Sign Language Syllabus Designing For Pakistani Learners With Auditory Impairment: A Needs Analysis

Tayaba Amin	MS Scholar, Department of Social Sciences & Humanities, University of Sialkot, Pakistan tayyabaamin460@gmail.com
Maria Naseem	Lecturer, Department of English and Literary Studies, University of Management and Technology, Lahore, Sialkot Campus, Pakistan maria.naseem@skt.umt.edu.pk
Zonaira Dar	MS Scholar, Department of Social Sciences & Humanities, University of Sialkot, Pakistan zonairadar053@gmail.com

Abstract: *This study implements the needs analysis model on the current syllabus of Pakistani auditory-impaired students. Two private schools in the Sialkot district have been selected to understand the problems of deaf learners and their needs. No separate syllabus has been designed for disabled students according to their requirements. So, there is a dire need to implement a needs analysis model to highlight the issues of deaf students in their existing syllabus. A mixed-method approach has been used to collect data and check the viability of the results. The quantitative data was gathered by a Point Five Likert scale questionnaire of the sample of 40 teachers. Whereas, qualitative data has collected by focus group interviews of 8 teachers and parents to validate the qualitative results. The findings of the current research have provided different views of teachers, and parents regarding difficulties faced by deaf students. They have also highlighted the weaknesses, lacks, needs, and wants in the given syllabus. The study has observed that teachers have also faced difficulties while teaching deaf students and highlighted the weaknesses of the current syllabus design for the auditory impaired students. Therefore, it is suggested that the need of an hour is to design a special syllabus for deaf learners.*

1. Introduction

In Bronowski's view, humans are blessed by nature with voice capability, and they communicate and interact with each other using this ability. Hence, spoken language is known as one of the important parts of human communication. Unfortunately, not everybody has this blessing of hearing and speaking and call him or her deaf. Deaf people cannot speak and listen just like normal people (Hauser et al., 2010). Therefore, this gap is filled by Sign Language as the basic communication method between deaf people and normal people (Marschark et al., 2006). A language is a mode of communication among human beings (Navaitthiporn et al., 2019). Without language, they cannot share their intentional message. There exist numerous languages for human beings to interact with each other (Cormier et al., 2012). These languages can be written or spoken but among these spoken languages, there is a special kind of language, which is neither written nor spoken. This is known as Sign Language, which is developed for the deaf community (Gondal, 2018). As explained by Black, people cannot live and do work without interaction with others, for example, gossiping, talking, sharing ideas or emotions, and chatting. When they talk to others, all forms of

conversation involve what they want to communicate. They used language for communication (Black, 2019). Baktir (2013) defined communication as a function of language that is carried out by speech in spoken language. Speech is denoted by shorter or longer elements of language that are used to express specific purposes, including written and spoken text (Baktir, 2013).

It shows the importance of sentence structure in language to make communication easier for listeners. When talked about the deaf or dumb, Sign Language comes into our mind (Stokoe Jr, 2005). Deaf or dumb use gesture-based communication as their basic medium for sharing their intentional meaning (Khan et al., 2020). SL is a visual language and the use of gestures by making specific shapes of fingers, hands, eyes, faces, heads, and arms (Karbasi et al., 2017). Without SL, we are unable to understand disabled people in our society. Moreover, it is also witnessed, that there is no comprehensible international system for deaf people to learn in the same way. There are different Sign languages in the world such as British Sign Language, American Sign Language, Spanish Sign Language, Israeli Sign Language, etc., and every country has its Sign Language for the deaf to communicate and share their views (Malenfant, 2013). In Pakistan Sign Language has developed its semantics, syntax, and vocabulary (Naseem et al., 2019). It has established different changes, and improvements according to the need of time like other languages (Khan et al., 2014). Pakistan Sign Language lacks linguistic development. It has no grammatical development, due to a lack of linguistic rules and sentence structure (Ahmad & Yousaf, 2011).

Pakistan Sign Language (PSL) development, came to know that it has no major role in the development of education for the hearing impaired. It has not gotten the status as a course or subject for the deaf to learn. According to Pushpanathan (2013), needs analysis provides insight to instructors and learners as a road map. It determines the attitudes and views of learners and teachers. It also supports running language curriculums and launches materials according to

the stages of learners (Pushpanathan, 2013). Needs analysis implementation is the main target of the current research, by implementing the needs analysis the students' needs and attitudes towards the given courses are emphasized. Deaf students and their syllabus design both are the main aim of the present study. As mentioned by Chunling (2014) syllabus designing is an important step to arrange for the learning process systematically. It helps to develop the content according to the level of learning for learners.

In Pakistan, Sign Language is used by the deaf community to communicate, but on the other side, it is also noted that Sign language is portrayed as difficult to learn due to a lack of interest. The focus of this research is to implement a needs analysis model on the syllabus design for Pakistani auditory impaired students. Although, much work has been done on the syllabus design for normal students. As stated by Khan et al., (2020), it is observed that there is a huge difference between normal students and deaf students. It leads to highlight a gap that there is no serious attention and steps toward Sign users' syllabi as a progressive and necessary language. The researchers has emphasized the particular problem from previous studies that different works are done on Sign Language but there is no work on the syllabus design for the deaf in Pakistan. Therefore, This study is going to highlight the learning impediments Sign Language users face in their existing syllabus, weaknesses in the current syllabus of auditory impaired students, and requirement of need analysis in designing syllabus for Pakistani auditory impairment students at the secondary level according to their learning needs.

2. Literature Review

Sign language is known as visual language and the use of gestures by making specific shapes of fingers, hands, eyes, faces, heads, and arms (Karbasi et al., 2017). Gesture-based communication is called Sign Language. SL is the basic communication between hard-of-hearing individuals. Communication through sign is a visual motion dialect (Khan et al., 2020). Hard-of-hearing individuals use gesture-

based communication as their primary medium for correspondence. Auditory impaired people, just like the spoken language use sign language by using different Signs (Liang & Ouhyoung, 1998). It has its structure, grammar, and rules. In many countries, sign languages have the status of the first language for the deaf (Krausneker, 2008). According to Khan (2020), deaf or dumb have gesture-based communication as a basic medium for sharing their purposeful meaning. They have no other language for communication and sharing their feelings.

As mentioned by Khan et al., (2014) Sign language exists in every country. In addition, it is according to the needs of Sign users as America has American Sign Language (ASL), China has Chinese Sign Language (CSL), British has British Sign Language (BSL), and similarly, Pakistan has Pakistan Sign Language (PSL). It is also noticed that the hearing impaired and normal people gap is tried to solve (Khan et al., 2014). For this purpose, Information Technology has been used to reduce this gap. Although Sign Language has been highlighted as not a complete language according to the linguistics properties due to missing features such as morphology, arbitrariness, and grammatical rules as in spoken language (Dotter & Okorn, 2003). In the Communication process of every human being, language plays a vital role. As described by Johnson, it has not happened with deaf learners due to their disability (Johnston, 1989). The deaf community is only realized when we communicate with them.

SL provides hearing-impaired people with a medium of communication (Cheok et al., 2019). It is used for auditory impairment better than as compared to the normal community. However, the bad situation is raised when it is remarked that normal people are in numbers cannot understand the Sign language. Therefore, sign users have many communication problems with society (Maarif et al., 2012). Moreover, it has a combination of complicated gestures, hand, arm movements, and different facial expressions. They faced difficulties in communication with normal people. In 2009, Zainuddin et al. stated about Sign Language users have the same physical characteristics as normal people have, but their way of communicating is different from normal people by making specific shapes of fingers, hands, eyes, face, head, and arms known as Sign Language. Sign Language is recognized as the most essential communication tool for the deaf to communicate therefore they could not get exclusive status as compared to spoken language (Zainuddin et al., 2009). It has a minority in many societies. In 2014, Khan has mentioned that Sign users in Pakistan use Pakistan Sign Language, and linguistically it is under-investigated due to a lack of grammatical rules, contents, absence of structure, and morphology. Pakistan Sign language has been established in Pakistan, Urdu is the national language, and the people who have command over the first language and other languages would consider trilingual (Alvi, 2020). However, persons with Hearing impairment are considered minorities both culturally and linguistically.

The Curriculum is an immense statement of philosophy, design, and complete teaching implementation, on the other hand, a syllabus is linked to giving order and organizing content design (Flowerdew, 2013). As stated by Soto (2015) it is a broad process to develop a Curriculum. The Curriculum is explained in different ways. For example, the curriculum is an arrangement of all those things, which are experienced by individuals to develop their abilities. It is also defined as the series that schools arrange for students to perform their roles in the learning process (Soto, 2015). South African Sign Language is used as the first language for the deaf in South Africa. In 2001, the South African government included a national unit for Sign language. SASL is promoted as a language for the deaf community. It is also considered a manual language in South Africa. The first South African National Council for the Deaf (SANCD) was changed to the Deaf Federation of South Africa in 199 (Morgan & Kaneko, 2018). Akach (2009) discussed the school and learning system for the deaf in South Africa. Due to the difficult acquisition process, deaf children learn sign language as their first language but in school not at home. Ting Yang

(2019) in Comparison of Chinese and American Sign Language Interpretation Majors and Some Enlightenment, the curriculum of both countries is about SL. Here the researchers did a comparison of curriculum design, the system of tests, the system of certification, employment of Chinese, and American Sign Language (Yang, 2019). The researchers observed that China has limited resources and facilities to teach students systematic way as compared to the American system. Whereas, the United States has a comprehensive system compared to China in providing qualifications and employment. Dzulkifli et al., (2021) has reported educational development and a new way of learning for hearing-impaired students in Malaysia. The learning and teaching have been developed formally in Special Education Schools. The schools are offering a Special Education Integration Program. The curriculum is based on Islamic Education subjects. The teachers are advised to prepare lesson planning according to the Quran and students' understanding level. This system has consisted of eight primary schools. Moreover, the hearing-impaired students are given tasks to recognize the Arabic letters.

Sign learners faced problems not only in the physical environment of school but also in getting access to learning as they wanted. All over the world during COVID-19, students have faced many problems in learning and continuing their studies. Although they get learning process by attending online learning programs, on other hand, the auditory impairment students are neglected in this whole process of learning. As stated by Wazalwar (2021) difficulties faced by the deaf during COVID-19. When the students are restricted by the order of the government to study at home by using mobile phones and laptops .in this difficult time the most influenced group who has faced problems in learning is children with disabilities. The researcher has also highlighted technological problems faced by deaf and dumb as compared to normal children (Wazalwar & Shrawankar, 2021). In addition, in Pakistan deaf children has lack evidence on the educational provisions. They are educated by arranging a separate school system

for deaf children in Pakistan. They are educated with the help of fingerspelling, sign language, lip-reading, audio-system voice therapy, hearing aids, total communication, and speech therapy training (Lynch & Terlektsi, 2021). They learned by using all these aids. Their curriculum depends on the curriculum for normal students. In Pakistan, many types of researches are conducted to develop programs for the betterment of auditory impairment and to reduce the gap in communication. These programs tried to finish the gap between the deaf and the normal communities (Arsh & Darain, 2019). However, there is no such study is done which explains the effective results of these programs. In recent years, many studies have been done on different issues relating to auditory impairment. They are facing many problems such as communication barriers between them and normal people, educational issues, unemployment, lack of socialization, and lack of access to modern technology and science education. Therefore, the current study is conducted to highlight auditory impairment learning problems, inappropriate syllabus, weakness in the existing syllabus, and the problems faced by Sign learners in Pakistan. Present study also emphasized on the importance of Needs Analysis for syllabus designing and problem solving of auditory impaired students at the secondary level.

3. Research Methodology

3.1 Research Design

This study has been conducted by applying a mixed-methods approach to analyze the needs of auditory impairment at the secondary level in Pakistan. Mixed methods research is considered suitable to provide strong results of finding in research (Johnson et al., 2007). This study is conducted by implementing the mixed methods approach (Zohrabi, 2013). The mixing of data provides reliable results (Creswell & Creswell, 2017). In this study, research has taken the needs analysis model to highlight the needs, wants, lacks, and necessities in their learning process (Betti, 2021). They should learn education, as normal students are learning according to their needs for this purpose researcher has selected disabled students for taking tests so that, their

learning issues can be resolved. The subject teachers are also selected who have experience to teach disabled students. Research has provided them with a questionnaire to fill for gaining the data collection according to research questions. In the next process, teachers and parents of disabled students are called to participate in focus groups interviews for data collection. They were given questions to fill. These questions are completed according to the learning issues of Sign learners in their syllabus design. While focus groups interview questions are filled based on questionnaire results. Teachers and parents are asked to answer according to the learning problems of students.

Regarding the Pakistani context, this study has also highlighted the different types of data collection. For collecting, the quantitative type of data collection questionnaire has been given to teachers. For collecting the qualitative type of data collection, this study has organized focus group interviews. According to the learning point of deaf students, this study has organized questionnaires and interviews. Disabled students have also been given chance to share their views according to their learning problems of students. Thus, this study is conducted to make an effort for improving the quality of education for disabled students at the secondary level. The findings of this study can be helpful for the Ministry of Special Education to design a new syllabus for deaf students.

3.2 *Research Participants*

This study is conducted to investigate the needs of Sign Language users at Special Education Schools to implement the needs analysis to identify the problems of Sign users. Some practical examples are taken by observing the progress of students. This research is designed to analyze the needs of Pakistani Sign Language users regarding their syllabus. By taking the perspectives of teachers, and parents. One is the teacher's group and the other is the teacher and parent's group. Hard-of-hearing students are considered a special group of people who want special attention and special education.

3.2.1 Group One

For this purpose, the researcher has selected 40 teachers who are teaching hard-of-hearing students from different schools of special education. These students are studying at the secondary level in the Pakistan district of Sialkot. The teachers are agreed to participate in the research. They are asked to fill Questionnaire. By giving questionnaires, teachers are asked to give their views on the present syllabus designed for Pakistani sign learners. The researcher has also discussed with them their views regarding the study, learning process, and the present syllabus. They told about the deaf student's problems and views for further recommendations according to their needs. In this way, the researcher has implemented the Needs analysis model. It is also noticed there is no Needs Analysis of the syllabus design for sign users in Pakistan. They taught the same curriculum as normal students. However, they have no subjects of their own choices. They cannot learn their favorite subjects.

3.2.2 Group Two

Eight teachers and parents are selected for focus group interviews. During the interview, parents and teachers were asked to give their views on the current syllabus designed for Pakistani sign learners. Teachers are well known for the progress of students. They know about the students' difficulties, lacks, wants, and weaknesses of the current syllabus. The researcher has also interviewed teachers about the different problems faced by students. The researcher asked for a suggestion for a new syllabus design. The other participants were parents who are asked to give suggestions for the new curriculum for the Auditory impaired. These parents and teachers are interviewed at the same time. Both have given their views according to the needs of sign learners. There is also discussion regarding the current syllabus design for Sign learners. Qualitative data were collected through focus group interviews. Quantitative data was collected through a questionnaire from teachers in different special education schools.

3.3 *Sampling*

The researcher has selected purposive sampling

for this research. For data collection, the population consists of 40 teachers, and 8 parents and teachers. This kind of sampling is already used. Through this population sample, a study has highlighted different problems issues in the syllabus, lack of learning process, and suggestions. This study is conducted at special education schools in the Sialkot district. Quantitative data was collected through a questionnaire from 40 teachers in different special education schools. Qualitative data were collected through 8 Parents and teachers for focus group interviews. The teachers are serving in the same institutions as deaf students.

3.4 *Research Instruments*

This study is conducted to highlight different issues of deaf learners regarding their study. It has developed a questionnaire and focus groups interviews (Adams & Cox, 2008; Fife-Schaw, 1995). A questionnaire is for teachers while a focus groups interview is taken from teachers and parents. The present study has used a mixed-methods approach.

4. Data Analysis and Discussion

4.1 *Findings from Questionnaires*

The main resource for collecting the data in this research was a close-ended questionnaire. It was used to gather data from the teachers about syllabus design for auditory impaired students in Pakistan. The teachers are asked to give their views about the current syllabus design, its weaknesses, the deaf students' learning process, and its recommendation for the future. The researcher has used the Likert scale to determine the accurate opinion.

4.1.1 Quantitative Analysis

The quantitative analysis results are presented by using descriptive analysis. There were 15 questions in the close-ended questionnaire, and 40 respondents has given their answers to the survey. The quantitative results of the questionnaire were taken from experienced teachers who are teaching hearing-impaired students. It can be observed that hearing-impaired students are facing many issues regarding their current syllabus design. These students should provide with the same rights in

their education as normal students have. Although the normal students get an education even syllabus according to their mental level and learning needs. However, we talk about deaf students, but we never tried to do better for these disabled students. However, we all consider them abnormal, but all the educational experts neglect their needs. In Pakistan, Sign learners have no specific syllabus at all levels. The researcher has raised this issue by collecting data from deaf school experienced teachers. The researcher did the quantitative analysis to present authentic results.

4.2 *Findings from Focus Group Interviews*

4.2.1 Qualitative Results

The present research uses qualitative analysis of focus group interviews. The five main themes related to the existing syllabus design for Pakistani auditory impaired students have been discussed in detail. The themes taken from the focus group interview are given below:

• Problems Faced by Deaf Learners in the Current Syllabus

• Weaknesses in the Existing Syllabus

• Benefits of the Current Courses

• Implementation of Needs Analysis Model

• Suggestions for New Curriculum for Pakistani Deaf Students

It shows that the current syllabus is not filling the needs of deaf learners. It is not providing valuable results. The deaf learners are not motivated by the current syllabus. They are not taking an interest in learning the subjects. Teachers and parents both want a special syllabus for students. So that teachers of deaf students can teach students without facing problems. Moreover, students can learn the appropriate syllabus. Finally, the results of focus groups interviews showed that there are several troubles faced by hard of hearing students in the present curriculum. They are not taking an interest in continuing their study. Due to this kind of behavior, they are creating a disturbance in classrooms. We can say that they are treated unjustly for educational needs. Although they are called disabled students, difficult students,

and hard of hearing students, they are not provided by the special syllabus. They are mandatory to learn the same curriculum as normal students are learning.

4.3 Discussion

The present research has aimed to highlight the current syllabus design of the Pakistan sign learner with auditory impairment. This study has been conducted in educational institutions for special students in Sialkot. Nevertheless, when the discussion is done about the educational needs of deaf students again it can notice a huge gap between syllabus design for deaf and normal students. It is accepted that both cannot understand each other without Sign Language but the right to education should not come in the category of gap or difference. It should provide equally to both. It is discussed in previous studies about the learning issues of deaf students. Different researchers from different countries have mentioned the learning problems of disabled students. They stressed to ensure the quality of education for deaf learners. As stated by Khasawneh (2021), deaf students faced problems with English subjects, teachers also teaching issues with teaching English subjects. The researcher has suggested training for teachers and the betterment of the English language for deaf learners according to their needs (Khasawneh, 2021). In other research, researchers have focused on deaf students' educational outcomes as a long-term global challenge. Although, the literature is full of problems of deaf students, and debates about their educational issues. As mentioned in the literature review of the current research. American Sign learners' problems, British Sign learners' problems, Malaysian Sign learner problems, and South African Sign leaners problems. Mentioned by (Mousley & Kelly, 1998).

The government of Malaysia has made different international policies for the rights of disabled people related to equality in linguistically, culturally, and socially (Miles et al., 2018). As is highlighted in the results of the questionnaires, nowadays, the use of multimedia is considered important for students. However, unfortunately, deaf students in Pakistan are not provided with a special syllabus according to their needs. The results of statement 2 showed that the current syllabus for Pakistani deaf learners is not according to them. The results of 3, 4, and 5 statements showed the difficulties of deaf students to learn the subjects. Even they cannot understand the basic concepts given in the syllabus. The results of the 8 statements showed that they faced problems in assessments. The results of statements 13, 14, and 15 revealed the needs of deaf students. As the results showed, there should be a special syllabus for impaired students. And the needs analysis model should be implemented to design a new syllabus for them according to their needs.

The overall results of the questionnaire show the situation of the current syllabus design for auditory impaired students. It presents they want their syllabus which can bring achievements for them and help to build their dreams. The responses given by focus group interviews, teachers, and parents both gave stress to highlight the needs of deaf learners. They pointed out many problems with syllabus design. As the researcher has asked one by one different questions. As mentioned in the themes. They are first asked to discuss the issues faced by deaf learners in their syllabus. They have discussed hearing impaired students' many difficulties in learning in classrooms properly. They do not show any interest in learning. In the second theme, the researcher has asked about the weaknesses of the current syllabus. They shed light on the weaknesses of the current syllabus by highlighting its weaknesses.

As they defined, the current syllabus is not according to the deaf learner's needs. It is not fulfilling their needs. In the same way, there is also asked by the researcher the third theme, to know the achievements of the current syllabus. Even they are facing issues with learning the basic concepts. Then one can judge the other achievements of the current syllabus. While, in the fourth theme, participants are asked to give their opinions regarding the needs analysis model. They completely agreed to implement a needs analysis model to highlight the needs, wants, and lacks in the syllabus design for deaf learners. In the last theme, the researcher has

provided valuable suggestions for the new syllabus design for deaf learners.

The purpose of the present research is to highlight the learning impediments faced by auditory impaired students. For this purpose, data is collected from teachers and parents. Whereas, parents are asked to share their views of the deaf students' progress in their current syllabus and suggestions for a new syllabus. The main goal of this research is to highlight the achievements of the current syllabus so that the new syllabus for auditory-impaired students can be prepared. Through this study, the researcher has tried to expose the issues of deaf students in their current subjects. However, they are learning these subjects by force due to no other choice. They have to learn but the results of the questionnaire and focus group interviews showed that all auditory impaired students must want a new curriculum according to their learning requirements. They should get equal rights in education as the normal students have. Their special syllabus should be designed. By keeping all these objectives, the researcher has tried to collect data from teachers and parents to present the intended results.

5. Conclusion and Future Recommendation

The researcher's goal was to highlight the problems of deaf students and suggest for new syllabus for them. The new program for deaf learners can provide them benefits in the future. They can learn according to their choices and practical base syllabus. They can learn all the subjects in full interest. The teachers who are teaching deaf students should complete understanding of Sign Language. In short, auditory impaired students should provide the same educational rights as normal students.

To conclude the overall discussion of the current research, one can get the results of questionnaires and focus groups interviews, that there is a dire need for hard of hearing students that it is very essential for the government to give attention to the syllabus for auditory impaired students in Pakistan. Their syllabus should be a practical base and they can get benefit in the future. Their disability should be kept in mind while developing a syllabus for them.

Finally, the researcher has provided suggestions about the curriculum for auditory impaired students. As mentioned in the data analysis researcher has highlighted different recommendations regarding syllabus design. In short, this research suggests that there should be practical based subjects to deaf students. The results of this research revealed the difficulties related to English, Maths, Science, Islamiyat, Urdu, and other subjects. In which, the concepts are given difficult for deaf learners. Therefore, it is the need for hearing impaired students to provide all those educational rights as normal students have. They will get the benefit from the learning process in the future. They can get a job and share their ideas with normal communities without feeling difficulty.

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