

## **CREATING INCLUSIVE TVET INSTITUTIONS FOR HEARING IMPAIRED STUDENTS: INSIGHTS AND RECOMMENDATIONS**

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### **ABSTRACT**

This study aimed to examine the perspectives of eleven participants, including teachers, parents, curriculum developers, and academic administrators in the Technical and Vocational Education and Training (TVET) sector, engaged in inclusive education and creating inclusive education strategies. More specifically, this study explored their perspectives on implementing inclusive education for students with hearing impairment (HI) in TVET institutions in Pakistan. Qualitative research using a focus group method was conducted to gather data. Focus group discussions revealed the need for counselling, awareness, attitude changes, instructional methods, and infrastructure to facilitate inclusive education. Creating inclusive learning environments required collaboration, personalised support, and accessible environments. It also stressed the difficulties and potential of inclusive education and urged for further study and implementation of solutions to improve student learning and well-being. Inclusive educational settings can help all students succeed. Infrastructure was examined in vocational institutions' special needs support. Wheelchair accessibility and a safe learning environment were emphasised. They stressed the impact of the institutions' environments on student attitudes, academic achievement, and social development. Inclusion was also discussed, emphasising the need for a community-oriented vocational skills approach customised to these individuals' educational requirements.

**Keywords:** Inclusive education, Hearing Impaired Students, TVET, Perceptions.

### **INTRODUCTION**

According to the World Health Organization, 14.5% of Pakistanis suffer from some kind of hearing impairment (Naz, 2022). A survey by the National Institute of Special Education found that only a small number of children with hearing impairment were enrolled in school. According to the United Nations Convention on the Rights of Persons with Disabilities, which Pakistan joined in 2011, all students have the right to an education. According to a 2018 survey conducted by the Pakistan Ministry of Finance, just 66 percent of primary school kids attend school, while 34 percent do not. In addition, more than 90 percent of differently abled youngsters in poor countries do not attend school (Al-Shammari, Faulkner, & Forlin, 2019).

In Pakistan, most students with hearing impairment attend separate special schools. They do not want to go to traditional public elementary schools where they would learn in a traditional way. In other places, this exclusion is most often blamed on a rigid curriculum, set pedagogy, teachers who do not understand the purpose of inclusive education, and a lack of resources and training for teachers (Florian, 2019). These students have been accommodated in a few mainstream schools, and that too in the private sector. Unfortunately, the learning settings of such schools are unsatisfactory for children with disabilities and their parents, which eventually leads to their recurrent failures, anxiety, absenteeism, high dropout rates, and return to special schools, among other outcomes (Al-Shammari et al., 2019).

According to the United Nations Guidelines for Inclusion, all students can be helped in schools, no matter what their social, emotional, intellectual, linguistic, or any other condition is. However, the curriculum needs to be changed to meet the needs of the students. All social contact options for hearing-impaired students

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are now physically limited. This cuts them off from the regular educational and emotional exchanges between hearing students (Schmidt & Vrhovnik, 2015). This exclusion is a constant source of worry for parents of children with hearing impairment, which goes against SDG4's call for inclusive schools (Anastasiou, Kauffman, & Di Nuovo, 2015).

This research aimed to gather concerns and obstacles about institutional assistance and the role of teachers in enabling their hearing-impaired students to participate in mainstream education in 'mainstream schools (Florian, 2019). The phrase "hearing impairment" refers to various levels of hearing impairment, including deafness and hard of hearing. Hearing impairment causes speech and language development delays, and this delay in school causes learning issues to worsen (Özkubat, Karabulut, & Özmen, 2020). Most mainstream and standard schools are reluctant to admit hearing-impaired students since all teachers commonly feel that children with hearing impairment have inadequate listening and learning abilities. Early treatments might stop these language deficits and allow children to attend mainstream school (Walsh, 2018). This goal may be achieved by including certain adjustments in the curriculum, instructional methods, and evaluation for students with hearing impairment (Walsh, 2018). Positive thoughts and feelings about including children with disabilities are closely linked to better training for teachers (Lewis, Wheeler, & Carter, 2017).

Educational institutions require support to assist such students. Support includes all educational initiatives that improve a school's ability to respond to diversity effectively (Özkubat et al., 2020). The curriculum may be accessed with the help of institutional assistance in the form of teachers' training, resources, and associated professionals in a satisfactory way for students with hearing impairment (Al-Shammari et al., 2019). In a research done in Finland, where most hearing-impaired students attend mainstream institutions following their inclusive policy, teachers said that the primary support categories that were given to them for making inclusion effective were pedagogical and technical assistance (Takala & Sume, 2018).

Parents of children with hearing impairment feel powerless because they believe that teachers in mainstream institutions use set teaching techniques and standardised evaluation processes, and their children may not be able to satisfy the requirements, ultimately failing the exams. Their worries include the institutions' ineffective efforts to improve their children's cognitive abilities via inadequate teacher training, a lack of resources and inadequate assistance. Moreover, they worry that their hearing-impaired children may be bullied, stigmatised, and rejected by classmates and teachers in inclusive institutions. With the present frightening situation in mind, the researchers wanted to hear from some relevant stakeholders about the difficulties that hearing-impaired students encounter in regular educational institutes (Ross-Hill, 2009).

## REVIEW OF LITERATURE

The literature review explores the factors influencing the effectiveness of inclusive education, particularly in the context of special needs students in Pakistan. It emphasises the importance of teachers' attitudes, knowledge, self-efficacy, and attitudes, as well as the need for teacher training initiatives and community engagement. It also highlights the challenges faced by parents and students due to limited access to resources.

One of the most important factors that impact the effectiveness of the inclusion process is a teacher's attitude toward special needs students and inclusive education, and implementation may be improved by recognising and developing the attitude (Costantino, 2018). Teachers with a more inclusive mindset are more likely to modify their lesson plans and curriculum to suit the requirements of each student better. Suppose teachers are appropriately taught to have a good attitude toward special people.

Teachers' perspectives on educating all children in inclusive classrooms are influenced by the teachers' knowledge, self-efficacy, sentiments, and attitudes (Savolainen, Malinen, & Schwab, 2022). According to several research studies, inadequate teacher preparation and a nonprofessional attitude toward inclusive education are the main barriers to the development of inclusive education. More knowledge might lead to more positive attitudes, but this has not been proven in a teacher-training programme (Costantino, 2018).

The mindsets and policies that prevail in Pakistan's private institutions provide a significant barrier to the implementation of inclusive education for students with a variety of individualised educational requirements. A significant role includes not only the attention and attitude of the teachers but also that of the directors of the institutions. The private institutions have more independence in setting admissions procedures and superior facilities. However, these institutions have a negative attitude toward inclusive education. They refuse to let students with special needs use their facilities, and their staff is likewise not encouraging. Teachers' training initiatives and sensitising them to the rights and needs of students with disabilities remain the primary obstacle to inclusive education in the attitudes of parents, teachers, legislators, service providers, and other community members (Schmidt & Vrhovnik, 2015).

Working with special needs children fosters a more favourable attitude toward inclusive education. According to studies that back this viewpoint, the strength and quality of education depend on teachers' professional development (Holmqvist & Lelinge, 2021; Wearmouth, Edwards, & Richmond, 2000). Teachers working in general education must be trained to satisfy the need for the necessary number of teachers who are trained in inclusive education (Florian & Camedda, 2020). Planning well and working as a team with other qualified teachers may improve the educational environment and include all special needs students in regular classrooms (Costantino, 2015).

Parents' roles and attitudes toward inclusive education are vital to the success of hearing-impaired students (Paseka & Schwab, 2020). In addition, the value of family and community organisations for inclusive education cannot be undermined. A parent is an important participant in developing a student with a handicap. Without parental engagement, understanding, and satisfaction, it seems impossible for children with hearing impairment to achieve the appropriate academic, emotional, and social results. Parents were apprehensive about enrolling their students in general education programs because of prior experiences with teachers and other parents of other children. Parents are concerned about their child's degree of acceptability by the teachers and other students in the classroom (Wang, 2019). Parents' worries and apprehensions may include their children's susceptibility to accidents and injuries, bullying, the labelling and rejection of these students by their teachers and classmates, and the parents' and peers' unfavourable views regarding disability (Costantino, 2018).

Children with hearing impairment greatly suffer if they are not diagnosed early, correctly recognised, and given timely treatments in institutions (Wang, 2019). To make sure that their children are treated with love and affection in the institutions discovered that parents are concerned about their involvement in a variety of extracurricular activities and recreational outings. Parents worry that the child's sensory impairment may cause teachers to overlook the child's skills. Parents are concerned that their children may be unable to match the requirements and, as a result, fail the test since teachers use set teaching techniques and standardised evaluation processes (Schmidt & Vrhovnik, 2015). If teachers lack the skills to cope with hearing impairment and use their preferred communication methods, they feel powerless. Parents are worried about the steps the school is taking to improve the social, emotional, and cognitive abilities of their children with hearing impairment with the support of associated specialists. For these students to be included effectively, frequent parent-teacher meetings, parental counselling, and flexibility in the curriculum, pedagogy, and assessment methods while considering the severity and functioning of hearing impairment are necessary (Corbett & Barton, 2018).

In Pakistan, parents worry that their children may get isolated in class and will not participate in school activities since assistive equipment and professional help are not readily available (Hammad, 2021). In Pakistan, students do not have enough access to diagnostic services and other assistive technology, such as hearing aids. Most households in Pakistan cannot afford to buy equipment for children with hearing impairments or to use other relevant services.

Most teachers in Pakistani educational institutions claim that a lack of resources and expertise prevents certain students from being included. Parental engagement is only allowed during meetings with the teachers, and even then, not often. Parents lack the involvement and training necessary to contribute to their student's academic success (Lewis et al., 2017). These children's cognitive, social, and emotional development is influenced by how they are treated in institutions. The effort toward inclusiveness will likely be hampered if the school administration and personnel do not effectively address these stakeholders' concerns (Yazcayir & Gurgur, 2021).

Despite Pakistan's governmental commitment to inclusive education, the reality on the ground is far from ideal. In Pakistan, inclusive education methods in TVET institutions are inadequate to meet the different needs and ambitions of all learners, particularly those who are marginalised or disadvantaged (Ahmed, Alwi, & Akhtar, 2022; Pirzada, Muhammad, & Anis, 2020; UNESCO, 2013). A lack of awareness and understanding of inclusive education among TVET stakeholders, a lack of resources and infrastructure to support inclusive education, a lack of training and capacity building for TVET teachers and managers, a lack of monitoring and evaluation mechanisms for inclusive education, and a lack of coordination and collaboration between TVET institutions and other stakeholders are some of the major obstacles to the implementation of inclusive education in TVET institutions (Fatima, 2021; Pirzada, Muhammad, & Mahmood, 2022; Pirzada, Muhammad, & Masood, 2021). These obstacles impede TVET institutions from offering excellent and accessible skills training for all learners, hence limiting their contribution to achieving SDG 4 (Pirzada, Muhammad, & Ahmed, 2021).

The 21st century sees a trend toward inclusivity. Studies show that when children with hearing impairment are put in inclusive classrooms instead of separate special institutions, they do better socially, emotionally, and intellectually (Luckner & Movahedazarhouligh, 2018; Schwab, Wimberger, & Mamas, 2019; Xie, Potmšil, & Peters, 2014). The inclusive movement has progressed, and parents' and educators' mindsets are shifting (Kauffman et al., 2023).

In conclusion, the literature review shows how teachers' attitudes, parents' involvement, access to resources, and the role of vocational educational institutions all affect inclusive education for students with special needs.

## **METHODOLOGY**

This study aimed to explore the perspectives of stakeholders on implementing inclusive education for students with Hearing Impaired (HI) in TVET Institutions in Pakistan. This study was qualitative in nature. The goal of selecting a qualitative research design was to enable the researchers to collect an in-depth information as possible from a small sample. Qualitative research design is more subjective and yields more substance and in-depth information since it allows participants to express their responses to the study's research questions in detail (Creswell & Poth, 2018). The research strategy was employed, considering that the participants could provide in-depth details.

The purposive sampling method was used to choose the participants. In qualitative research investigations, the purposive sampling approach, often known as "judgmental" or "selective" sampling, is frequently utilised (Punch, 2016). Purposive sampling involves the researcher choosing people who can provide extensive, in-depth information about the phenomena being studied (Brinkmann & Kvale, 2018). In this case, the researcher has chosen the relevant participants who have offered the finest data to answer the study questions. The eleven participants in the research included two MPhil students enrolled in special education and two professors of special education institutions, three parents, one social activist, one journalist from the mainstream media group, one art therapist, and one public sector executive working as deputy director curriculum in the special education sector under the government of Punjab.

A focus group with the above-mentioned participants was conducted for data collection from the participants—with the purpose of illuminating agreement among them (Gill & Baillie, 2018). According to Acocella and Cataldi (2020), focus groups are another name for group interviews. However, it is crucial to differentiate between them. Multiple persons are interviewed at once in a group interview, focusing on the questions and replies between the researcher and participants. On the other hand, focus groups focus on discussion among group members on subjects that the researcher provides (Hall, 2020). The participants were informed of the study's objectives, and the researcher assured them that their names would be kept private and anonymous (Katz-Buonincontro & Nezu, 2022).

The current study applied a qualitative content analysis method for analysing the data (Schreier, 2012). This analysis method is one of the popular approaches for coding and categorising data in qualitative research (Elo et al., 2014). The use of qualitative content analysis in a study can produce significant discoveries and unexpected insights since it can synthesise the key elements of a large body of data.

The analysis of focus group data produced four major themes regarding students with HI in the TVET institutions: the need for counselling and awareness, change in attitudes, change in teaching methodologies, and change in the infrastructure of vocational institutions.

## **RESULTS**

This section presents the findings of a focus group discussion that examined various aspects of counselling services in TVET institutions, teaching methodologies for students with HI, and the infrastructure required to support students with HI in TVET institutions. The discussion highlighted great insights and trends across these domains, giving essential considerations for improving the entire educational experience and student supports. This section is divided into three primary subsections: the need for counselling and awareness, change in attitudes, change in teaching methods, and change in infrastructure. Each subsection emphasises major results and participant views, illuminating agreement among them (Gill & Baillie, 2018) on the problems and possibilities associated with the creation of inclusive and supportive learning environments for students with HI in inclusive TVET institutions.

### ***Need for counselling services***

The focus group discussion indicated four sub-themes connected to school counselling services: (1) promoting academic and psychological well-being, (2) balancing and responding to students' needs, (3) managing stress and motivation, and (4) addressing individual differences and growth.

*Supporting academic and psychological well-being.* Participants saw counselling services as playing a vital role in promoting students' academic success and mental health. They felt that the major objective of counselling services is to assist students (through scaffolding) in achieving tasks linked to their growth and challenges caused by external factors. They also believed that counselling services are one of the most important benefits for students in the educational context, as they may assist them in understanding their strengths and weaknesses and guiding them in aiming and modifying their success to their physical condition.

*Balancing and responding to students' needs.* Participants noted that counselling is offered to help students manage their time between academic work and mental health treatment. However, they also emphasised that counselling guidance is not static but rather varies based on institution-specific difficulties. They valued the cooperation of teachers and administrators with parents and other parties with more understanding of children's psychology. Moreover, they wanted the school to establish a curriculum that takes into account the kids' abilities and interests.

*Managing stress and motivation.* Participants expressed that institutions give guidance on how to manage stress and how to encourage oneself and one's classmates. They understood that this endeavour requires specialised knowledge and skills that may contribute to the psychological success of pupils. Students are more likely to refrain from engaging in bad behaviour if they get positive reinforcement from others; therefore, they emphasised combining typical counselling with modelling techniques.

*Addressing individual differences and development.* The participants stated that the appropriate psychological approach must be used to address issues pertaining to psychological students, particularly those pertaining to individual development, throughout the stages of transition, maturation, and task completion in order to promote further development. In addition, they highlighted the challenges connected with individual differences, both among children with special needs and among students in the mainstream population. According to them, students must comprehend the fundamental notion to discern between their desires and requirements, as well as the introduction of varying degrees of needs. Moreover, they asserted that students with special needs are entitled to the same amount of affection, self-esteem, belonging, achievement, status, security, and safety as other students. They anticipated that the government and the school would facilitate the achievement of a goal for the greater good.

### ***Changing attitudes***

The results of the focus group discussion showed four sub-themes about changing attitudes.: (1) balancing academic and psychological needs, (2) collaborating with various stakeholders, (3) managing stress and motivation, and (4) addressing individual differences and development.

*Balancing academic and psychological needs.* Participants indicated the need for guidance in achieving a balance between academic work and psychological counselling. They valued the regular counselling sessions but wished that they were also sensitive to issues in the school environment. In addition, they anticipated a curriculum that takes their abilities and interests into consideration.

*Collaborating with various stakeholders.* Participants recognised the responsibility of educators and administrators in providing both individualised and generalised counselling. However, they also urged collaborating with parents and other parties with a greater understanding of the psychology of children, such as psychologists and psychiatrists. They believed that this would increase the efficacy and quality of learning in institutions.

*Managing stress and motivation.* The participants reported students with HI experienced exam-related anxiety and a need for coping strategies. Moreover, they valued the suggestions on how to inspire students with HI and their colleagues. They expressed appreciation for constructive comments and support from school personnel.

*Addressing individual differences and development.* The participants placed a strong emphasis on the need for a proper psychological approach to handle the issues connected to their individual development, transition, maturity, and task completion. In addition to this, they brought attention to concerns regarding the individual diversity of the students, including those with special needs as well as normal students. They stated that students needed to grasp the many kinds of needs and the varying degrees of those needs, as well as differentiate between their desires and their necessities. In addition to this, they asserted that they were entitled to the same level of affection, self-esteem, belonging, achievement, status, security, and safety as the other students. They anticipated that the government and the school would provide an environment that would make it easy to achieve a goal that was intended to benefit the community as a whole.

### ***Changing teaching methodologies***

The focus group discussion identified three sub-themes for changing teaching methodologies concerning students with HI in TVET institutions.: (1) understanding different learning styles, (2) providing appropriate support and feedback, and (3) mapping the success of various techniques and strategies.

*Understanding different learning styles.* Participants agreed that each learner is unique and has a distinct learning style that is determined by his or her own characteristics. They identified five learning styles depending on a child's primary intelligence: visual, auditory, kinesthetic, interpersonal, and intrapersonal. They outlined the preferences and traits of each learning style, as well as how they influence the learning process. In addition, they underlined that it is the teacher's duty to offer a variety of activities, materials, and experiences to suit different learning styles.

*Providing appropriate support and feedback.* Participants acknowledged that recognising a student's learning style is essential but not sufficient for ensuring their success in the classroom. In addition, they highlighted the learning difficulties faced by certain students with HI, such as a short attention span and a reduced learning rate, which might easily demotivate them from learning a content area. As an example, they stated that the teacher might aid the student by enabling him or her to start practising a certain language structure by repeating it as many as required, by being extremely patient and without interfering, and by encouraging the student, applauding their work, and increasing their confidence. In addition, they emphasised the significance of avoiding criticism and instead modelling the proper conduct or allowing the student to shadow the recorded text.

*Mapping the success of various techniques and strategies.* The participants noted that the field of inclusive education for HI is expansive and involves a wide range of educational requirements across all school levels. They acknowledged that it is difficult to track the effectiveness of the strategies employed to cover the whole range of students' special educational needs. However, they emphasised the need for diverse information sources that teachers may use, such as research reports and expert advice for instruction to ensure proper mapping of the success of various techniques and strategies.

### ***Changing infrastructure***

The focus group discussion indicated two subthemes concerning the provision of a suitable learning environment and adequate infrastructure for students with HI in TVET institutions.: (1) preparing educational inputs and ensuring consistency, and (2) facilitating accessibility and safety.

*Preparing educational inputs and ensuring consistency.* Participants underlined the need to prepare instructional inputs and create a suitable learning environment for students with HI in the TVET sector. They maintained that this was necessary to provide the comfort, safety, and independence of learning for these pupils. In addition, they emphasised the need for inclusion for students with HI and opposed the segregation of students in regular education. To meet the special educational requirements of these students, they advised adopting a community-oriented TVET sector.

*Facilitating accessibility and safety.* Participants acknowledged that the environment in which a student receives education and training influences his or her attitudes, academic performance, skill development, and social growth. Consequently, they emphasised several essential characteristics that must be addressed for training and learning objectives at any vocational school, such as accessible facilities, wheelchair access, a pleasant classroom, readily accessible training workshops/laboratories, and safety considerations. They argued that students with special needs could easily finish the learning process if supplied with the appropriate facilities, space, teachers, peers, environment, and equipment. In addition, they argued that students with HI are able to accomplish better levels of education and training if accessibility and safety are provided in the TVET sector.

In conclusion, the focus group discussion findings in this part demonstrate the need for counselling and understanding, changes in attitudes, instructional methods, and infrastructure to facilitate inclusive education. These results stress the necessity for a supportive learning environment that meets students' intellectual, psychological, and personal needs. Teachers, administrators, parents, and other stakeholders must collaborate to provide enough assistance and guidance. TVET institutions may build inclusive settings that support the holistic development of all students, including those with special needs, by recognising learning styles, offering tailored assistance, and guaranteeing accessible infrastructure.

## **DISCUSSION AND CONCLUSION**

This study showed how TVET institutions can better help students with HI, what teachers can do to reach these students, and what facilities TVET institutions need to better help these students.

One of the main findings of this study was that guidance and awareness are important for improving students' academic achievement and mental health. Participants talked about how important it is to set up steps

for students' activities and pay attention to their progress and problems that come from outside the classroom. Counseling is a very important part of school because it helps students figure out their strengths and weaknesses and guides them to success. Participants also talked about how important it is to find a balance between academic and psychological demands, deal with stress and motivation, and deal with differences and progress at an individual level. These results show that students need comprehensive counselling services that can meet their different needs.

The results showed that an inclusive education paradigm shift is needed. Participants stressed how important it is for teachers, administrators, parents, and other stakeholders to work together for students with HI to get a good, individualised education at TVET institutions. Also, they emphasised how important it is to have a curriculum that considers the skills and interests of students and strikes a balance between academic work and mental health care. To get inclusive education, these results show how important it is to create a collaborative and supportive environment that values the expertise of many different stakeholders.

The results also showed that students with HI need to be taught about different ways to learn. Participants emphasised that five main ways people learn, and they stressed that it is the teachers' job to provide training and activities that match these styles. Participants also stressed how important it is to give students with HI the help and honest feedback, patience, encouragement, and positive reinforcement. The discussion also brought up how hard it is to track the success of the many strategies used to meet the special needs of students with HI, as well as the need for more research.

The study also looked at how infrastructure can help students with HI. Participants talked about how important it is to be able to use a wheelchair and have a safe place to learn. They talked a lot about how the atmosphere of a TVET institution affects students' attitudes, academic performance, and social growth. Integration was also looked at, which showed how important it is to have a TVET strategy that is focused on the community and meets the unique educational needs of these kids.

In conclusion, focus group discussions highlight the need for counselling and understanding, as well as changes in attitudes, teaching methods, and infrastructure, to help students with HI in TVET institutions to get an inclusive education. The study shows that counselling for children helps with both academic and emotional success. Additionally, for inclusive education to work, teachers, administrators, parents, and other stakeholders need to work together. TVET teachers must also use effective methods to help all of their students succeed. Facilities such as wheelchairs and a safe learning environment can give all students the same opportunities and a safe place to learn.

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