colleagues. Problems to remove trouble shootings occurred in hearing aid. We face difficulties in the appointment of specially trained educators.

## **Common Barriers:**

- Participation of parents in academic and non-academic activities is average.
- Lack of speech therapists for speech correction for hearing impaired students.
- Students with hearing impairment were facing problems understanding the teacher's lectures.

## **Barriers according to Specially Trained Teachers -**

## **Barriers according to Participant 1**

Students with hearing impairment show less participation in academic and nonacademic activities. Unable to represent themselves in the classroom. Unable to read complex sentences. Problems in proper pronunciation. They have hesitation in sharing their learning materials. Faces problems in understanding new concepts. Faces problems in recalling any concept.

## **Barriers according to Participant 2**

Participation of students with hearing impairment in school curricular activities is unsatisfactory. Students with hearing impairment feel segregated in school cocurricular activities. Poorly express their ideas. Unable to read complex sentences. Problems in proper pronunciation. Problems in communication with peers. Faces

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problems in understanding teacher's lecture.

## **Barriers according to Participant 3**

Have minimum participation in classroom activities. Students with hearing impairment have low interest in school co-curricular activities. Students with hearing impairment face problems in representing themselves in the classroom. Unable to read complex sentences. Problems in communication with peers. Faces problems in understanding new concepts. Faces problems in recalling any concept.

## **Barriers according to Participant 4**

They have very little interest in academic and non-academic activities. Unable to represent themselves in the classroom. Problems in proper pronunciation. Problems in communication with peers. Faces problems in understanding new concepts. Their written work, including class work and homework, was generally incomplete. Faces problems in recalling any concept.

## **Barriers according to Participant 5**

Unable to represent themselves in the classroom. Unable to read complex sentences. Problems in proper pronunciation. Problems in communication with peers. Faces problems in understanding mathematical concepts. Their written work, including class work and homework, was generally incomplete. Faces problems in recalling any concept.

## **Barriers according to Participant 6**

Participation of students with hearing impairment in academic activities is unsatisfactory. Unable to communicate with teachers. Unable to read sentences. Problems in pronunciation. Problems in communication with peers. Their written work,

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including class work and homework, was generally incomplete. Faces problems in retaining and recalling any concept.

## **Barriers according to Participant 7**

Unable to express his/her views in the classroom. Unable to read complex sentences. Mistakes in pronunciation. Problems in communication with peers. They have hesitation in sharing their learning materials. Faces problems in recalling any concept. Feel segregated in the school environment.

## **Barriers according to Participant 8**

Less interested in academic and non-academic activities. Problems in pronunciation. Students with hearing impairment were making grammatical errors in sentence framing and writing. Problems in communication with peers. They have hesitation in sharing their learning materials. Faces problems in understanding new concepts. Their written work, including classwork and homework, was generally incomplete.

## **Barriers according to Participant 9**

Participation of students with hearing impairment in academic and nonacademic activities is unsatisfactory. Students with hearing impairment feel segregated in school co- curricular activities. Problems in communication with peers. They have hesitation in sharing their learning materials. Faces problems in understanding new concepts. Their written work, including class work and homework, was generally incomplete. Faces problems in recalling any concept.

## **Barriers according to Participant 10**

Less interested in academic activities. Participation of students with hearing

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impairment in non-academic activities is unsatisfactory. Students with hearing impairment feel segregated in school co-curricular activities. Unable to represent themselves in the classroom. Unable to read complex sentences. Problems in communication with peers. Faces problems in understanding new concepts.

**Common Findings:** Students with hearing impairment show less participation in academic and non-academic activities. Problems in communication with peers. Faces problems in understanding new concepts. Unable to read complex sentences. Problems in proper pronunciation. Unable to represent themselves in the classroom.

## Barriers according to Parents of Hearing Impaired Students -

## **Barriers according to Participant 1**

The child faces problems in oral communication. Unable to express himself adequately. The child is less interested in household work. Due to the communication gap child is less interested in participating in social activities. Lower self-help skill.

## **Barriers according to Participant 2**

The child prefers sign language instead of oral language for communication. He likes mobile-based recreation instead of television. He faces problems in completing his homework always needs someone's help. Due to the communication gap child is less interested in participating in social activities. He faces problems in expressing himself. Faces problems in retaining and recalling things.

## **Barriers according to Participant 3**

The child has less interested in participating in family and social activities. Problems in understating new concepts need to repeat the same again and again. Lower interest to attend social functions. Problems in speech and language therapy due to less

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availability of experts. The child is less interested in household work.

## **Barriers according to Participant 4**

The child needs some gestures with oral language for communication. He is interested in attending social functions but has few duration functions. Confusion in discriminating concepts. In school examination time, he feels that he has too much load, and this time, he has a low confidence level. He is interested in attending non-academic activities with normal hearing friends.

## **Barriers according to Participant 5**

Unable to express himself adequately. Due to the communication gap child is less interested in participating in social activities. Lower interest to attend social functions. The child faces problems in completing school homework. Problems in understating new concepts need to repeat the same again and again.

**Common Barriers:** Due to the communication gap child is less interested in participating in social activities. He faces problems in expressing himself. Lower interest to attend social functions. Unable to express himself adequately.

## 5.2.4 Objective No. 4

**"To suggest a model for improving Quality of Life of Students with Hearing Impairment in an inclusive educational set-up:-** To achieve this objective focus group discussion is conducted and the transcripts are as follows-

## **Suggestions from Participant 1**

Need to aware the population about Divyangta. Need to remove the barrier between the able and disabled. Teaching and non-teaching staff needs to add more

#### Result, Discussion and Conclusion

exciting activities that make teaching and non-teaching work more interested and according to the student's level. Parent's participation in academic and non-academic activities. Motivation them to represent themselves. Reinforcement will be given against each activity. Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid.

## **Suggestions from Participant 2**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the student's level. Parent's participation in academic and non-academic activities. Appropriate speech therapy/auditory verbal therapy by expert.

## **Suggestions from Participant 3**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Parent's participation in academic and non-academic activities. Appropriate speech

therapy/auditory verbal therapy by expert. An inclusive school must have a friendly and accepting environment.

## **Suggestions from Participant 4**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid. Need to be aware the population about Divyangta

#### Result, Discussion and Conclusion

and remove misconceptions. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interesting and according to the student's level. Parent's participation in academic and non-academic activities. Appropriate speech therapy by expert.

## **Suggestions from Participant 5**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Teaching and non-teaching staff need to add more exciting activities that make teaching and non-teaching work more interested and according to students level. Parent's participation in academic and non-academic activities. Appropriate speech therapy/auditory verbal therapy by expert. Acceptance by inclusive school teachers and colleagues.

## **Suggestions from Participant 6**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate support services. Need to aware the population about Divyangta. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level. Parent's participation in academic and non- academic activities. Appropriate speech therapy/auditory verbal therapy by expert. Sociallyacceptance environment.

## **Suggestions from Participant 7**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Parent's participation in academic and non-academic

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activities. Appropriate speech therapy/auditory verbal therapy by expert. Motivation and reinforcement will be given as needed. **Suggestions from Participant 8** 

Early identification and intervention of hearing impairment. Need to provide advanced

and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to the students level. Parent's participation in academic and non-academic activities. Appropriate speech therapy/auditory verbal therapy by expert. Acceptance by society.

## **Suggestions from Participant 9**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level. Parent's participation in academic and non-academic activities. Appropriate speech therapy/auditory verbal therapy by expert. Acceptance by inclusive school teachers and colleagues.

## **Suggestions from Participant 10**

Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Teaching and non-teaching staff needs to add more exciting activities that make teaching and non-teaching work more interested and according to students level. Parent'sparticipation in academic and non-academic activities. Appropriate speech therapy/auditory verbal therapy by expert. An inclusive

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school must have a friendly and accepting environment.

**Common Suggestions:** Early identification and intervention of hearing impairment. Need to provide advanced and appropriate hearing aid like cochlear-implant. Need to aware the population about Divyangta. Appropriate speech therapy/auditory verbal therapy by expert. Parent's participation in academic and non-academic activities. Motivation and reinforcement will be given as needed.

Model for Improving the Quality of Life of Hearing Impaired Students in an Inclusive Educational Setting: Selected samples actively participated in the focus group discussion and provided suggestions; after receiving their valuable suggestions, a telephonic conversation was held with experts working in the field of hearing impairment, and the suggested model is as follows-

## Result, Discussion and Conclusion



Figure 5.1 Model for improving Quality of Life of Students with Hearing Impairment inan inclusive educational set-up

## **5.3 Educational Implications:**

 Hearing impairment is prevalent among the Indian population. Many Divyangjan with Hearing Impairment have worked in offices, clinics, and organisations with normal hearing people. Citizens' disability awareness, early identification and intervention of hearing impairment, parental participation in the education process, parent-

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professional collaborations, and appropriate support services are critical components of becoming a Divyangjan as a productive citizen in India. The current research could help individuals become a Divyangjan as a productive citizen in India.

- Many aspects of our lives have represented our quality of life; the main component of our quality of life is interaction with others and participation in all surrounding activities. The present study will pave the way for future research into improving interaction and participation of children with hearing impairments at various levels of education and in various educational settings.
- When children with hearing impairments were educated solely through sign language and gestures, they were isolated from mainstream society. Integrated education allows them to interact socially, but it also has some conditions and a lack of appropriate support services and trained professionals; integrated education is growing slowly. The current study will pave the way for Divyangjan with Hearing Impairment to live a better life.
- An inclusive education system eliminates segregation barriers, and an integrated education system allows Divyangjan with hearing impairment to enrol in the nearest regular school system. The present study will point the way forward for future research aimed at improving the quality of life of Divyangjan with Hearing Impairment.
- Social awareness of disability, parental attitudes, participation in various activities, and collaboration with professionals may all contribute to Divyangjan's inclusion and improve his/her quality of life. The current study may aid in raising social awareness of disability.

## Result, Discussion and Conclusion

- Divyangjan's with hearing impairment necessitates the use of amplification devices, which has a significant impact on his or her quality of life. Hearing Impaired Divyangjan using a cochlear implant, who was identified early, may have significant inclusion success and a better quality of life. The current study will compel parents of children with hearing impairment to identify their child's hearing impairment early and provide appropriate hearing aid.
- Knowing the significance of interaction and participation may assist parents of Divyangjan with hearing impairment inclusive school teachers in achieving great success with inclusion and improving their quality of life. The present research will assist inclusive school teachers in improving the interaction and participation of students with hearing impairment in the school learning environment.
- Tools like IHISIS and PHISIS may be used to know the interaction and participation of Divyangjan with Hearing Impairment in an inclusive school set-up.
- Model related to improving the quality of life of Divyangjan with hearing impairment may be apply to removing the barriers of quality of life and improving the quality of life.

## 5.4 Challenges faced:

The following challenges were faced during the research-

- Similar research has not been found in India so far when selecting an appropriate research design for the study.
- Selecting samples and areas of study due to a lack of actual data related to inclusive schools with hearing-impaired students.

#### Result, Discussion and Conclusion

- Knowing the validity of self-made tools due to a scarcity of experts in the relevant area of specialization.
- Conducting interviews with teachers and parents of Divyangjan with hearing impairment because they agreed to online interviews, and due to internet issues, the researcher faces some challenges.
- Conducting a focus group discussion as the number of experts in the related area is too small.

## 5.5 Recommendations for future research:

- Very few Research Studies has been conducted in India on the Quality of Life of Students with Hearing Impairment with Reference to their Interaction and Participation in Inclusive Schools. Present research may be instrumental in improving the quality of life of Divyangjan with hearing impairment in India.
- The inclusive education system and Government policies may be evaluated for their efficacy to improving the quality of life of Divyangjans.
- Tools like "Interaction of Hearing Impaired Student in Inclusive School (IHISIS)" and "Participation of Hearing Impaired Students in Inclusive Schools (PHISIS)" may be used as an effective tool to know the interaction and participation of Divyangjan with Hearing Impairment.
- Model related to improving the quality of life of Divyangjan with hearing impairment may be apply to removing the barriers of quality of life and improving the quality of life.
- Apart from interaction and participation of Divyangjan with Hearing Impairment, other aspects related to the quality of life may also be evaluated.

#### Result, Discussion and Conclusion

 The study was focused only on Divyangjan with hearing impairment. However, as per RPWD Act 2016 there are twenty one different categories of Divyangjan and similar studies may be conducted.

## **5.6 Limitations of the study:**

Every research study has its limitations. The present study is also not exceptional in this context.

- The study was limited to two districts in Rajasthan. It also used a mixed method design to understand the issues related to quality of life of Divyangjan with hearing impairment.
- The study was focused only on Divyangjan with hearing impairment. However, as per RPWD Act 2016 there are twenty one different categories of Divyangjan and similar studies may be conducted.

## 5.7 Conclusion:

The present research was intended to investigate the Quality of Life of Students with Hearing Impairment with Reference to their Interaction and Participation in Inclusive Schools of Rajasthan', using a mixed method of research with a Convergent Concurrent design and collected various information and efforts were made to depict unified interpretation. The research was conceptualized along with four objectives: to study the participation and interaction of students with Hearing Impairment in inclusive schools, to investigate the Quality of Life of students with Hearing Impairment, especially at school, to identify barriers to improve the Quality of Life of students with Hearing Impairment and to suggest a model for improving

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the Quality of Life of students with Hearing Impairment in an inclusive educational set-up.

For investigating the participation and interaction of students with Hearing Impairment in inclusive schools, three-point rating scale was returned from one hundred normal hearing peers of students with hearing impairment, fifty school teachers working in inclusive schools and fifty parents of hearing-impaired students. The data were analyzed by using descriptive analysis. The interaction of CWHI is better when they see any teacher, during the changes of classroom period and interaction with school Principal, CWHI is average interaction while clearing doubts during any lecture, and if any period is free in class, report it to the Principal.CWHI is poorly interactive in asking the queries if any content they are not understood. The interaction of CWHI is better in outdoor games, sharing hobbies, and interaction during drawing, painting, crafting, etc. CWHI is averagely interacting during the discussion on music & dance-related activities. CWHI is poorly interacting while asking if any issues occurred in new activities. The interaction of CWHI is better in respecting others, social smiles, party interaction, etc. CWHI is averagely interacting in social debates. CWHI is poorly interacting while sharing painful experiences. Overall the interaction of CWHI is better in co-curricular activities, and some are social interactions. The CWHI is poorly interacting in school curricular activities. The participation of CWHI is better in-class work/homework as assigned by the teacher. Average participation of CWHI in classroom performances. CWHI has poorly participated in reading, writing, and answering the questions. The participation of CWHI is better in any social activity like a birthday celebration, asking something

#### Result, Discussion and Conclusion

about visitors, and forgetting requests to others. CWHI has averagely, participated in free period work in the classroom. CWHI is poorly participated in recalling activities and risky work. Overall the participation of CWHI is better in social activities comparatively curricularactivities.

For investigating the Quality of Life of students with Hearing Impairment, especially at school, a semi-structured interview was conducted with twenty students with hearing impairment, twenty specially trained teachers and twenty parents of hearing-impaired students. Content analysis was performed for data analysis. Divyangjan, with Hearing Impairment, is more punctual in reaching school than normal hearing students and shows interest in spending more time at school. Mild, Moderate, and Severe hearing impaired Divyangian have actively participated in academic activities in the classroom. Divyangjan with Hearing Impairment is less interested in doing curricular activities individually; they are interested in doing these activities with their hearing-impaired peers. Divyangjan with Hearing Impairment, has actively participated in non-verbal activities like- drawing, painting, crafting, etc., and is less interested in those activities that need to use more oral language like debate, singing, dance, music, etc. Divyangjan with Hearing Impairment sadly shares their educational progress, especially with normal-hearing peers, and is blamed for their impairment. Early identified & intervened Divyangian with Hearing Impairment who got Cochlear Implant (CI) in their critical age have uses more oral language during communication. CI user, Divyangjan with Hearing Impairment, has better participation skills in family and society than other hearing aid users. CI user, Divyangjan with Hearing Impairment, is more interested in helping with household

## Result, Discussion and Conclusion

chores comparatively and uses other hearing aid types. CI user, Divyangjan with Hearing Impairment, has participated in recreational activities where more oral language will be used. Other than CI user Divyangjan with Hearing Impairment has participated in mobile-based recreational activities where the minimum use of oral language will be used. CI user, Divyangjan, with Hearing Impairment, seeks less help from others to complete their homework. A family with two or more children, including Divyangjan with Hearing Impairment (DWHI), and parents' education is graduation level and doing a private job, DWHI seeks more help from family members to complete their homework. If DWHI faces any problem in school or feels uncomfortable, they immediately share it with parents without any hesitation.

For identifying the barriers to improving the Quality of Life of students with Hearing Impairment focus group discussion was conducted with five Principals of inclusive schools, ten specially trained teachers and five parents of hearing-impaired students. Critical analysis was performed for data analysis. Participation of parents in academic and non-academic activities is average. Lack of speech therapists for speech correction for hearing impaired students. Students with hearing impairment were facing problems understanding the teacher's lectures. Students with hearing impairment show less participation in academic and non-academic activities. Problems in communication with peers. Faces problems in understanding new concepts. Unable to read complex sentences. Problems in proper pronunciation. They are unable to represent themselves in the classroom. Due to the communication gap, child is less interested in participating in social activities. He faces problems in expressing himself. Lower interest to attend social functions. Unable to express himself adequately.

### Result, Discussion and Conclusion

For suggesting a model for improving the Quality of Life of students with Hearing Impairment in an inclusive educational set-up focus group discussion was conducted with ten specially trained teachers, and critical analysis was performed for data analysis. Early identification and intervention of hearing impairment. We need to provide advanced and appropriate hearing aid like cochlear-implant. We need to be aware of the population of Divyangta. Proper speech therapy/auditory verbal therapy by an expert. Parent's participation in academic and non-academic activities. Motivation and reinforcement will be given as needed.

The current study's findings, particularly the barriers to improving Quality of Life, are consistent with Lamichhane's (2013) research on Disability and barriers to education: evidence from Nepal. Some matched barriers include the severity of impairments, less parental participation, and social barriers. The findings on the barriers to limited resources are consistent with Coster et al.'s (2013) study on school participation, supports, and barriers of students with and without disabilities.

# APPENDIX

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## Appendix

# **Interaction of Hearing Impaired Student in Inclusive School**

(For Colleagues of Children with Hearing Impairment)

निर्धारण मापनी

नाम : महिला/पुरुष

कक्षा :

विद्यालय :

नोट: \*यह निर्धारण मापनी समावेशित विद्यालय में अध्ययनरत श्रवणबाधित छात्र के सहपाठी द्वारा भरा जाये।

\*आपको नीचे दिये गये तथ्यों/मदों को ध्यानपूर्वक पढ़ना है तथा प्रत्येक तथ्य के आगे दिये गये

"हाँ" "नहीं" या "कभी-कभी" खंड में से किसी एक खंड में सही ( ) का निशान लगाना है|

	पाठ्यक्रम गतिविधियों के दौरान संपर्क (बातचीत)			
	(Interaction during Curricular Activities)			
क्र.	तथ्य / मद	हाँ	नहीं	कभी - कभी
1	आपका यह श्रवण बाधित मित्र किसी टीचर को देखकर उनके बारे में आपको बताने का प्रयास करता है			
2	आपका यह श्रवण बाधित मित्र टीचर के कक्षा में आने पर सभी बच्चों को सतर्क करता है			
3	आपका यह श्रवण बाधित मित्र टीचर द्वारा पढाते समय बीच-बीच में प्रश्न पूछता है			
4	आपका यह श्रवण बाधित मित्र विषय-वस्तु समझ न आने पर टीचर को पुनः समझाने के लिये कहता है			
5	टीचर के कक्षा से जाते समय आपका यह श्रवण बाधित मित्र उनसे Bye या धन्यवाद (Thanks) कहता है			
6	एक कालांश समाप्त होने पर आपका यह श्रवण बाधित मित्र आपसे अगले कालांश के बारे में चर्चा करता है।			

लिंग:

		-	 
7	कोई कालांश खाली होने पर आपका यह श्रवण बाधित मित्र प्राचार्य को सूचित		
	करने का प्रयास करता है।		
8	प्राचार्य के कक्ष में जाने में आपका यह श्रवण बाधित मित्र स्वयं को सहज		
	महसूस करता है।		
9	आपका यह श्रवण बाधित मित्र निःसंकोच अपनी बात प्राचार्य से करता है		
10	आपका यह श्रवण बाधित मित्र परीक्षा के बारे में आपसे चर्चा करता है		

पाठ्यक्रम सहगामी अभिक्रियाओं के दौरान संपर्क (बातचीत)				
(Interaction during Co-Curricular Activities)				
क्र.	तथ्य / मद	हाँ	नहीं	कभी -कभी
1	आपका यह श्रवण बाधित मित्र खेल में भी रूचि दिखाता है और उनके बारे में			
	आपसे चर्चा करता है।			
2	आपका यह श्रवण बाधित मित्र कमरे के अन्दर खेले जाने वाले खेलों (Indoor			
	games) के बारे में आपसे चर्चा करता है			
3	आपका यह श्रवण बाधित मित्र बाहरी खेलों (Outdoor games) के बारे में			
	आपसे चर्चा करता है।			
4	आपका यह श्रवण बाधित मित्र आपसे गीत, संगीत, नृत्य इत्यादि विषयों पर			
	चर्चा करता है			
5	आपका यह श्रवण बाधित मित्र शारीरिक शिक्षा, व्यायाम एवं योग सम्बन्धी			
	क्रियाओं पर आपसे चर्चा करता है।			
6	आपका यह श्रवण बाधित मित्र अपने एवं आपके शौक (Hobbies)पर आपसे			
	चर्चा करता है			
7	आपका यह श्रवण बाधित मित्र किसी टॉपिक पर आपके एवं अन्य मित्रों के			
	साथ अपने विचार निःसंकोच साझा करता है।			
8	आपका यह श्रवण बाधित मित्र विभिन्न राष्ट्रीय एवं धार्मिक त्योहारों की चर्चा			
	आपसे करता है			
9	आपका यह श्रवण बाधित मित्र चित्रकारी, पेन्टिंग आदि से सम्बन्धित चर्चा			
	आपसे करता है			
10	आपका यह श्रवण बाधित मित्र नवीन गतिविधियों को करने में आयी चुनौतियों			
	के समाधान के बारे में आपसे पूछता है।			

	सामाजिक गतिविधियों के दौरान संपर्क (बातचे	गीत)		
(Interaction during Social Activities)				
क्र.	तथ्य / मद	हाँ	नहीं	कभी - कभी
1	आपका यह श्रवण बाधित मित्र सुबह स्कूल आने पर आपको अभिवादन करता है			
2	जब आप आपके इस श्रवण बाधित मित्र से हेलो बोलते हैं तो वह उसका उत्तर देता है			
3	आपको देखकर आपका यह श्रवण बाधित मित्र मुस्कुराता है			
4	आपका यह श्रवण बाधित मित्र आपसे अपने सुबह के नाश्ते की बातें करता है			
5	आपका यह श्रवण बाधित मित्र आपके परिवार के लोगों से सहजता से बातें करता है			
6	स्कूल में कभी किसी अतिथि के आने पर आपका यह श्रवण बाधित मित्र उनसे बात करने की इच्छा रखता है			
7	आपका यह श्रवण बाधित मित्र अपने से बड़ों का आदर करता है			
8	आपका यह श्रवण बाधित मित्र अपने दोस्तों से वाद-विवाद करता है			
9	आपका यह श्रवण बाधित मित्र अपने दुखों को आपके साथ बांटता है			
10	आपका यह श्रवण बाधित मित्र आपको जन्मदिन और अन्य उत्सवों पर म्बारकबाद देता है			
11	अापका यह श्रवण बाधित मित्र आपके घर के कार्यक्रमों जैसे जन्मदिन या अन्य कार्यक्रमों में बुलाने पर सम्मिलित होता है			
12	आपका यह श्रवण बाधित मित्र आपको अपने घर अपने जन्मदिन या अन्य कार्यक्रमों में ब्लाता है			

# Participation of Hearing Impaired Student in Inclusive School

## (For Inclusive School Teachers)

निर्धारण मापनी

शिक्षक का नाम:

शैक्षणिक योग्यताएं:

विद्यालय का नाम एवं पताः

शिक्षण का स्तर: प्रायमरी/सेकेण्डरी/सीनियर सेकेण्डरी

नोट: \*यह निर्धारण मापनी समावेशित विद्यालय में अध्ययनरत श्रवणबाधित छात्र के शिक्षकों द्वारा भरा

जाये|

\*आपको नीचे दिये गये तथ्यों/मदों को ध्यानपूर्वक पढ़ना है तथा प्रत्येक तथ्य के आगे दिये गये

"हाँ" "नहीं" या "कभी-कभी" खंड में से किसी एक खंड में सही ( ) का निशान लगाना है|

	पाठ्यक्रम गतिविधियों के दौरान सहभागिता			
	(Participation during Curricular Activities)			
क्र.	तथ्य / मद	हाँ	नहीं	कभी
				- कभी
1	यह श्रवण बाधित विद्यार्थी आपके द्वारा पढ़ाई जा रही विषय-वस्तु पर सामान्य बच्चों की तरह रूचि लेता है			
2	यह श्रवण बाधित विद्यार्थी सामान्य बच्चों की तरह आपके व्याख्यान पर ध्यान देता है			
3	यह श्रवण बाधित विद्यार्थी आपके शिक्षण कार्य के समय बीच-बीच में प्रश्न पूछता है			
4	यह श्रवण बाधित विद्यार्थी आपके शिक्षण कार्य के समय आपसे आँख मिलाकर बात करता है			
5	आपके द्वारा कक्षा में दिये जाने वाले कार्य को पूरा करने के लिये यह सामान्य बच्चों की तरह रूचि लेता है			
6	यह श्रवण बाधित विद्यार्थी अपने गृहकार्य को समय पर पूरा कर लेता है			
7	इस श्रवण बाधित विद्यार्थी का कक्षा में प्रदर्शन (performance) अन्य बच्चों जैसा होता है			

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आयु एवं लिंग:

अनुभव :

8	यह श्रवण बाधित विद्यार्थी कक्षा परीक्षण में उत्सुकता दिखाता है?		
9	यह श्रवण बाधित विद्यार्थी कक्षा टेस्ट समय पर पूरा कर लेता है		
10	यह श्रवण बाधित विद्यार्थी सामान्य बच्चों की तरह लेखन तथा पठन कार्य		
	करता है		
11	आपके द्वारा प्रति-प्रश्न करने पर यह श्रवण बाधित विद्यार्थी संतोषजनक उत्तर		
	देता है		
12	पढाते समय अचानक कुछ प्रश्न पूछने पर यह श्रवणबाधित विद्यार्थी		
	संतोषजनक उत्तर दे पाता है		
13	कल हमने क्या पढ़ा था? इस प्रकार का प्रश्न पूछने पर यह श्रवणबाधित		
	विद्यार्थी जवाब देता है		
14	यह श्रवण बाधित विद्यार्थी कक्षा में किसी भी प्रकार के प्रस्तुतिकरण के लिये		
	उत्सुकता दिखाता है		
15	यह श्रवणबाधित विद्यार्थी कक्षा में किसी भी शैक्षणिक विषय पर वाद-विवाद		
	करने में रूचि रखता है		
16	यह श्रवणबाधित विद्यार्थी किसी समस्या पर अपने तर्क प्रस्तुत करता है		

सामाजिक 🔅	अभिक्रियाओं	के	दौरान	सहभागिता
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### (Participation during Social Activities)

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क्र.	तथ्य / मद	हाँ	नहीं	कभी -कभी
1	शिक्षण कार्य शुरू करने के पहले ही यह श्रवण बाधित विद्यार्थी पिछले दिन के			
	प्रकरण तथा आज के प्रकरण को बताता है			
2	यह श्रवणबाधित विद्यार्थी अपने जन्मदिन पर आपको अपने घर बुलाने की			
	इच्छा रखता है			
3	यह श्रवणबाधित विद्यार्थी आपके जन्मदिन पर आपको मुबारक-बाद देता है।			
4	कक्षा में किसी का स्वास्थ्य खराब हो जाने पर यह श्रवणबाधित विद्यार्थी			
	उसके लिये कुछ करता है			
5	स्कूल छोड़कर जाने वालों छात्रों के लिये यह श्रवण बाधित विद्यार्थी बिदाई			
	समारोह मनाने की इच्छा रखता है			
6	यह श्रवणबाधित विद्यार्थी स्कूल के सभी सांस्कृतिक कार्यक्रमों में सक्रिय			
	सहभागिता निभाने की इच्छा रखता है			
7	स्कूल में कभी किसी आगंतुक (visitor) के आने पर यह श्रवणबाधित विद्यार्थी			
	उसके बारे में आपसे जानने की इच्छा रखता है।			
8	यह श्रवणबाधित विद्यार्थी कक्षा के बाकी बच्चों के बारे में आपसे चर्चा करता			
	है।			
9	खाली कालांश होने पर यह श्रवणबाधित विद्यार्थी तुरंत आपको सूचित करता			
	है।			
10	अपने किसी मित्र की गलतियों को माफ करने सम्बन्धी सिफारिश आपसे			
	करता है			

## Interview Schedule for Colleagues Part-A

•	आपके	पिता	का	व्यवसायः	(सरकारी	नौक	री/प्राइवेट	नौकरी/स्	वयं का
	व्यवसाय	/अन्य)							
•	आपकी	माता का व	व्यवसाय:	(गृहणी/सरव	कारी नौक	री/प्राइवेट	नौकरी/स	वयं का व्यव	ासाय/अन्य)
•	आप	कितने	भाई	बहन	हैं:	भाई			. बहन
•	आपके भ	गई बहन क	न्हाँ पढते	हैं (यदि ला	गू हो तो)	: सरकारी	विद्यालय	/ गैर सरकारी	। विद्यालय
	भाई:		(यदि		ला	गू		हो	तो)
	बहन:			(यदि			लागू		हो
	तो)								
	आप कब	ा से इस वि	रेव्यांग ब	च्चे के साथ	ग पढ़ रहे	हैं			

#### Part-B

- 1. आपका यह श्रवण दिव्यांग मित्र आपसे अनौपचारिक वार्ता या सम्प्रेषण कैसे करता है?
- 2. कक्षा के अन्दर जब टीचर पढ़ा रहे होते हैं उस समय आपके इस श्रवण दिव्यांग साथी की गतिविधियों के बारे

में बताइये |

- कक्षा में जब कोई टीचर देरी से आता है या कोई क्लास खाली होती है उस समय आपके इस श्रवण दिव्यांग
   मित्र की क्रियाएँ क्या होती हैं ?
- आपके विद्यालय के सांस्कृतिक कार्यक्रमों में आपके इस श्रवण दिव्यांग दोस्त की प्रतिक्रियाएं एवं सहभागिता बताइये।
- आपका मित्र जब कभी लम्बी छुट्टियों जैसे दीपावली या गर्मी की छुट्टी के बाद पुनः स्कूल आता है तब उस समय के अनुभव कैसे साझा करता है?

### Interview Schedule for Parents

### <u>Part-A</u>

<u>बालक के पिता</u>	का विवरण :-
	शैक्षणिक योग्यता:
•	व्यवसायिक/तकनीकी योग्यता:
	परिवार का प्रकार (एकल/संयुक्त/अन्य):
	बच्चों की संख्या: पुत्र: पुत्र:
	······
•	व्यवसाय:(सरकारी नौकरी/प्राइवेट नौकरी/स्वयं का व्यवसाय/अन्य)
•	वार्षिक आय:
<u>बालक की माता</u>	का विवरणः-
•	शैक्षणिक योग्यताः
•	व्यवसायिक/तकनीकी योग्यता:

व्यवसाय:(गृहणी/सरकारी नौकरी/प्राइवेट नौकरी/स्वयं का व्यवसाय/अन्य)

.....

वार्षिक आय (यदि लागू हो तो):

.....

#### Part-B

- 1. आपका यह श्रवण दिव्यांग बच्चा सम्प्रेषण कैसे करता है?
- 2. आपके इस बच्चे की सामाजिक एवं पारिवारिक कार्यों में भागीदारी के सन्दर्भ में बताइये
- 3. आपका यह श्रवण दिव्यांग बच्चा घर के कामों में आपका कितना या किस तरह हाथ बटाता है?
- 4. विभिन्न मनोरंजनात्मक क्रियाओं में आपके इस दिव्यांग बच्चे की सहभागिता के बारे में बताइये
- 5. आपका यह बच्चा विभिन्न सामाजिक क्रियाओं में परिवार के साथ कितना भाग लेता है?
- 6. अपने विद्यालय के गृहकार्य के बारे में आपका यह श्रवण दिव्यांग बच्चा परिवार में किस तरह से बात चीत

करता है?

- 7. स्कूल में कोई परेशानी होने पर आपका यह श्रवण दिव्यांग बच्चा परेशानियों को कैसे साझा करता है?
- 8. अपनी पसंद और ना पसंद की चर्चा आपका यह दिव्यांग बच्चा कैसे करता है?
- 9. आपका यह श्रवण दिव्यांग बच्चा अपने भाई बहनों से सम्प्रेषण कैसे करता है?
- 10. घर पर किसी मेहमान के आने यह उनसे किस तरह सम्प्रेषण करता है?
- 11. किसी वस्तू की आवश्यकता होने पर यह कैसे सम्प्रेषण करता है?

#### Interview Schedule for Principal/Teacher

Part-A

पद : शैक्षणिक योग्यता : प्रोफेशनल/व्यवसायिक योग्यता : ..... वर्तमान विद्यालय में कार्यान्भव : ..... समावेशित विद्यालय का कुल कार्यानुभव : ..... Part-B 1. विद्यालय आगमन पर यह श्रवण दिव्यांग बच्चा आपसे किस तरह सम्प्रेषण करता है? 2. विद्यालय की छुट्टी होने पर यह आपसे किस प्रकार सम्प्रेषण करता है? 3. इस श्रवण दिव्यांग छात्र की कक्षा में सहभागिता के बारे में बताइये 4. इस श्रवण दिव्यांग छात्र की पाठ्यक्रम क्रियाओं में रूचि के बारे में बताइये 5. विद्यालय की पाठ्य सहगामी क्रियाओं में श्रवण दिव्यांग छात्र की सहभागिता के बारे में बताइये 6. अनेक क्रियाओं में इस श्रवण दिव्यांग छात्र के नेतृत्व गुणों के बारे में बताइये 7. अपनी शैक्षणिक प्रगति को अन्य छात्रों से तुलना के बारे में यह श्रवण दिव्यांग छात्र आपसे किस प्रकार चर्चा करता है?

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# PUBLICATIONS

#### Publications and Conference Presentation Certificates

Online International Interdisciplinary Research Journal, {Bi-Monthly}, ISSN 2249-9598, Volume-10, Issue-02, Mar-Apr 2020 Issue

#### The health and education related quality of life of children with Hearing Impairment: A Review

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### Abstract

Quality of life is an important aspect of every individual. If it is concerned with children with disabilities, it becomes more critical. In the present study an effort has been made to review studies related to quality of life of Children with Hearing Impairment in contemporary literature. A systematic review has been conducted on quality of life of children with Hearing Impairment. The review revealed that Children with hearing impairment having additional associated impairment usually shows comparatively poor quality of their speech clarity & communication skill resulting in socio- emotional aspects of quality of life. The clients who were treated surgically and given a hearing aid reported a significant improvement in their health-related quality of life after treatment. In addition, some research studies reported that children with hearing impairment who have fitted cochlear implant in early age of life shows better in academic achievement indicating better education related quality of life. Children with hearing impairment who have hearing impaired parents shows better results in achievement in school instead of those having parents with normal hearing.

#### **KEYWORDS:** Quality of life, Hearing Impairment, Cochlear Implant

Disability exists since the existence of mankind: either visible or invisible. Hearing Impairment is among one of the invisible disabilities. It may occur at any time from conception to old age. There are many varying causes of hearing impairment: either genetic or environmental. It can develop due to various pathological conditions due to certain genetic conditions or several times may be due to environmental conditions. Itmay be of several types based upon the criteria of classification like the degree of hearing loss, type of hearing loss, age of onset etc. Whether referred to as a disability, disorder, or impairment, hearing loss is one of the most common chronic health conditions affecting all age groups, ethnicities, and genders. Hearing loss represents the third most prevalent health complaint in older adults following arthritis and stroke (Fausti, Wilmington, Helt, & Martin, 2005). In addition, Hearing impairment generally impairs emotional, social, communication and educational functioning of an individual (Adibi, Chen, Azmir, Solahan, Ismail, Anuvar & Abdullah, 2013). Regardless of its degree or age of onset or whatever the causes contributing hearing loss, hearing impairment affects overall aspectsof life of the affected individual or in other words affects the quality of life of affected individual.

Quality of life can be defined as individual's perceived physical and mental wellbeing and there are many factors which may contribute to a person's quality of life (Adibi, Chen, Azmir, Solahan, Ismail, Anuvar & Abdullah, 2013).Quality of Life (QOL) has been defined by World Health Organization as an individual's perception of their

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position in life in the context of the culture and value systems in which they live, and in relationship to their goals, expectations, standards and concerns (Dobhal, Juneja, Jain, Sairam & Thiyagrajan, 2014; WHO, 1995).

World Health Organization (WHO) Quality of Life group on health describes that quality of life is concerned with the individual's perception of their position in life in the context of the cultural and value systems in which they live, and in relation to personal goals, expectation, standards and concerns above mere absence of the disease.

#### Studies on Health-Related Quality of Life (HRQOL)

Rajendran & Roy (2010) conducted a study comparing health related quality of life of primary school deaf children with and without motor impairment and found that children with both hearing impairment and motor impairment are associated with significantly increased suboptimal levels of functioning and significantly lower Health Related Quality of Life (HRQOL). Children with hearing impairment alone, without any motor impairment did not show any statistically significant difference in physical and social health scores when compared with their normal hearing peer group. However, there was a statistically significant difference in other domains as well as the total scoreof HRQOL when hearing impaired children with motor impairment were compared with children with hearing impairment without any motor impairment and children with normal hearing. The findings of the study did not indicate any significant reduction in physical health in the hearingimpaired group.

Hintermair (2011) carried out a study on Health-Related Quality of Life and classroom participation of deaf and hard-of-hearing students in general schools. A total 212 Deaf and Hard-of-Hearing (DHH) students at mainstream schools were investigated through a survey using the 'Inventory of Life Quality of Children and Youth' and a 'Classroom Participation Questionnaire'. The result revealed that the domains of schooland social activities with peers were more important for the Health-Related Quality of Life (HRQOL) of the DHH students than for those having no hearing impairment. The results also revealed differences in the HRQOL levels of the two samples, with the DHH sample having higher scores for school experiences, physical and mental health, andoverall HRQOL. A positive relationship was also observed between quality of life and perceived classroom participation in certain domains like students who perceived classroom participation as satisfying scored higher on quality of life in school, social contact with peers, and mental health.

#### Studies related to Education Related Quality of Life

Stacey, Fortnum, Barton & Summerfield (2006) conducted a study on Hearing-Impaired Children in the United Kingdom. The study was focused on auditory performance, communication skills, educational achievements, quality of life and cochlear implantation and found that when rigorous statistical control is exercised in comparing cochlear implanted and non-implanted children, pediatric cochlearimplantation was reported more effective for improvements in spoken communication skills and also shown improvements in some aspects of educational achievements and quality of life, provided that children receive implants before 5 years of age. Online International Interdisciplinary Research Journal, {Bi-Monthly}, ISSN 2249-9598, Volume-10, Issue-02, Mar-Apr 2020 Issue

Kushalnagar, Topolski, Schick, Edwards, Skalcky and Patrick (2011) studied mode of communication, perceived level of understanding, and perceived quality of lifein youth with Deaf or Hard of Hearing. The study suggested important implications for improving perceived quality of life of youths with deafness and hard of hearing and the depressive symptoms among them if they have a difficult communication with their parents. Results emphasized that quality of communication among family members is essential even when youth with hearing loss are in their adolescent years. In keeping with reports of the benefits of positive perception on parent's level of understanding and associated reduction in youth's depressive symptoms as well as an increase in perceived quality of life, the study suggested that effort should be made to identify youth at risk for communication problems at home.

Schich, Skalicky, Edwards, Kushalnagar, Topolski and Patrick (2012) in their study on 'School Placement and Perceived Quality of Life in Youth' having Deafness or Hard of Hearing found that in the education of students with Hearing Impairment, there is much debate about how placement affects educational outcomes and quality of life. This study examined the relationship between quality of life and educational placement of Youths with DHH. Results showed that there were few differences in quality of life related to school placement (with age, gender, depression symptoms, and hearing level as covariates). Data revealed that DHH students may not differ much in terms of quality of life across school placements, but that there may be differences in subsets of DHH youth.

Ciorba, Bianchini, Pelucchi and Pastore (2012) conducted a study on impact of hearing loss on the quality of life of elderly adults and found that Presbycusis is a complex disease, with a controversial physio-pathology, which is influenced by genetic, environmental, and medical factors. Presbycusis is an increasingly important public health problem that can lead to reduced quality of life, isolation, dependence, and frustration. The study suggested a requirement to improve methods of identifying individuals with presbycusis and their deteriorating Quality of Life, thus improving services by providing hearing aids, assistive listening devices, and auditory rehabilitation. Identifying individuals with hearing loss, supplying appropriate hearing aids or otherlistening devices and teaching coping strategies may have a positive impact on the quality of life of older people.

Freeman (2013) in his study on the relationship between optimism, adaptation to disability and quality of life among college students with disabilities found that there is no with-in group significant differences in optimism, adaptation to disability and the quality of life of college students with low perceived severity of disability and high perceived severity of disability. However, this study indicated significant between-group differences in optimism, adaptation to disability, and quality of life of college students with low and high perceived severity of disability. This research supports the tenets behind Bishop's Disability Centrality model and demonstrates the relationship and similarities between adaptation to disability and quality of life.

Patel, Moitra, Modi, Contractor & Kantharia (2014) conducted a study on impact of hearing loss on daily life style and schooling among children between 5- and 15-years age-group. In their study they found that most common negative impact was children were not admitted to school and were lagging behind in their academic performance andonline International Interdisciplinary Research Journal, [Bi-Monthly], ISSN 2249-9598, Volume-10, Issue-02, Mar-Apr 2020 Issue

progress. Poor awareness among parents about existence of special schools of children with DHH was also observed. Parental attitude too young to go to school was another stigma associated with students.

Conclusively, the review of research studies carried out on two dimensions of quality-of-life: health dimension and education dimension of students/youths/ old age persons with Deaf and Hard of Hearing which revealed a poor quality of life they are experiencing due to the deafness and hard of hearing. Further reviews indicated a relationship between quality of life and perceived classroom participation in certain domains. Reviews suggested a positive impact on quality of life in case of early cochlear implant than providing hearing aid in a later age. The reviews also indicated that although very less number of research studies have been conducted and the area is yet to be explored, an increased interest of researchers is observed towards quality-of-life of persons with deafness and hard of hearing in recent years.

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#### Social Participation & Quality of Life of Divyangjan with Hearing Impairment in Jaipur Rajasthan

Pramod Kumar Kulhade\*, Akhilesh Kumar\*\*

#### Abstract

Hearing Impairment is an invisible impairment. It obliges a significant lag in social development, breakdowns in social communication and isolation from educational system as well as from social participation. Social participation of any individual depends on his/her communication skill with others and it plays a vital role to determine his/her quality of life. Many amplification devices like Cochlear Implant, Behind the Ear (BTE) hearing aid etc. have been used for developing their social participation. Divyangjan with hearing impairment who received better interventional services at an early age with good habilitation measures may have good language abilities resulting in a valued social role in current Indian society. As a consequence, a large proportion of children with hearing impairment now attend mainstream education from an early age. This paper focuses on social participation and quality of life of Divyangjan with hearing impairment using different types of amplification devices & habilitation services. Fifteen special educators working with hearing impaired Divyangjan in different special schools in Jaipur, ten parents of cochlear implant users & ten parents of BTE device users who were hearing impaired Divyangjan were purposively selected as a sample of present study. Responses were collected with the help of a questionnaire from special school teachers as well as the parents of cochlear implant & BTE user Divyangjan with hearing impairment. Results revealed that Hearing Impaired Divyangjan having a cochlear implant in early age have better social participation than BTE users. Findings also suggest that using different amplification devices and other related factors significantly affect social participation of Divyangjan with hearing impairment in society and at school.

Key words: Social Participation, Hearing Impairment, Cochlear Implant, Behind The Ear (BTE) hearing aid

#### Introduction:

Participation is the act of sharing in the activities of a group by any individual it is also known as joint consultation in decision making, setting of goals and other team work. Social participation is an indicator of quality of life. Poor or limited social participation may be a predictor of reduced quality of life. Social participation plays a pivotal role in lives of human beings as man is a social animal. Social Participation may take place at any social situation. Participation in school includes participation in unstructured activities (e.g friendships, play) as well as participation in organized activities (e.g. sports, clubs, arts). Classroom based activities (e.g. group work, group study, group projects) are example of structured participatory activities based on social constructivist views of Vygotsky which assign and engage learners in different social roles.

Divyangjan(Children with Disabilities) usually are at significant risk of limited opportunity of participation in various activities at school. Their restrictions due to their disability have significant lifetime consequences on their achievement, quality of life and wellbeing. There are several issues that influence participation of divyangjan in various school activities resulting in their poor attendance and sometimes dropout as compared to their nondisabled peers. Divyangjan student participate less

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in structured and unstructured activities, and experience reduced interaction and playground participation. Divyangjans additionally show less engagement in the wider school world, including different clubs like Math Club, Science Club and other such organizations.

Class participation is an important aspect of student learning. When students speak up in class, they learn to express their ideas in a way that others can understand. When they ask questions, they learn how to obtain information to enhance their own understanding of a topic. Classroom participation is also a valuable learning tool for teachers. Through student's questions, teachers learn what they don't understand, and can adjust their way of instruction accordingly, search for innovative ways to teach a particular subject or topic. Skill related to public speaking doesn't come easily to many adults however, speaking up in class is a struggle for many students. That struggle might manifest itself in the classroom in a variety of ways like not volunteering to answer the questions, not asking for help as and when required, not speaking up in small-group activities, even not talking in class at all.

Quality of Life could be understood as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. The World Health Organization describes QOL as a broad-ranging concept that incorporates individual's physical health, psychological state, level of independence, social relationships, personal beliefs and their association to salient features of the environment. Quality of life (QOL) is the general well-being of individuals and societies, outlining negative and positive features of life. It observes life satisfaction,

including everything from physical health, family, education, employment, wealth, religious beliefs, finance and the environment.

According to Quality of Life Research Unit, University of Toronto: Quality of life is the degree to which a person enjoys the important possibilities of his/ her l ife. Possibilities result from the opportunities and limitations each person has in his/her life and reflect the interaction of personal and environmental factors. Enjoyment has two components: the experience of satisfaction and the possession and the three major life domains were 3B's: Being, Belonging, and Becoming. The conceptualization of Being, Belonging, and Becoming as the domains of quality of life were developed from the insights of various writers and needless to mention here that being, belonging and becoming all the three are closely related to the increased participation.

**Hearing Impairment:** Hearing impairment means loss of sixty decibels or more in the better ear in the conversational range of frequencies.

Due to Hearing Impairment and late identification & intervention of hearing impairment divyangjan with hearing impairment has less vocabulary. Hearing impairment affects speech & language development of divyangjan with hearing impairment which is one of the major prerequisite of communication skill. Social participation basically related with communication skill of any individual. Delayed speech and language makes divyangjan with hearing impairment limited friend & low quality of life.

Participation of any individual in social activities determines the role & quality of life. Quality of life of Divyangjan with hearing impairment has been gravely affected due to their impairment. For improving the quality of life & social role of Divyangjan with hearing impairment Government of India emphasizes on implementing the policy of Inclusion where every Divyang student with hearing impairment has equal participation in all educational and social activities but in practical, Divyangjan with hearing impairment have been facing a lot of problems. Generally they are using sign language for communication which is difficult to be understood by their classmates with normal hearing, teachers and other school authorities as well as society member. This communication gap creates a lots of barriers in his/her role &quality of life due to lack of resources or support service, awareness etc. An investigation needed how hearing impairment affects social participation &quality of life of Divyangjan with hearing impairment in all aspects of life.

#### **Objectives of the study:**

The objectives of this study were two-fold: first to study the social participation of Divyangjan with hearing impairment using cochlear implant and the second to study the social participation of Divyangjan with hearing impairment using Behind The Ear (BTE) hearing aid.

#### **Review of literature:**

Yu (2009) conducted a study onsocial participation of youth with disability in HILDA. This research investigates the impact of disability on social participation of youth (15-24 years) in Australia and aims to contribute to the evidence base for the Social Inclusion Agenda of the Australian Government using the first seven waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. HILDA is a large, nationally representative Australian panel survey with rich information on social participation. This research chooses active club membership, attendance at religious services and social interaction with friends or relatives as key indicators of social participation. In addition, two comprehensive indices involvement in group activities and personal contact – are derived from 12

items regarding community participation using factor analysis. In this study disability is defined as having any long-term health condition, impairment or disability that restricts one's everyday activities, and has lasted or is likely to last, for 6 months or more.

On average, youths with disability had lower levels of social participation as indicated by a lower probability of being an active club member, less frequent contact with friends or relatives and less personal contact. However, after controlling for other observed factors and unobserved heterogeneity, differences in social participation by the incidence, type, onset and severity of disability were not significant. In relation to social participation outcomes, disability was found to be correlated and interact with some other aspects of disadvantage such as low income. As such, the research raises issues about whether young people with disability are at risk of multiple disadvantages. Personality is also found to be an influential factor for social participation, suggesting that controlling for unobserved heterogeneity when data on personality is not available should be an important consideration when examining this issue.

Koster et al. (2010) conducted a study on Social Participation of Students with Special Needs in Regular Primary Education in the Netherlands. This study addresses the social participation of young students (Grades One to Three) with special needs in regular Dutch primary schools. More specifically, the focus lies on four key themes related to social participation: friendships/relationships, contacts/ interactions, students' social self-perception, and acceptance by classmates. The outcomes of the study revealed that the majority of students with special needs have a satisfactory degree of social participation. However, compared with students without special needs, a relatively large portion of the students with special needs experience difficulties in their social participation. In general,

students with special needs have a significantly lower number of friends and are members of a cohesive subgroup less often than their typical peers. In addition, students with special needs have fewer interactions with classmates, have more interactions with the teacher, and are less accepted than students without special needs. The social self-perception of both groups of students does not differ. A comparison between students with different categories of disability regarding the four themes of social participation revealed no significant differences.

Punch & Hyde (2011) conducted a study entitled Social Participation of Children and Adolescents with Cochlear Implants: A Qualitative Analysis of Parent, Teacher, and Child Interviews. Researcher interviewed 24 parents, 15 teachers, and 11 children and adolescents. The study reported here extends the largely quantitative findings of previous research through a qualitative analysis of interviews with parents, teachers, and pediatrics cochlear implant users themselves in three eastern states of Australia. The findings displayed commonalities across the three groups of participants, indicating positive experiences around the children's psychosocial development with their cochlear implants, but also on-going difficulties communicating in groups of people and problems related to social skills. Some children had little contact with other deaf children (with or without cochlear implants) despite parents and teachers perceiving such contact beneficial. Children attending schools where there were other deaf children valued friendships with both deaf and hearing peers. Adolescence was a particularly difficult time for some as they struggled with feelings of self-consciousness about their deafness and external cochlear implant equipment and worries around friendships, dating, and their future place in the world.

Avramidis(2013) conducted a study on Selfconcept, social position and social participation of pupils with SEN in mainstream primary schools. This paper questions the literature's dominant representation of children with special educational needs (SEN) as holding negative perceptions of themselves and being socially isolated. The study examined dimensions of pupils' self-concept and their social position in their class network. Contrary to previous research, pupils with SEN were found to hold positive perceptions in all assessed domains of self-concept and, notably, they felt good about their academic performance, and they felt socially accepted by their classmates. With regard to their social position, children with SEN were found to be less popular and to have fewer friends than their non-SEN peers. Nevertheless, they had formed some positive relationships, they were equally likely to be members of a social cluster, and they were no more likely to be isolated than their non-SEN peers. This evidence is supplemented with teacher accounts that provide a greater understanding of the nature of social interaction and quality of friendships in their classes. Finally, the paper concludes that experiencing SEN alone is not a determining factor of social isolation and argues that schools should aim at enhancing the self-image and reducing the marginalization of all pupils regardless of their SEN or non-SEN classification.

Carter and Hughes (2005) conducted a study on Increasing Social Interaction among Adolescents with Intellectual Disabilities and Their General Education Peers: Effective Interventions. This Research indicates that peer interaction can have a substantial impact on the lives of adolescents with disabilities. However, social interaction among adolescents with intellectual disabilities and their general education peers typically occurs infrequently in secondary schools. This paper provides a critical analysis of twenty-six empirical interventions aimed at promoting social interaction among adolescents with intellectual disabilities and their general education peers in middle and high school settings. Findings are analyzed with regard to intervention components; student characteristics; interaction settings; measures of interaction; observation procedures; experimental designs; intervention components; and measures of generalization, social validity, and treatment integrity. Based upon findings from this literature, we present recommendations to guide future research and the development of effective social interaction interventions for adolescents with intellectual disabilities in middle and high schools.

Chung, Carter and Sisco (2012) conducted a study on Social Interactions of Students with Disabilities Who Use Augmentative and Alternative Communication in Inclusive Classrooms. The purpose of the study was to explore the naturally occurring social interactions for students with disabilities who use augmentative and alternative communication (AAC) in general education classrooms. We observed 16 students who used AAC and received services under the categories of autism or intellectual disability. Participants primarily interacted with their support personnel and infrequently conversed with peers despite often being in close proximity. Few interaction episodes were initiated by students who used AAC, and initiations to peers and adults appeared to serve somewhat different functions. Students with disabilities relied more heavily on facial expressions and gestures than on the use of their AAC devices. Recommendations for promoting interaction opportunities among students are offered, and future research directions are suggested.

Yiu & Tang (2014) conducted a study on Social Integration of Deaf and Hard of Hearing Students in a Sign Bilingualism and Co-Enrollment (SLCO) Environment. The aim of this study is to investigate if the DHH students in a sign bilingualism and coenrolment (SLCO) educational environment possess a positive perception of their classroom participation comparable to their hearing peers. The 28-item Classroom Participation Questionnaire (CPQ) was translated into Chinese and administered to 17 DHH and 62 hearing students studying from Primary 4-6 in a SLCO education setting. Co relational analyses were conducted to investigate the relationships between CPQ scores and their performance in literacy, oral and signed language assessments. Results showed that both DHH and hearing students possessed a positive perception in their classroom communication with the teachers and peers. No major differences between the CPQ scores of DHH and hearing students were found. Oral and signed language skills, in general, do not possess strong association with DHH students' classroom participation. Rather, literacy skills in the setting seem to play a specific role that supports their classroom communication.

#### Methodology:

**Research Design:** The research design of the present study is of survey type. In modern scientific research, survey is taken as a primary and common method of collecting data. In order to collect the data purposive technique was used.

**Sampling:** Total 15 special educators of hearing impaired students, 10 parents of cochlear implant user hearing impaired students and 10 parents of behind the ear hearing aid user hearing impaired students were selected from special school of Jaipur Rajasthan as sample of this study.

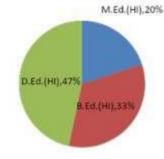
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## **Rehabilitation Quali** ation of Special Educators selected as sample:

Rehabilitation Quali□cation	No. of Special Educators	Percentage (%)	Degree
D.Ed. (HI)	07	47	168
B.Ed.(HI)	05	33	120
M.Ed.(HI)	03	20	72
Total	15	100	360

#### Rehabilitation Qualification of Special Educators selected as sample



## Distribution of Parents of Behind The Ear (BTE) hearing aid user

Distribution on the basis of Gender

Male	03
Female	07

Distribution on the basis of residential area

Rural	08
Urban	02

Distribution on the basis of qualification

PG & above	04
Lower than PG	06

## Distribution of Parents of Cochlear Implant (CI) user

Distribution on the basis of sex

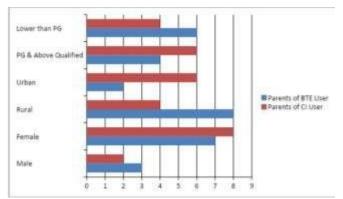
Male	02
Female	08

Distribution on the basis of residential area

Rural	04
Urban	06

Distribution on the basis of qualification

PG & above	06
Lower than PG	04



Graph showing distribution of parents using as sample on the basis of sex (male/female), residential area (urban/rural) and qualification (lower than PG / PG & above

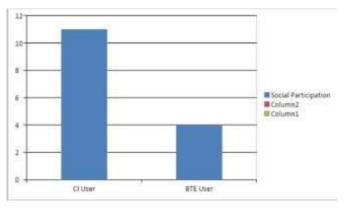
**Preparation of Tool:** A questionnaire has been prepared as a tool for the study. A draft questionnaire was developed to assess the social participation of divyangjan with hearing impairment in the area of social interest, interaction with others, academic achievement.

**Validation:** In order to validate the questionnaire a validity test by carried out with the help 10 randomly selected judges having more than 5 years of experience in the field of rehabilitation and special education of divyangjan with hearing impairment. All the judges were given appropriate instructions & requested to make corrections and/or add new questions as they think relevant. However, the questionnaire was modified and finalized based on the response given by the judges.

Procedure: Received permission from special schools authorities working with divyangjan with hearing impairment to collect data. Responses from special educators working with divyangjan with hearing impairment on questionnaire that consist questions related to participation of divyangjan with hearing impairment in curricular and social activities at school were collected. All fifteen special educators has required rehabilitation qualification and on average three years experienced to working with divyangjan with hearing impairment. Ten parents from two different special schools in Jaipur were selected due to not availability of parents of hearing impaired using hearing aid and other ten using cochlear implant. Responses from all ten parents of hearing impaired using behind the ear hearing aid and other ten using cochlear implant on questionnaire that consist questions related to participation of divyangjan with hearing impairment in social activities at school as well as society were collected.

Data analysis: Differences of social participation & quality of life between students with hearing impairment using BTE hearing aid and cochlear implant are analyzed descriptively. On research tool questions related to academic achievement, teachers working with cochlear implant and behind the ear hearing aid give their opinion that divyangjan with hearing impairment that uses cochlear implant shown better academic achievement than divyangjan with behind the ear hearing aid user. Questions related to interaction with others that included in research tool both teachers and parents says that divyangjan with cochlear implant user shown better interaction than divyangjan with behind the ear hearing aid user, some of the selected sample says that divyangjan with hearing impairment those fitted cochlear

implant in early age and received proper rehabilitation services like as auditory verbal therapy shown better interaction with others. Questions related to social interest in school and society, views of selected samples suggested that divyangjan with cochlear implant user shown better social interest in school as well as society than divyangjan with behind the ear hearing aid user.



Graph showing the social participation & quality of life of divyangjan with hearing impairment using cochlear implant and behind the ear hearing aid

#### **Result and Discussion**

On the basis of objectives framed by researcher the findings of present study shows that divyangjan with hearing impairment using cochlear implant shows better social participation than divyangjan with hearing impairment using behind the ear hearing aid. Findings also suggest that cochlear implant may help in wellbeing of children with hearing impaired in school and society.

#### **Delimitation of the study**

The sample size chosen for the study was taken from only two special schools in Jaipur district, Rajasthan for the hearing impaired it is the need to complete the study within a large population.

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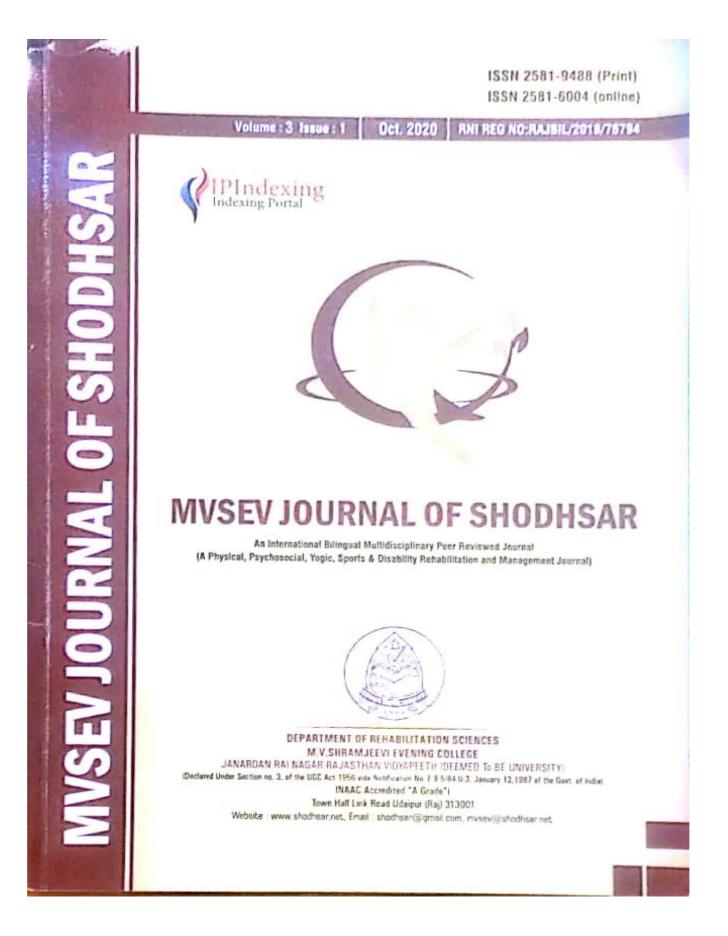
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#### Impact of COVID-19Pandemic on Quality of Life of Divyangjan with Hearing Impairment (with reference to their interaction with others in Jaipur, Rajasthan)

Pramod Kumar Kulhade\*, Akhilesh Kumar\*\*

#### Abstract

In the current corona virus disease (COVID-19) pandemic social distancing, uses of face mask and other etiquettes are required to save lives. During the Covid-19, many divyang students were impacted physically, mentally and their interactions may have been mired. Therefore, this study aims to identify the impact of COVID-19 pandemic on interaction between divyangian with hearing impairment & person with normal hearing. The data was collected from thirty five students with hearing impairment & person with normal hearing. The data was collected from thirty five students with hearing impairment and analyzed qualitatively. Out of these thirty five, twenty nine participants were used Behind The Ear(BTE)hearing aid and six were fitted Cochlear Implant(CI) The participants were interviewed using spontaneous interview questions via whatsapp video calling, which lasted about ten minutes for each participant. The finding shows that there were four major impacts of COVID-19 pandemic on Quality of Life (QoL) of divyangian with hearing impairment with specific reference to their interaction with others. These impacts were classified related to hearing device, lip-reading skills, communication and emotional expressions. The findings further reveal that the divyangian with hearing impairment suffered with hindrances in their interactions skills with others during the pandemic expressions reduced quality of life to a greater extent.

Keywords: Impact, Hearing Impairment, Interaction, COVID-19

#### Introduction

The Novel Corona Virus, started from Wuhan, China and within a couple of months, captured the globe. As noted by Xiang et.al. 2020, The 2019 novel coronavirus (2019-nCoV) pneumonia, believed to have originated in a wet market in Wuhan, Hubei province, China at the end of 2019, has gained intense attention nationwide and globally. The situation has worsen around the world as beyond supportive care, no specific coronavirus antivirals or vaccines of proven efficacy in humans exist. Person-to-person transmission has been widely documented, and a limited number of countries have reported sustained person-to-person spread. The COVID-19 virus adversely affected quality of lives of individuals among which the health related quality of life is reported at the top particularly the mental health —"—. As far as persons with disabilities are concerned they experienced more severe consequences of the pandemic and it is reported that Persons with disabilities (PWDs) living in cities during the COVID-19 pandemic response may be four times more likely to be injured or die than non-disabled persons.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to

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develop serious illness. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. Quality of life is a highly subjective measure of happiness that is an important component of many financial decisions. Factors that play a role in quality of life vary according to personal preferences, but they often include financial security, job satisfaction, family life, health and safety. Financial decisions usually involve a tradeoff where quality of life is decreased in order to save money or, conversely, quality of life is increased by spending more money.

Quality of Life is an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. (WHO) The World Health Organization describes QOL as a broad-ranging concept that incorporates individual's physical health, psychological state, level of independence, social relationships, personal beliefs and their association to salient features of the environment. Quality of life (QOL) is the general well-being of individuals and societies, outlining negative and positive features of life. It observes life satisfaction, including everything from physical health, family, education, employment, wealth, religious beliefs, finance and the environment.

QOL may be defined as subjective well-being. Recognizing the subjectivity of QOL is a key to understanding this construct. QOL reflects the difference, the gap, between the hopes and expectations of a person and their present experience. Human adaptation is such that life expectations are usually adjusted so as to lie within the realm of what the individual perceives to be possible. This enables people who have difficult life

circumstances to maintain a reasonable Qu (Janssen Quality-of-life Studies) According Quality of Life Research Unit, University of Toronto, Quality of life is the degree to which person enjoys the important possibilities of  $h_{is}h_{is}$ life. Possibilities result from the opportunities and limitations each person has in his/her life and reflect the interaction of personal and environmente factors. Enjoyment has two components the experience of satisfaction and the possession achievement of some characteristic. In quality of its research one often distinguishes between the subjective and objective quality of life. Subjection quality of life is about feeling good and being satisfied with things in general. Objective quality of life is about fulfilling the societal and culture demands for material wealth, social statu rd physical well-being(Quality-of-Life Res Center, Denmark).

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An interaction, grossly speaking is a transbetween two entitles, typically an exchaninformation but it can also be an exchange of or services. Every day, teachers make coureal-time decisions and facilitate man interactions between themselves and their stud Although they share this commonality, educato over the country often talk about these decision interactions in different ways. As a teacher one to know some basic factors related to interac like know students, their names and experies determine their skills and knowledge, creawelcoming learning environment, make stud. feel comfortable and important, Set communicate expectations and encourage stude to interact positively with one another. Interaction the activity of being with and talking to other peop and the way that people react to each other. Sointeraction is a fundamental kind of interaction included a large number of behaviors so many that sociology. Interaction is usually divided into hycategories: exchange, competition, cooperation

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conflict and coercion. Social interaction involves people communicating face to face or via computer and acting and reacting in relation to other people.

Interaction is very important for a teaching learning situation in order to learning to have take place. It is equally important for normal as well as children with disabilities. A person who is not able to hear as well as someone with normal hearing hearing thresholds of 25 dB or better in both ears - is said to have hearing loss. Hearing loss may be mild, moderate, severe, or profound. It can affect one ear or both ears, and leads to difficulty in hearing conversational speech or loud sounds. Hard of hearing refers to people with hearing loss ranging from mild to severe. People who are having hard of hearing usually communicate through spoken language and can benefit from hearing aids, cochlear implants, and other assistive devices as well as captioning. People with more significant hearing losses may benefit from cochlear implants.

Deaf people mostly have profound hearing loss, which implies very little or no hearing. They often use sign language for communication. Communication is a key trait of any entity, it play a vital role in our quality of life. Without interaction we can't communicate. Interaction of Divyangjan with hearing impairment has been affected due to COVID-19 pandemic. Children with Hearing Impairment (CWHI) who were early identified with getting good interventional services or fitting cochlear implant were placed in integrated or inclusive school setting. Early intervened CWHI depends on oral or auditory clues for communication. CWHI have good skills to easily understood lip reading and face reading. Masks are a key measure to suppress transmission of corona virus and save lives. By following the World Health Organization (WHO) guidelines people were covered their nose and mouth or uses masks. Using mask creates a barrier to CWHI for doing lip reading and it results low communication between hearing

population and CWHI. This communication gap creates lots of barriers in his/her role &quality of lifedue to COVID-19 An investigation needed how COVID-19 pandemic impacts interaction&quality of life of divyangjan with hearing impairment in all aspects of life?

#### Objectives of the study

The objectives of this study were as follows:-

- To study the impact of COVID-19 pandemic on interaction between divyangjan with hearing impairment and person with normal hearing.
- To study the barriers to interaction between divyangjan with hearing impairment and person with normal hearing.

#### Research Questions of the Study

The Research Questions of this study were as follows:-

- What are the impacts of COVID-19 pandemic on interaction between divyangjan with hearing impairment and person with normal hearing?
- What are the barriers to interaction between divyangjan with hearing impairment and person with normal hearing?

#### **Review of Literature**

Carter and Hughes (2005) conducted a study on increasing social interaction among adolescents with intellectual disabilities and their general education peers. This Research indicates that peer interaction can have a substantial impact on the lives of adolescents with disabilities. However, social interaction among adolescents with intellectual disabilities and their general education peers typically occurs infrequently in secondary schools. This paper provides a critical analysis of twenty-six empirical interventions aimed at promoting social interaction among adolescents with intellectual disabilities and their general education peers in

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middle and high school settings. Findings are analyzed with regard to intervention components; student characteristics; interaction settings; measures of interaction; observation procedures; experimental designs; intervention components; and measures of generalization, social validity, and treatment integrity. Based upon findings from this literature, we present recommendations to guide future research and the development of effective social interaction interventions for adolescents with intellectual disabilities in middle and high schools.

Chung, Carter and Sisco (2012) conducted a study on Social Interactions of Students with Disabilities Who Use Augmentative and Alternative Communication in Inclusive Classrooms. The purpose of the study was to explore the naturally occurring social interactions for students with disabilities who use augmentative and alternative communication (AAC) in general education classrooms. We observed 16 students who used AAC and received services under the categories of autism or intellectual disability. Participants primarily interacted with their support personnel and infrequently conversed with peers despite often being in close proximity. Few interaction episodes were initiated by students who used AAC, and initiations to peers and adults appeared to serve somewhat different functions. Students with disabilities relied more heavily on facial expressions and gestures than on the use of their AAC devices. Recommendations for promoting interaction opportunities among students are offered, and future research directions are suggested.

Kylea (2020) conducted a study on The Effect of COVID-19 on Deaf and Hard of Hearing College Students. The aimed was to study Deaf and hard of hearing (DHH) college students access to appropriate information about the COVID-19 pandemic and how barriers to information have impacted them emotionally. This project was consisted of review of literature, comparison of English and American Sign Language (ASL) is programming and a survey of DHH and heat college students. These programs were sent a los an online survey through Survey Monkey and at to forward the link to their DHH students. At the of the sample period, 17 hard of hearing and (9), students responded. This study revealed that D college students have a more negative emotor response to the pandemic and have less access information in their first or preferred language

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Swanwick et al. (2020) conducted a study on 1 impact of the COVID-19 pandemic on deaf adul children and their families in Ghana the striobjective of this study was to investigate the impof the COVID-19 pandemic on deaf adults, thildreand their families in Ghana, focusing on issueinclusion. Video interview and whatsapp video were used to members of the deaf communisolicit their views and experiences in relation impact of COVID-19. The result of this study that participants were talked primarily about isolation, and hardship. The expressions of related overwhelmingly to the lack of acce information around the pandemic and the diffic in understanding the information.

Naylor et al.(2020) conducted an online su on Covid-19 Lockdown effects on hearing disa) and and concluded that it affected them in div ways. It was a rapid online survey. The aim of study was to explore the perceived effectcoronavirus disease 2019 (Covid-19) so distancing restrictions and safety measures people with hearing loss. 129 adults (48.1% fem mean age 64.4 years) with an audiometric hear loss were selected as a sample of this study. A rapideployed 24-item online questionnaire asked abthe effects of certain aspects of lockdown, including face masks, social distancing, and video calling. participants' behavior, emotions, hearing performance, practical issues, and tinnitus. Dat were analyzed descriptively across the entity Volume 8, Issue 1, ftct. 2020.

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sample, and with Chi-squared tests for differences between subgroups self-reporting relatively good and relatively poor unaided hearing, respectively. Result of this study shows that a large majority found it hard to converse with people in face masks due to muffled sound and lack of speech reading cues.

Krishnan et al (2020) conducted a study on challenges faced by students with hearing impairment during COVID-19. The aim of this study was to discover the challenges faced by hearing impaired students & how it affects the communication and mainstreaming process. The data was collected from ten hearing impairments students and analyzed qualitatively. The participants were interviewed using impromptu interview questions via whatsapp, which lasted about ten minutes for each participant. The findings shown that there were four challenges faced by the hearing impairment students-hearing devices, disruption to comprehend the lesson, not familiar with the online devices and emotionally affected during online classes. The findings further reveal that the hearing impairment students hampered their social interactions skills towards others during the pandemic.

#### Methodology

#### Setting:

Data was collected from the students enrolled in Monsoon Anubodh School running under Research Education & Audiological Development Society located in Jaipur, Rajasthan India. This society has been running teacher training course & also running four special schools in Jaipur in specialization area hearing impairment. The consent was obtained to conduct the research from organization, participants and parents of the participants also.

#### Sampling:

There were thirty five students participated in this study. Out of these thirty five participants twenty three were male and twelve were female. Among

these 35 twenty nine were using behind the ear (BTE) hearing aid and rest six were fitted cochlear implant (CI). Samples were also distributed on the basis of their school settings. Thirteen participants had studied at special school focusing oralism philosophy and twenty two participants had studied at special school focusing on total communication philosophy. All participants have good lip reading skills and interested to communicate with oral language in their school era.

#### Distribution of Samples-

#### On the basis of school setting

Gender	Studied at special school focusing oralism philosophy	Studied at special school focusing total communication philosophy
Male	09	14
Female	0.4	08
Total	13.	12

#### On the basis of Hearing aid used

Gender	Behind The Ear (BTE)	Cochlear Implant (CI)
Male	20	03
Female	69	03
Total	29	06

#### Data collection and Analysis Procedure

Data was collected via interview questions. Interviews were conducted in to three phases in first phase was ten participants and fifteen and ten participants was participated in second and third phase respectively. Interview was done one by one participant via whatsappvideo calling. There were no standard interview questions constructed. The interview questions were based on objectives of the study and spontaneous questions can be asked about the context and repeatedly asked until get the accurate information till meet the objective of the study.

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#### **Results and Discussion**

The responses of the participants were analyzed to see the impact of COVID-19 pandemic on Quality of Life of Divyangjan with Hearing Impairment with reference to their interaction with others. Through interview questions four basic impacts were come out which are summarized as below:

#### Impact Related to Hearing Device-

Participants of this study were BTE & CI user. These hearing devices are unable to pick up speech or sounds completely and accurately during interaction with others due to use of face- shield or mask. Through spontaneous interview questions participants were shown negative impact of hearing devices as they use.

#### Impact on Lip Reading Skills

Participants also had good lip reading skills but due to COVID-19 pandemic peoples were covered their lips by using masks which created a negative impact on interaction of divyangjan with hearing impairment with others and profoundly impacted their quality of life in terms of communication. As we discussed above that due to COVID-19 pandemic hearing devices and lip reading skills were negatively impacted this created a big barrier to communication between CWHI with others and shown reduced quality of life in terms of their communication and interaction with others. Furthermore, as the interaction of subjects with hearing impairment with others was poor so participants were feeling a handicapping situation while trying to communicate with others, and thus were unable to express their emotion in several situation when they were needed to do so.

#### Summary

The present study revealed that COVID-19 pandemic badly affected the communication related quality of life of Divyangjan with hearing impairment as the necessity to wear a mask for every one reduced their communication through lip reading skills. BTE and CI were show malfunctioning due to face shield and also done lockdown it was difficult to get repaired i fined a hearing aid/device. As a result COVID-19 paradees profoundly affected the quality of life as hearing impairment resulting in poor services them and inability to express properly their choice wishes or even emotions.

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This certificate is presented to <u>Mr Pramod Kumar Kulhade</u> for sharing his valuable knowledge as Resource Person for the topic titled <u>Communication option in teaching</u> <u>Children with Hearing Impairment</u> in the three days National Conference on "Communication option in teaching Children with Hearing Impairment" organized by Samarpan Badhir Vidyalaya 25, Krishna Kunj, Kalindipuram, Mau Road, Khandari, Agra-282005 held on 15 to 17 March-2021.

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Sunil Kumar Yadav Director Samarpan Badhir Vidyalaya

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Prakash Yadav Course coordinator Samarpan Badhir Vidyalaya

#### Publications and Certificate of Conference Presentation





Place: Agra Date: 02.08.2021

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