

Challenges Faced by Speech and Language Pathologists in Special Education Schools of Students with Hearing Impairment Punjab, Pakistan

Dr. Hina Hadayat Ali¹, Dr. Muhammad Javed Aftab², Dr. Muhammad Nazir³,
Dr. M. Naeem Mohsin⁴ & Muhammad Akram Sabir⁵

1. Assistant Professor/Coordinator, Department of Special Education, University of Education, Lahore (Faisalabad Campus), Punjab, Pakistan. Email: hina.hadayat@ue.edu.pk
2. Assistant Professor, Department of Special Education, Division of Education, University of Education, Lahore, Punjab, Pakistan. Email: drmjavedaftab@ue.edu.pk
3. Lecturer Special Education, Department of Special Education, University of Education, Lahore, (Faisalabad Campus), Punjab, Pakistan. Email: muhammad.nazir@ue.edu.pk
4. Associate Professor, Department of Education, GC University Faisalabad, Punjab, Pakistan. Email: mnmohsin71@gmail.com
5. Lecturer Special Education, Government Training College for the Teachers of Blind Lahore, Punjab, Pakistan. Email: makramsabir22@gmail.com

Abstract

The study aimed to explore the challenges faced by the speech pathologist in special education schools of students with hearing impairment in Punjab Pakistan. The study was based on descriptive methodology. All the male and female speech and language pathologist working in public special education schools of the students with hearing impairment of comprised of the population of the study. Convenient sampling technique was used to select the sample. A sample of 56 Speech and Language Pathologists was chosen from district Faisalabad, Toba Tek Singh, Chiniot, Jhang, Gujranwala, Layyah. A structure questionnaire containing 30 statements was framed for the speech and language pathologists of the public special education schools of the students with hearing impairment. Researcher visited the govt. special education schools of students with hearing impairment personally for the data collection. The collected data was recorded carefully and was described in the form of tables. The data was analyzed in terms of frequency, percentage, mean and standard deviation. The study revealed that speech-language pathologists faced administrative challenges such as lack of special rooms, internet, telephone, and projector/LED services. Many also reported absence of attendants, inadequate furniture, and poor coordination from teaching staff. Speech-language pathologists faced intervention challenges like limited time, poor parental coordination, excessive paperwork, lack of sound systems, and communication barriers during speech therapy for students with hearing impairment. Speech-language pathologists faced personalized challenges like exhaustion, burnout, and boredom, but remained confident and motivated to handle issues effectively. Speech therapists were facing administrative challenges at a higher level as compared to the intervention and personalized challenges. The study will help to provide more effective and suitable service deliver environment for the speech therapists in Punjab Pakistan.

Keywords: *Speech and Language Pathologist, Challenges, Hearing Impairment.*

INTRODUCTION

The phrase "hearing impaired" is frequently used to refer to those who are deaf or hard of hearing, as well as those who have hearing loss of any severity. The labels "deaf" and "hard of hearing," which are perceived as more positive than "hearing impaired," which suggests a

deficiency or that something is amiss that renders a person less than whole, are preferred by many deaf and hard of hearing people. Generally speaking, being "deaf" means having a hearing loss so severe that one can hardly hear at all. The term "hard of hearing" describes a hearing loss in which there may be enough residual hearing to support an aural aid or FM system, and help to improve speech (University of Washington, 2022).

The most common sensory organ deficiency in the human population is thought to be hearing impairment. According to estimates from the World Health Organization (2011), the number of people with impairments has grown from 42 million to over 360 million since 1985. Regardless of the age of the afflicted persons, hearing impairment often impacts their quality of life, economic independence, mental wellness, and interpersonal communication. According to Olusanya, Neumann, and Saundersc (2014), the areas of Asia Pacific, Southern Asia, and Sub-Saharan Africa have the highest levels of harm to hearing-impaired children and elderly people.

The development of speech and language is the region with the most harm. Research shows that a child with hearing loss (HIC) can significantly improve their communication skills with early identification and amplification. According to certain research, if a child's hearing loss is detected and treated appropriately by the time they are six months old, their language skills can catch up to those of their hearing counterparts. The social, emotional, psychological, and physical well-being of people with different levels of hearing loss may be significantly improved by appropriate and prompt rehabilitation efforts (Kochkin, 2005).

It has been said that speech is the result of the intricately coordinated movement of the oral-facial (mouth, lips, and cheeks) muscles, which produce meaningful words, phrases, and sentences. By the time they are eight years old, most kids have developed their verbal abilities. For some kids, speech development could be interrupted or stopped completely. These kids could have trouble making speaking sounds as a result. Children who struggle with speech sounds also struggle with phonological development and articulation. When certain sounds are mispronounced, such as when youngsters lisp the letters s and z, it is considered an articulation issue. Children who are unable to comprehend the rules governing a language's sounds, such as pronouncing the words "tat" for cat or "gog" for dog, are said to have a phonological impairment (Reilly *et al.*, 2015).

The goal of speech therapy is to help you speak more fluently and employ other language abilities. It enables you to communicate your ideas and comprehend what others are expressing to you. Additionally, it might enhance your memory and problem-solving abilities. 1) Early language abilities (particularly for young children beginning to speak and communicate), 2) Vocalization ability, 3) Language comprehension (the ability to grasp words and language), and 4) Fluency (the ease and effectiveness with which you can use language) are all improved by speech therapy.

The evaluation and treatment of speech abnormalities and communication issues is known as speech therapy. SLPs (speech-language pathologists), sometimes known as speech therapists, carry it out (Bramovitz A, et al. 2017).

In both children and adults, speech therapists prevent, evaluate, diagnose, and treat issues related to speech, language, social communication, cognitive communication, and swallowing. Training hearing-impaired people to build auditory skills that are mirrored in their verbal communication abilities is the primary focus of speech therapy services (Ray, 2017).

The impact of speech-language therapy on the academic performance of kids with hearing impairments in special education schools and centers was investigated in one research. Finding out how speech and language therapy affects hearing-impaired kids' learning and academic performance is the main goal of the study. Emphasize how speech therapy aids in the development of H.I. pupils' communication skills. This research makes some recommendations that might assist students with hearing impairments overcome the communication challenges they face in the classroom. Additionally, it gives teachers guidelines on how to better coordinate with H.I. kids. This study was carried out using a quantitative research methodology. The study's overall findings indicated that speech and language impairments affect the academic performance of children with hearing impairments and that speech therapists are crucial to the academic success of H.I. pupils. Speech therapists provide each kid with the information and chances they need to reach their maximum academic potential. The information provided indicates that speech therapists have used a range of methods and treatments to assist students in achieving their academic objectives (Waqar et al., 2023).

In Pakistan, speech-language pathology is a relatively recent profession. Due to linguistic and cultural differences, SLP entrepreneurship in Pakistan must be expanded in order to help the underprivileged and support the nation's economic development; hence, obstacles must be recognized. The study identified the obstacles speech-language pathologists must overcome in order to pursue entrepreneurship. Using a sample of 15 speech-language pathologists, the study produced a wealth of valuable data, with 11 (73.33%) highly qualified females and 14 (93.33%) having a master's degree and 10 (66.67%) having less than 10 years of experience. With a frequency of 45 for Infrastructure, 32 for Professionalism, 27 for Recruiting, 26 for Inclination, 23 for Unity, 22 for Legislation, 21 for Self-regulation, 20 for Wealth, 17 for Determination, 11 for Optimism & Matriarchy each, 10 for Expertise, 8 for Customers, 8 for Obstacles, and 2 for Ethics, the thematic analysis identified the outcome themes in descending order. According to their frequency, the most prevalent and significant problems or themes that speech therapists encounter as business owners are unity, professionalism, recruiting, infrastructure, and inclination (Jamali & Kiyani, 2023).

Speech-language pathologists deal with a variety of personal and professional challenges. A rising issue that can have severe repercussions for both the school and the students is the low retention rate of school-based speech-language pathologists (SLPs). The work environment's characteristics, role ambiguity, poor pay, and a rigorous schedule with increased caseloads—which might leave little time for documentation and lesson planning for the best service delivery models—are some of the factors causing this shortfall. The study's goal was to ascertain the present levels and determinants of burnout and occupational stress that SLPs encounter in the classroom. A cross-sectional survey approach was used to gather information from 453 school-based SLPs nationwide on their stress and burnout levels, career goals, access to social support, and workload management.

The relationship between the factors of interest and the occupational stress and burnout ratings was ascertained using multiple linear regression. At the height of the COVID-19 epidemic, from September to December 2020, data were gathered. On average, SLPs reported moderate access to social support, high emotional weariness, low-to-moderate emotions of depersonalization, moderate-to-high sentiments of personal successes, and overall stress levels in the moderately noticeable range. SLPs in this sample are described as feeling overworked and unproductive based on a standardized burnout measure. According to the results of linear regression models, the sample's total stress, emotional exhaustion, and depersonalization scores

were all best predicted by the sense of job manageability. The findings of this study provide the first steps for implementing a well-informed change for the workplace of school-based SLPs. The findings showed that school-based SLPs felt overworked and inefficient. The strongest predictor of their reported stress and burnout levels was their opinion of how manageable their task was. There includes discussion of recommendations for administrators, SLP supervisors, and other interested parties (Marante et al., 2023).

REVIEW OF RELATED LITERATURE

The ear is the physical component that is responsible for hearing. Hearing is how we learn about the outside world. It should be assumed that someone has an ear issue if they are unable to hear anything around them, regardless of how loud the sound is. It is an impairment, or more accurately, a physical, observable state of tissue that may have an impact on how the organ system of which the tissue is a part functions. Regardless of when it first appears, hearing impairment is a handicap that can impact how well a person functions overall (Okeke, 2001).

The inability to hear sounds clearly or at all is referred to as hearing impairment (also known as hearing loss). Congenital, or present from birth, hearing impairments can also be developed later in life. A person's capacity to communicate successfully in both receptive (understanding) and expressive (verbal) forms is impacted by hearing problems, which can vary in severity (Shepherd, 2024).

People who have trouble speaking can improve their communication skills and remove the obstacles caused by speech impairments with the aid of speech therapy. Learning to speak correctly, strengthening the speech muscles, and enhancing pronunciation are the objectives of speech therapy. From minor issues like hoarseness to partial speech loss brought on by brain injury, speech therapy may help with a wide range of speech impairments and concerns. Additional medical or psychological therapies may also be utilized, depending on the kind of condition. Risk factors include biological, psychological, and environmental elements that are connected to children's speech, language, and communication requirements (Bishop et al., 2017).

Speech-language pathologists should be equipped with the knowledge and abilities to treat deaf and hard-of-hearing patients in areas including normal communicative development and the consequences hearing loss has on communication development. According to ASHA, speech-language pathologists are qualified to treat and evaluate hearing-impaired people's communication skills and intervention, as well as to avoid communicative problems in the first place (ASHA, 2016).

In order to treat the deaf and hard of hearing population, which falls under the purview of speech-language pathology experts, they are given information, tools, and techniques. Due to factors including the kind, severity, and/or age at which hearing loss first appeared, the deaf and hard of hearing community is quite different. In order to use spoken language to treat the deaf and hard of hearing, speech-language pathologists undergo considerable training. Certification does not need proficiency in American Sign Language (ASL) or cultural sensitivity, but it does require classes like advanced audiology and oral rehabilitation (Hyter & Salas-Provence, 2019).

Innovation has led to advancements in technology and the creation of several kinds of communications networks. An increasing number of healthcare practitioners are using telehealth, which is one of these breakthroughs. Long-distance diagnostic and therapeutic

services from a doctor, nurse, or other healthcare provider are referred to as telemedicine. One such group of medical specialists that offer teleservices to a diverse patient population are audiologists and speech-language pathologists. Using online videoconferencing platforms and other specialized telecommunication technologies, telepractice enables the provision of diagnosis and intervention services to a range of patients with communication impairments over long distances (Fong & Fong, 2010).

"The application of telecommunications technology to deliver professional services at a distance by linking clinician to client, or clinician to clinician for assessment, intervention, and/or consultation," is how ASHA (2005a) defines telecommunication. Numerous benefits of telepractice include better access to services for clients with linguistic and cultural diversity, easier collaboration among multidisciplinary team members, cost savings for clients, and expanded availability of speech-language pathology and audiology services. This study will use the words "tele-practice" and "teletherapy" interchangeably (Theodoros, 2010).

Consequently, the potential of technology has been investigated in almost every aspect of life. The use of information and communication technology (ICT) to provide rehabilitation services to people across long distances in their homes or other locations is known as telerehabilitation (Vrinda & Reni, 2020).

Numerous studies have examined the viability and convenience of teletherapy compared to in-person therapy, with varying degrees of success. Teletherapy has become a feasible option for people with a strong educational and technological background, yet in-person treatments have long been considered the "gold standard" for treating patients with speech, language, and swallowing difficulties (Chaudhary, 2021). Telepractice, which was a critical necessity at the time, is more widely accepted and used, according to another study. The Speech Language Pathologists quickly adjusted and used the available technology to provide services, even if it seemed stressful to quickly adjust to utilize tele-practice (Aggarwal, 2020).

In India, very few audiologists and speech pathologists work remotely, and even fewer are qualified to provide services via telepractice. To increase speech therapists' knowledge of the technology, the Rehabilitation Council of India (RCI)-approved organizations can provide telerehabilitation courses in several nations. Research on the subject should also be given high priority. Additionally, it will provide therapists new knowledge and skills and improve their attitudes toward telepractice. To legitimize their services, these organizations must also take legal action. In order to encourage SLPs to use this type of treatment more often, it is suggested that professional associations take more action to remove obstacles for therapists and support tele-practice facilitators (Tohidast et al., 2020).

Although preliminary study has been done to examine professionals who have received training of any kind, more thorough studies are required to support the notion that professionals should get training. The dearth of standardized and evidence-based tools for teletherapy that makes little use of hands-on activities is another difficulty. This restriction might be further expanded to include a dearth of materials pertinent to the Indian setting. It is necessary to investigate the present resource usage habits of the professionals and students providing telepractice services (Mohan et al., 2017).

Statement of the problem

Students with hearing impairment face numerous challenges regarding the language and speech development. Speech pathologists play very effective role to overcome such issues. However, speech therapists have to deal with various problems to deliver their duties in a

befitting manner. Therefore, investigator aimed to determine the challenges faced by the speech pathologist in special education schools of students with hearing impairment.

Objectives of the study

Following were the objectives of the study:

1. To measure the administrative challenges faced by the speech pathologists in special education schools of students with hearing impairment.
2. To explore the challenges encountered by the speech pathologists related to speech therapy interventions.
3. To assess the personalized challenges encountered by the speech pathologists in special education schools of students with hearing impairment.

Research Questions

Following were the research questions:

1. What are the administrative challenged faced by the speech pathologists in special education schools of students with hearing impairment?
2. What are the challenges encountered by the speech pathologists related to speech therapy interventions?
3. What are the personalized challenged faced by the speech pathologists in special education schools of students with hearing impairment?

Significance of the study

The study will help to provide necessary information regarding the challenges faced by the speech pathologist in effective delivery of speech therapy services in order to bring some notable changes in the field. Speech therapy improves the communication skills of the students with hearing impairment. Therefore, communication challenges of the students with hearing impairment will be controlled by implicating the study recommendations for effective speech therapy usage. The study will help to understand administrative challenges faced by the speech therapists and ensure necessary provisions and measures to eliminate such challenges to enhance the productivity of the speech therapists. The study will help improvise the personalized aspects and facilities of the speech therapists by making the environment more safe and assistive for the professional and personal growth.

RESEARCH METHODOLOGY

This section deals with methodology adopted by researcher for the data collection. A structured questionnaire was designed for the Speech therapists of public special education schools/centers of district Faisalabad, Toba Tek Singh, Chiniot, Jhang, Layyah, Jhang and Gujranwala for the study purpose. The collected data has been analyzed to trace out the facts and figures about the study.

Nature of the study

The study was based on descriptive methodology. Descriptive research is a type of research where researchers try to “describe” the characteristics of the problem, phenomenon, or subject. The researcher studies the details and background information related to the subject.

Therefore, this research type deals with the questions of *what, when, and where* and try to find answers to these questions (Cobanoglu, 2023).

Population of the study

All the male and female speech and language pathologists working in public special education schools of the students with hearing impairment of district Faisalabad, Toba Tek Singh, Chiniot, Jhang, Layyah, Jhang and Gujranwala were comprised of the population of the study.

Sampling Technique

Convenient sampling technique was used to select the sample of male and female speech and language pathologists from the public special education schools of the students with hearing impairment.

Sample of the study

Sample of the study is obtained by collecting information only about some members of a "population". A sample of 56 Speech and Language Pathologists was chosen as under:

1. SLPs from special education schools of district Faisalabad.
2. SLPs from special education schools of district Toba Tek Singh.
3. SLPs from special education schools of district Chiniot.
4. SLPs from special education schools of district Jhang.
5. SLPs from special education schools of district Layyah.
6. SLPs from special education schools of district Gujranwala.

Tool of Research

A structure questionnaire containing 30 statements was framed for the speech and language pathologists of the public special education schools of the students with hearing impairment of district Faisalabad. All the questions were close ended comprising of the following options:

- | | | |
|------------------------------------|---|---|
| 1. Very Unsatisfied (VU) | - | 1 |
| 2. Unsatisfied (U) | - | 2 |
| 3. Satisfied Nor Unsatisfied (SNU) | - | 3 |
| 4. Satisfied (S) | - | 4 |
| 5. Very Satisfied (VS) | - | 5 |

The subjects were asked to tick the suitable choice as per their will according to their own interest. Demographic attributes included the gender, age, experience, academic and professional qualification, marital status, locality and school level.

A section of administrative challenges comprised of 10 statements with five point likert scale options. A section of intervention challenges comprised of 10 statements with five point likert scale options. A section of personalized challenges comprised of 10 statements with five point likert scale options.

Reliability and Validation of Research Tool

The research tool was designed with the help of supervisor and other faculty members for having reliable and valid results. All the questions were designed keeping in view the purpose and topic of the research. The research tool was designed in a very simple form for the clear perception at the time of data collection. Reliability of the research tool was determined with the help SPSS program using the Chronbach statistics. It was noted reliability index was greater than 0.7 required value and was suitable for the study purpose.

Collection of Data

Researcher visited the govt. special education schools of students with hearing impairment of district Faisalabad, Toba Tek Singh, Chiniot, Jhang, Layyah and Gujranwala personally for the data collection. Proper permission of head staff was taken for the purpose. Speech and Language Pathologists were informed the procedure of filling out the questionnaire. All the questions were elaborated at the spot by the researcher. The return rate of the questionnaire was hundred percent. The collected data was recorded carefully for having the accurate results for the study.

Data Analysis

The collected data was recorded carefully and was described in the form of tables. The data was analyzed in terms of percentage, mean and standard deviation for the proper elaboration of the of respondents views about the study.

RESULTS OF THE STUDY

The study was carried out to explore the challenges faced by the Speech and Language Pathologists serving in special education schools of children with hearing impairment. The results of the study have been presented below:

Table 1: Demography of Respondents

Variables	f	%
Gender		
Male Respondents	5	8.9
Female Respondents	51	91.1
Marital Status		
Married	46	82.1
Unmarried	10	17.9
Qualification		
Bachelor	11	19.6
Masters	6	10.7
Master of Philosophy	19	33.9
PhD	1	1.8
Others	19	33.9
School Type		
Special Education Center	39	69.6
Special Education School for Deaf	17	30.4
Locality		
Urban	41	73.2
Rural	15	26.8
Experience		
Less than 5 years	12	21.4
6-10 Years	27	48.2
11-15 Years	11	19.6

16 Years & Above	6	10.7
Age		
20-30 Years	11	19.6
31-40 Years	38	67.9
41 Years & Above	7	12.5

Note: *f*=frequency, %=percentage

Table 1 expressed the demographic information about the speech and language pathologists. It showed that there were 8.9% male speech pathologists while 91.1% were female. Marital status of the respondents indicated that there were 82.1% married whereas 17.9% unmarried participants of the study. The qualification status of the respondents showed that 19.6% were bachelor, 10.7% master degree holder, 33.9% M.Phil, 1.8% PhD whereby 33.9% others. 69.6% respondents belonged to special education centers of the Punjab, whereas 30.4% belonged to the special education schools for the deaf in Punjab. 73.2% participants had urban locality background, 26.8% had rural locality background. Experience status of the SLPs showed that 21.4% had less than 5 years experience, 48.2% had 6-10 years of experience, 19.6% had 11-15 years of experience, and 10.7% had 16 or above years experience. The age status of the respondents depicted that 19.6% were the part of 20-30 years age group, 67.9% were the part of 31-40 years age group while 12.5% were falling in the age range of 41 years and above group.

Table 2: Administrative challenges faced by the speech pathologists in special education schools of students with hearing impairment

Sr. No.	Administrative Challenges	N	Mean	S.D
1.	Special room is allocated for speech therapy services.	56	3.11	1.216
2.	Speech therapy room is adequately spacious to effectively conduct speech therapy sessions.	56	2.93	1.126
3.	Attendant is always available to help conduct the speech therapy services effectively.	56	2.16	1.005
4.	Adequate furniture is provided for the speech therapy services.	56	2.63	1.137
5.	Suitable lighting has been arranged in speech therapy room.	56	3.11	1.246
6.	Head teacher always help to meet administrative requirements.	56	3.20	1.052
7.	Teaching staff properly coordinate for effective delivery of speech therapy services.	56	3.23	1.062
8.	Public telephone facility is available to coordinate with the parents.	56	2.95	1.212
9.	Computer with internet facility has been provided for effective delivery of speech therapy services.	56	2.30	1.111
10.	Projector/LED is also available for speech therapy sessions.	56	2.20	1.212

Note: *N*=Number, *S.D*=Standard Deviation, *LED*=Light Emitting Diode

Table 2 depicted the administrative challenges faced by the speech pathologists in special education schools of students with hearing impairment in Punjab, Pakistan. It was noted more than half of the respondents ($M=3.11$, $SD=1.216$) agreed that special room was allocated for speech therapy services. Half of the participants ($M=2.93$, $SD=1.126$) told that speech therapy room is adequately spacious to effectively conduct speech therapy sessions. A large number of the participants were dissatisfied ($M=2.16$, $SD=1.005$) with the idea that attendant is always available to conduct the speech therapy services effectively. More than half of the respondents ($M=2.63$, $SD=1.137$) were dissatisfied that adequate furniture is provided for the speech

therapy services. More than half of the study participants ($M=3.11$, $SD=1.246$) were satisfied that suitable lighting has been arranged in speech therapy room.

About half of the study respondents ($M=3.20$, $SD=1.052$) agreed that head teachers always help to meet administrative requirement. More than half of the participants ($M=3.23$, $SD=1.062$) said that teaching staff properly coordinate for effective delivery of speech therapy services. Less than half of respondents ($M=2.95$, $SD=1.212$) agreed that public telephone facility is available to coordinate with the parents. A large number of respondents dissatisfied ($M=2.30$, $SD=1.111$) that computer with internet facility has been provided for effectively delivery of speech therapy services. Majority of study participants ($M=2.20$, $SD=1.212$) negated that projector or LED is also available for speech therapy sessions.

It showed that speech and language pathologists were facing various administrative challenges including the non-provision of special rooms, internet and computer services, telephone services, projector/LED service. Many of the speech and language pathologists also viewed that they were not provided with the attendant services and adequate furniture. Teaching staff was also not properly coordinating with the speech and language pathologists for effective delivery of services.

Table 3: Speech therapy intervention challenges faced by the speech pathologists in special education schools of students with hearing impairment

Sr. No.	Speech Therapy Intervention Challenges	N	Mean	S.D
1.	Speech therapy material is always available for the speech therapy sessions.	56	3.02	1.136
2.	Ample time is given to deal with each student with hearing impairment.	56	2.80	1.119
3.	Parents always coordinate for speech development of their children.	56	2.25	1.031
4.	Cultural limitations hamper the speech therapy work.	56	2.86	1.034
5.	Students show appropriate behavior during the sessions.	56	3.43	.912
6.	Substantial paper work affects the speech therapy sessions.	56	3.12	1.129
7.	Suitable sound system is available to conduct the speech therapy session.	56	2.27	1.053
8.	Acoustic conditions are made suitable for speech therapy sessions.	56	2.48	1.095
9.	Communication barrier hampers the workflow of speech therapy.	56	2.96	1.159
10.	Sessions are flexibly conducted.	56	3.32	1.029

Note: N=Number, S.D=Standard Deviation

Table 3 expressed the speech therapy intervention challenges faced by the speech pathologists in special education schools of students with hearing impairment in Punjab, Pakistan. It was noted almost half of the respondents ($M=3.02$, $SD=1.136$) agreed that speech therapy material is always available for the speech therapy sessions. About half of the participants ($M=2.80$, $SD=1.119$) told that ample time is given to deal with each student with hearing impairment. A large number of the participants were dissatisfied ($M=2.25$, $SD=1.031$) with the idea that parents always coordinate for speech development of their children. Less than half of the respondents ($M=2.86$, $SD=1.034$) were dissatisfied that cultural limitations hamper the speech therapy work. More than half of the study participants ($M=3.43$, $SD=0.912$) were satisfied that students show appropriate behavior during the sessions.

About half of the study respondents ($M=3.12$, $SD=1.129$) agreed that substantial paper work affects the speech therapy sessions. A great number of the participants ($M=2.27$,

SD=1.053) were dissatisfied that suitable sound system is available to conduct the speech therapy sessions.

Most of respondents (M=2.48, SD=1.095) agreed that acoustic conditions are made suitable for speech therapy sessions. Less than half of respondents satisfied (M=2.96, SD=1.159) that communication barrier hampers the workflow of speech therapy. About half of study participants (M=3.32, SD=1.029) agreed that sessions are flexibly conducted.

It exhibited that speech and language pathologists were facing various speech therapy intervention challenges including the less time allocation, poor coordination of the parents of students with hearing impairment, extra paper work burden, non-provision of suitable sound system, and communication barriers to effectively conduct the speech therapy sessions for the students with hearing impairment.

Table 4: Personalized challenges encountered by the speech pathologists in special education schools of students with hearing impairment

Sr. No.	Personalized Challenges	N	Mean	S.D
1.	Feel satisfied with the job.	56	3.50	1.062
2.	Easily exhausted after the sessions.	56	3.13	.974
3.	Salary is adequate to meet the life requirements.	56	3.27	1.018
4.	Feel depressed during the job sessions.	56	2.63	.945
5.	Fully confident to deal with students with hearing impairment.	56	3.82	.974
6.	Feel burnout after the sessions.	56	2.80	.903
7.	Feel pressured during the working sessions.	56	2.82	.993
8.	Feel bored during the sessions.	56	2.54	.990
9.	Face trust issues with others.	56	2.87	1.080
10.	Feel anxious about the job future.	56	2.84	1.141

Note: N=Number, S.D=Standard Deviation

Table 4 represented the personalized challenges encountered by the speech pathologists in special education schools of students with hearing impairment in Punjab, Pakistan. It was inferred that a great number of the respondents (M=3.50, SD=1.062) agreed that they were satisfied with their job. Less than half of the participants (M=3.13, SD=0.974) told that they easily exhausted after the speech therapy sessions.

Most of the participants were satisfied (M=3.27, SD=1.018) with the idea that salary is adequate to meet the life requirements. More than half of the respondents (M=2.63, SD=0.945) were dissatisfied that they feel depressed during the job sessions. Majority of the study participants (M=3.82, SD=0.974) were satisfied that they were fully confident to deal with students with hearing impairment.

Most of the study respondents (M=2.80, SD=0.903) agreed that they feel burnout after the sessions. Less than of the participants (M=2.82, SD=0.993) were dissatisfied that they feel pressured during the working sessions. A great number of respondents (M=2.54, SD=0.990) disagreed that they feel bored during the sessions. Less than half of respondents dissatisfied (M=2.87, SD=1.080) that they face trust issues with others. Less than half of study participants (M=2.84, SD=1.141) dissatisfied that they feel anxious about the job future.

It depicted that speech and language pathologists were facing moderate level of personalized challenges including easy exhaustion after the sessions, burnout feeling after sessions, bore feelings. On the other hand, speech and language pathologists showed good spirit and confidence to deal with the issues more effectively.

Table 5: Level of various challenges faced by the speech and language pathologists

Sr. No.	Challenges	N	Mean	S.D	Level
1.	Administrative challenges	56	2.78	0.775	Higher
2.	Intervention challenges	56	2.85	.692	Moderate
3.	Personalized challenges	56	3.02	0.619	Lower

Note: N=Number, S.D=Standard Deviation

Table 5 presented the level of various challenges faced by the speech and language pathologists. It was inferred that speech and language pathologists were facing the administrative challenges at higher level ($M=2.78$, 0.775), intervention challenges at moderate level ($M=2.85$, 0.692), whereby personalized challenges ($M=3.02$, 0.619) at lower level.

FINDINGS OF THE STUDY

The study aimed to explore the impact of challenges faced by the speech pathologist in special education schools of students with hearing impairment at higher education.

The administrative challenges faced by speech pathologists in special education schools for students with hearing impairment in Punjab, Pakistan showed that over half of the respondents ($M=3.11$, $SD=1.216$) reported that a special room was allocated for speech therapy, while half ($M=2.93$, $SD=1.126$) found the room adequately spacious. Many participants were dissatisfied with the availability of attendants ($M=2.16$, $SD=1.005$) and the adequacy of furniture ($M=2.63$, $SD=1.137$).

More than half were satisfied with the lighting arrangement ($M=3.11$, $SD=1.246$). About half agreed that head teachers assist in meeting administrative needs ($M=3.20$, $SD=1.052$) and that teaching staff provide proper coordination ($M=3.23$, $SD=1.062$). Fewer respondents ($M=2.95$, $SD=1.212$) agreed on the availability of a public telephone. Many expressed dissatisfaction regarding internet-connected computers ($M=2.30$, $SD=1.111$) and the availability of projectors or LEDs for therapy ($M=2.20$, $SD=1.212$).

Speech therapy intervention challenges faced by speech pathologists in special education schools for students with hearing impairment in Punjab, Pakistan are numerous. Around half of the respondents ($M=3.02$, $SD=1.136$) confirmed the availability of therapy material, and a similar number ($M=2.80$, $SD=1.119$) said enough time is given per student. Many were dissatisfied with parental coordination ($M=2.25$, $SD=1.031$) and sound system availability ($M=2.27$, $SD=1.053$).

More than half ($M=3.43$, $SD=0.912$) were satisfied with student behavior during sessions. About half agreed that paperwork affects sessions ($M=3.12$, $SD=1.129$) and that flexible scheduling exists ($M=3.32$, $SD=1.029$). Less than half were satisfied with acoustic conditions ($M=2.48$, $SD=1.095$) and felt communication barriers affect workflow ($M=2.96$, $SD=1.159$).

The personalized challenges faced by speech pathologists in special education schools are various in nature. Many respondents ($M=3.50$, $SD=1.062$) expressed job satisfaction, and most felt their salary was adequate ($M=3.27$, $SD=1.018$). A majority ($M=3.82$, $SD=0.974$) reported confidence in handling students with hearing impairment. Less than half felt easily exhausted ($M=3.13$, $SD=0.974$), while many agreed they experience burnout ($M=2.80$, $SD=0.903$). A large number disagreed with feeling depressed ($M=2.63$, $SD=0.945$), pressured ($M=2.82$, $SD=0.993$), or bored ($M=2.54$, $SD=0.990$) during sessions.

Fewer participants reported issues with trust ($M=2.87$, $SD=1.080$) or anxiety about job security ($M=2.84$, $SD=1.141$). Speech and language pathologists were facing the administrative challenges at higher level ($M=2.78$, 0.775), intervention challenges at moderate level ($M=2.85$, 0.692), whereby personalized challenges ($M=3.02$, 0.619) at lower level.

CONCLUSIONS OF THE STUDY

The study aimed to explore the impact of challenges faced by the speech pathologist in special education schools of students with hearing impairment at higher education. Following conclusions were inferred from the study:

- The study indicated that speech and language pathologists were facing various administrative challenges including the non-provision of special rooms, internet and computer services, telephone services, projector/LED service. Many of the speech and language pathologists also viewed that they were not provided with the attendant services and adequate furniture. Teaching staff was also not properly coordinating with the speech and language pathologists for effective delivery of services.
- Speech and language pathologists were facing various speech therapy intervention challenges including the less time allocation, poor coordination of the parents of students with hearing impairment, extra paper work burden, non-provision of suitable sound system, and communication barriers to effectively conduct the speech therapy sessions for the students with hearing impairment.
- Speech and language pathologists were facing moderate level of personalized challenges including easy exhaustion after the sessions, burnout feeling after sessions, bore feelings. On the other hand, speech and language pathologists showed good spirit and confidence to deal with the issues more effectively.
- Speech and language pathologists were facing the administrative challenges at higher level, intervention challenges at moderate level, whereby personalized challenges at lower level.

Recommendations of the Study

The study recommends to provide the attendant for the speech therapy sessions, internet facility, and projector/LED for effective delivery of speech therapy services. There is a need to provide a healthy and comfortable environment to the speech therapists to eradicate their boredom during the services time. The provision of sound system, acoustic environment, computer system, and furniture is highly recommended for the effective delivery of speech therapy sessions. The parents and the teaching staff should be adequately trained for collaboration and coordination with the speech therapists in order to make the speech therapy services more proficient and objective oriented.

Future research may be conducted to assess the self-efficacy of the speech and language pathologist in all kind of special education schools and colleges to make the speech therapy services more effective.

Limitations of the study

A self-made questionnaire was designed by the researcher with the help of her supervisor in order to assess the challenges faced by the speech pathologists in the special education schools of students with hearing impairment.

Delimitation of the study

The study was delimited to the special education schools students with hearing impairment of the districts Faisalabad, Toba Tek Singh, Chiniot, Layyah, Gujranwala and Jhang.

Ethical consideration

All ethical principals were taken into considerations while data collection procedure and interacting the study subjects. The social, physical and psychological measures were given due consideration to protect the rights of the subjects of the study.

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