Inclusive Education for Students with Hearing Impairment in Pakistan: Communication & Socialization Challenges at Higher Education

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Inclusive Education for Students with Hearing Impairment in Pakistan: Communication & Socialization Challenges at Higher Education

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Abstract

Inclusive higher education is a way to protect the academic rights of young students with hearing impairment. Multiple challenges faced by students with hearing impairment (SWHI) at the higher education institutes (HEIs) affect the inclusive higher education in Pakistan. This study used a questionnaire to explore the challenges faced during communication and socialization by SWHI in the HEIs. Inclusion in Pakistan's HEIs is a recent phenomenon for all persons with hearing impairment (HI); however, HEIs are not wholly prepared to meet this challenge. Studies reported that SWHI face multiple problems in HEIs worldwide during admission, learning, social adjustment, and assessment. There are a few HEIs in Punjab, Pakistan offering admission to SWHI. So, it is highly desirable to highlight the opinion of teachers and students about the communication and socialization problems of SWHI in these HEIs. Descriptive research method was used to collect data from 48 teachers and 246 SWHI studying in the HEIs of Punjab, Pakistan. Census sampling technique was used to gather the data; moreover, the differences in the opinions of teachers and students were measured using the t-test. The findings of the study highlighted that SWHI enrolled in various programs face communication and socialization problems, such as the non-availability of sign interpreters and note-takers and the lack of direct communication with teachers.

Keywords: communication problems, inclusive higher education, hearing impairment, socialization problems

Introduction

Pakistan provides education to future generations as a tool for survival; it is imperative to equip the youth with the skills to interact and build relationships (Government of Pakistan, 2017). Therefore, in Pakistan, quality higher education institutes (HEIs) must be established to equip the students with hearing impairment (SWHI). According to their taste and nature, inclusive education, equitable access and participation of the SWHI at all levels should be readily possible. The provision of an inclusive and equitable quality education (QE) is the major concern of the literature in the developed world, strongly impacting the teaching of the future

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cohus of HEIs. Unfortunately, QE of HEIs has not received due attention in Pakistan. As a result, the country could not achieve the EFA agenda by 2015 (Government of Pakistan Education Statistics, 2017).

Hearing impairment (HI) is a hidden disability; a student cannot hear speech sounds and abstracts the meanings of different words due to the inconsistent categorization of sounds. Speakers of different ages and gender produce different frequencies, durations, and intensities; thus, SWHI remain confused about learning a language (Northern & Downs, 2014). HI is not the reason for poor social adjustment and other psychological snags; instead, these problems result from classroom communication gaps. Parents, siblings, and teachers of SWHI have started to apprehend the importance of sign language (SL). Therefore, it is expected that the communication gap between the hearing and the SWHI will be minimized in the future. The inability to enter into higher educational also limits the ability of SWHI to enter into the respectable job market. It was pointed out by Arsh et al. (2019) that the government of Pakistan is still unable to fulfill the quota of 2% for persons with disabilities. Students with disabilities face numerous problems in HEIs, such as the lack of a differentiated curriculum and assistive technologies (AT), appropriate learning resources, and the absence of trained staff (Bano et al., 2013; Hameed, 2020; Safder et al., 2012; Yasmeen et al., 2010).

Hutcheon and Wolbring (2012) drew attention towards the critical examination of higher education policies to determine the strategies and institutional ability of HEIs to cater the individual differences in student abilities. According to them, so far higher education policies are dominated by “ableism”, that is, the prevailing notion of ability used to screen students at the time of admission. One such ability is related to socialization and communication; if higher education leads to success, then effective communication is the key to success (Omar & Arif, 2020; Punch & Duncan, 2020).

In Pakistan, the national language is Urdu and individuals with HI who know a different first language would be considered trilingual if they learn two oral and written languages in addition to the Pakistan Sign Language (PSL). Persons with HI are part of the disability community and remain a cultural and linguistic minority (Alvi & Anis, 2020). Hence, their inclusion in higher education becomes difficult (Hyde et al., 2016). SWHI learn best in a bilingual environment where they are taught in their native SL and they also read and write in the local language. SWHI are already searching for equitable learning environments in Pakistan.

In contrast, labeling students with certain deficiencies makes them misrepresented members of the equity-seeking groups and shift them towards
another misperceived block of students labeled as students with “special interest” or “special needs” (Devlin & Pothier, 2006). Such exclusion makes their existence political, implying that they would have to lobby for their otherwise secured rights under the law (Hutcheon & Wolbring, 2012). This situation makes inclusive education for SWHIs a much more complicated phenomenon.

Review of the Related Literature

Communication and Socialization Challenges

Academic achievements of SWHI are comparatively lower than students with visual or physical disabilities. Scholars have noted that SWHI face countless problems in communication, socialization, curriculum adaptation and modification and above all, in sign language interpretation (Onuigbo et al., 2020; Possi & Milinga, 2018; Safer et al., 2012). In the Pakistani context, communication and socialization problems faced by SWHI in HEIs are higher as compared to the developed countries. This is because of the fact that only a few Pakistani HEIs in public and private sectors are at the initial stages of accepting SWHI (Hussain et al., 2020; Noor et al., 2020).

Communication problems of SWHI are complicated because they come from a variety of educational backgrounds and communication environments. They face communication problems in inclusive settings because there is a gap between personal comprehension and the ongoing classroom conversation (Hussain et al., 2020). Such problems seem more significant for SWHI who use a mixed communication model; however, the major obstacle identified for them is classroom communication (Noor et al., 2020). They face communication difficulties even when an interpreter and additional support services are provided for them simultaneously in HEIs.

SWHI have to use frequency modulation (FM) systems to supplement their lip-reading because the teacher wears an FM microphone and the students’ hearing-aids are switched on to receive the FM input. However, SWHI generally do not participate in class discussion. Therefore, the needed resources should be designed according to the Organization of Economic Cooperation and Development, 2016. So, to motivate HEIs and to achieve the levels of equity and quality. Inequity expressions pose the challenge of inclusive education searching for a more just and pacific society (Guerrero, 2019; Hameed & Ain, 2020).

Physical infrastructures are common barriers in implementing inclusive education in HEIs (Ackah-jnr & Danso, 2019). However, essential issues such as curriculum, standardization of the Pakistan Sign Language (PSL), teacher
training, awareness of stakeholders, provision of advance assessment facilities and other ATs are under consideration of the Punjab Special Education Department (Akram & Bashir, 2012; Arsh et al., 2019). SWHI face different problems; the ones who rely entirely on SL as their primary medium of communication howling suffer due to a lack of interpretation services for non-academic activities. On the contrary, those who use their residual hearing and lip-reading skills frequently find that different activities within the HEIs are not conducive for their participation (Powell et al., 2014). Socialization for them in HEIs would become easier if they are provided a chance to mix with sign language interpreters (SLIs). Therefore, they may become fluent in PSL, a standardized format for education. Then comes the challenge of transferring knowledge from the sign language to the written or spoken language (Albertini et al., 2011; Yuknis et al., 2021).

The problems faced by SWHI in the higher education system are evident and shared worldwide, even in developed countries. Some of the communication problems faced by the Pakistani SWHI were highlighted by Safder et al. (2012). These included 1) teachers talk fast, so lip reading becomes difficult; 2) inability or sometimes restriction to participate in discussion and question and answer sessions; and 3) the absence of sign interpreters. Students are most distressed if SLIs are not there to help them. Moreover, few teachers allow them to record lectures. As far as communication and socialization challenges are concerned regarding HEIs accepting diversity, no serious effort had surfaced yet in Pakistan (Arsh et al., 2019).

Inclusion serves the paradigm of acceptance and love; it is involved in creating a learning atmosphere where all students are valued as learners and given equal opportunities to learn (Madaus et al., 2020; Takala & Sume, 2018). Socialization inside and outside the classroom provides opportunities for learning social norms through interaction with peers and by making friends. Limiting the opportunities to socialize threatens the chances to learn and achieve in life. Therefore, there has been a strong call from researchers and practitioners that SWHI should be socially integrated. Despite the dawn of ATs, the acceptance of PSL and the presence of trained SLIs in HEIs is still the need of the time. The use of sign language encourages the social and communication development of SWHI. So, to achieve academic goals and overcome communication and socialization challenges faced by them, we need continuous adjustment in language planning and policies.

**Statement of the Problem**

A few public and private HEIs in Pakistan have taken initiatives to accept SWHI, but these HEIs are not fully equipped to overcome the resultant
communication and socialization challenges. As a result, SWHI faces such challenges in HEIs during their studies. Therefore, this research was primarily conducted to obtain the perceptions of teachers and SWHI regarding the communication and socialization challenges they faced in HEIs.

**Research Questions**

1. What are the perceptions of teachers regarding the communication and socialization of SWHI in HEIs?
2. What are the perceptions of SWHI regarding their communication and socialization in HEIs?
3. What is the difference in the perceptions of teachers and SWHI regarding their communication and socialization in HEIs?

**Research Methodology**

The current research is a descriptive study in nature. Inclusive higher education is a new phenomenon in Pakistan. So, this research was conducted primarily to know the existing situation in HEIs regarding the services provided to SWHI to overcome the communication and socialization challenges faced by them, keeping in view their wellbeing during their studies in the selected HEIs.

**Research Instrument**

After a detailed review of the literature regarding communication and socialization challenges faced by SWHI in HEIs, subsequent research tools were formulated:

- A questionnaire for the teachers.
- A questionnaire for the SWHI.

Self-created questionnaires were used. They were constructed on a five-point Likert scale consisting of four points including strongly disagree, disagree, agree, and strongly agree. Both questionnaires comprised two parts. The first part was used to retrieve the demographic information (age, gender, qualification experience, and class). The second part was used to ask the relevant questions both from teachers and students. Relevant experts ensured the validity of the instrument. After validation, items were refined and reliability was measured using Cronbach’s alpha. It was 0.81 for the teachers’ questionnaire and 0.85 for the students’ questionnaire.

**Sampling**

SWHI in HEIs and their teachers comprised the population for the current research. Male and female SWHIs studying in ten public and private HEIs of...
Punjab were invited to participate in this study following the rule of census sampling, making a total of forty-eight male and female teachers and two hundred forty-six SWHI. In this way, maximum participation of both teachers and SWHI was ensured. The researcher personally visited all HEIs and explained the questionnaire through PSL to obtain the genuine opinions of the SWHI. All teachers of the SWHI personally read the questionnaire before filling it.

**Data Analysis**

The majority of the teachers who participated in the current study were middle-aged and they had taught both in segregated and inclusive HEIs. Most of the teachers were professionally trained to teach SWHI. Most of the SWHI were 17 to 24 years old. They were doing BFA, BS, MA, and MPhil from both segregated and inclusive HEIs. The data gathered from both teachers and SWHI was entered into SPSS. Each item’s minimum and maximum mean value was obtained to identify the weak and strong items. An independent sample t-test was applied to compare the differences in the opinions of teachers and SWHI. The results are presented below.

**Results**

The demographic distribution of SWHI regarding age revealed that they were 20 to 23 years old. Frequency distribution of students on the basis of their gender as according to Pakistan statistics 2016-17, the adult literacy rate of males is 69.1% and of females is 45.2%. Gross enrollment ratio (GER) of males in the higher secondary institutes of Pakistan is 42.9% and the same ratio for females is 34.9%. However, keeping in view the gender rate in general education colleges, gender parity in special education is much better. Table 1 presents the descriptive analysis of the responses of the survey items.

Table 1 shows the views of teachers. The dropout rate of students with hearing impairment is high in institution, that is, (3.44), (3.25) and (3.06) are having. Statements 2, 1 and 6 have the highest mean values which means that these are all strong statements. So, the results showed that the teachers believed that class fellows help each other to learn lessons and SWHI are recognized as honorable persons in HEIs. The teachers were indecisive about the dropout rate of SWHI with a mean score of 3.0.

Table 2 shows the opinions of SWHI. They did not think that they were respected in their respective institutions, since the mean score of the statement is slightly lower than average. SWHI affirmed that their class fellows helped them learn; the mean score is slightly above average (3.03). The statement regarding the use of SL and SLIs is available. The statement ‘All lectures are interpreted via sign
language by SLIs’ yielded lower than average mean scores, that is, (1.87) and (1.86). SWHI disagreed with their dropout rate in HEIs.

Table 1

Perceptions of Teachers regarding Communication and Socialization Challenges faced by SWHI in HEIs

| Communication and Socialization                                                                 | N  | Min. | Max  | Mean | SD  |
|-----------------------------------------------------------------------------------------------|----|------|------|------|-----|
| 1. Students with hearing impairment are recognized as honorable persons in your institution.   | 48 | 1.00 | 4.00 | 3.25 | .84 |
| 2. Other class fellows help students with hearing impairment to learn lessons.                  | 48 | 2.00 | 4.00 | 3.44 | .54 |
| 3. Students with hearing impairment discuss their social matters with their class fellows.     | 48 | 1.00 | 4.00 | 2.92 | .77 |
| 4. Sign language interpreters (SLIs) are available.                                            | 48 | 1.00 | 4.00 | 2.52 | 1.07|
| 5. All lectures are interpreted via sign language by SLIs.                                     | 47 | 1.00 | 4.00 | 2.66 | 1.01|
| 6. You communicate with your students with hearing impairment using sign language.             | 48 | 1.00 | 4.00 | 3.06 | 1.02|
| 7. You communicate with your students with hearing impairment through SLIs.                    | 48 | 1.00 | 4.00 | 2.52 | .97 |
| 8. Dropout rate of SWHI is high in your institution.                                            | 48 | 1.00 | 3.00 | 1.71 | .58 |

Table 2

Perceptions of SWHI regarding Communication and Socialization Challenges

| Communication and Socialization                                                                 | N  | Min  | Max  | Mean | SD  |
|-----------------------------------------------------------------------------------------------|----|------|------|------|-----|
| 1. You are recognized as an honorable person in your institution.                               | 246| 1.00 | 4.00 | 2.96 | .77 |
| 2. Your class fellows help you to learn lessons.                                               | 246| 1.00 | 4.00 | 3.03 | .65 |
| 3. You discuss your social matters with your class fellows.                                    | 246| 1.00 | 4.00 | 2.78 | .92 |
| 4. SLIs are available.                                                                         | 246| 1.00 | 4.00 | 1.86 | .92 |
| 5. All lectures are interpreted via sign language by SLIs.                                      | 246| 1.00 | 4.00 | 1.87 | .87 |
| 6. Your teachers communicate with you using sign language.                                     | 246| 1.00 | 4.00 | 2.83 | 1.01|
| 7. Dropout rate of SWHI is high in your institution.                                            | 246| 1.00 | 4.00 | 2.11 | .79 |
The Difference in the Perceptions of SWHI and their Teachers

Table 3

*Independent Sample t-test Comparing the Views of SWHI and their Teachers regarding Communication and Socialization Problems in HEIs*

| Dependent Variable | Types of Respondents | N   | Mean  | SD    | t     | Sig  |
|--------------------|----------------------|-----|-------|-------|-------|------|
| Communication and Socialization (CS) | Students | 246 | 17.4309 | 3.28157 |       | .000 |
|                     | Teachers            | 48  | 22.1042 | 3.72021 | -8.109|      |

The independent sample *t*-test (Table 9) showed a significant difference in the opinions of teachers and students about the problems faced by SWHI in communication and socialization (*t* = -8.109, Sig. = .000, Mean students = 17.43, Mean teachers = 22.10). According to the teachers’ point of view, SWHI faced communication and socialization problems in HEIs, whereas the SWHI did not think the same.

However, SWHI showed consensus regarding the fact that they were not provided SLIs. So, this condition depicts a major communication issue in HEIs.

Conclusion

The current study strived to identify the communication and socialization challenges in inclusive and segregated HEIs to ensure the access and success of every SWHI and to make higher education more fruitful and relevant to their lives.

Teachers believed that class fellows help each other to learn new lessons and SWHI are recognized as honorable persons in HEIs. All teachers stated that they used sign language while communicating with SWHI in classrooms and their dropout rate from HEIs was minimal. Moreover, teachers were satisfied with the services provided to SWHI in HEIs.

However, the difference between the opinions of SWHI and their teachers was statistically significant. In the expert opinion of teachers, SWHI suffer from more communication and socialization problems than they can imagine. Contrasting opinions about the use of sign language and the availability of SLIs are also worth noticing, as it can cause severe damage to their learning.

SWHI stated that they lack respect and recognition in the society. They would fall short if their class fellows would not help them in learning lessons.
Nevertheless, all SWHI showed consensus regarding the fact that SLIs are not available in HEIs, so that all lectures are not interpreted via sign language.

**Discussion**

SWHI face numerous communication and socialization challenges across the world and it is also a fact in Pakistan (Albertini et al., 2011; Alsalamah, 2020; Datta et al., 2019; Onuigbo et al., 2020; Yuknis et al., 2021). All SWHI expressed their consensus that SLIs are not adequately available in HEIs to meet their requirements. As a result, all SWHI face communication challenges, directly or indirectly affecting their academic success adversely. Pakistani HEIs are still immature in handling the problems of SWHI and do not really provide them with an enabling and inclusive learning environment (Arsh et al., 2019; Hameed & Ain, 2020; Hussain et al., 2020; Noor et al., 2020).

Moreover, the analysis pointed out that SWHI cannot take notes of daily lectures taught in their classrooms. As a result, they do not have complete access to the available information. For complete access to classroom information, notetakers should be employed in the classrooms even in the presence of SLIs, so that the SWHI can concentrate on the speaker, interpreter, and other visual cues. These results showed that all SWHI face communication problems at the highest level, although they do not face socialization issues.

The results confirmed numerous issues such as the adaptation of curriculum, standardization of PSL, teacher training, awareness of stakeholders, and the lack of provision of advance assessment facilities and other ATs (Akram & Bashir, 2012; Saafder et al., 2012). It is the obligation of HEC to pay adequate attention to fulfill the obligations towards special needs students. Punjab Special Education Department has taken some significant steps towards the improvement of facilities available for the special education institutions. However, the Higher Education Department Punjab, Punjab Higher Education Commission, and university administration are still lagging behind.

According to Brett (2010), the shortage of SLIs is a significant issue. Inherent difficulties are associated with interpreting in the higher education context. According to Knoors and Marschark (2012), SL encourages the development of SWHI. So, to achieve these goals, we need the continuous adjustment of SLIs in HEIs. The provision of SLIs to the universities should be a priority as SLIs provide the opportunity to socialize and communicate not only to SWHI but to their peers and teachers as well (Takala & Sume, 2018). Mastering socialization and communication techniques is the key to career success (Madaus et al., 2020).
Another study by Alnahdi (2014) also concluded that educational institutions lack support services and have limited placements for the staff needed for an inclusive learning environment for SWHI. According to Brett (2010), two interpreters are required to take turns for 15-20 minutes interval at a time for each lecture. Note-takers should also be employed in the classrooms, even in the presence of SLIs, so that all SWHI may focus on the speaker, interpreter, and other visual cues without the distraction of taking notes, simultaneously. Indeed, it is difficult to deal with diversity, although it is not justified to leave SWHI unattended (Rao & Skouge, 2015).

Samina (2012) suggested that teaching and learning are impossible without effective communication in any classroom. Moores (2001) claimed that note takers are not available before every lecture. Foster et al. (1999) reported that educational settings pose problems for SWHI. Lang (2002) suggested that SWHI withdraw from higher education programs because they face difficulties since they cannot communicate easily. SLIs are provided to SWHI irrespective of their HI level to learn in the classroom using PSL.

Inclusive HEIs are the best models through which SWHI can enhance their socialization (Gaydarov, 2014). A positive social environment brings positive social change among students which helps to shape their personalities (Thakur & Abbas, 2017). Teacher awareness and willingness to deal with SWHI is mandatory because teachers are the key resource in HEIs (Bannister et al., 2018).

Students with significant disabilities continue to confront prejudice and physical, social, and emotional barriers in obtaining higher education. Students with a disability are often referred to as a ‘burden’ or ‘obligation’. Moreover, the bio-medical model renders them unfit for the pursuit of higher learning in institutions or disciplines of their choice. Unless challenged at the policy level, this hegemony of ‘ableism’ will continue to affect the lives of many who could potentially make a difference in their lives by obtaining the higher education of their choice.

**Recommendations**

1. SLIs should be available all the time and during all lectures in HEIs to facilitate SWHI. It is compulsory for the retention of SWHI in HEIs.
2. SLIs should be available during and after the class to assist SWHI in reading with comprehension.
3. The quality of education in HEIs should be raised to retain SWHI and to decrease their dropout rate.
4. SLIs should be employed permanently in all HEIs.
5. Note-takers should be employed in all HEIs.
6. In the absence of note-takers, computerized speech recognition software should be installed in the classrooms to change any delivered lecture into a comprehensible text easily read by SWHI and interpreted by the SLIs after the class.
7. Note-takers should also be available in HEIs during classes to take notes of the delivered lectures, helping SWHI to reread and understand lessons.
8. The shortage of SLIs and note-takers should be overcome in all HEIs.

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