

CHALLENGES FACED BY TEACHERS WHILE TEACHING VISUAL AND HEARING-IMPAIRED STUDENTS AT SCHOOL LEVEL

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Abstract

The research explores the challenges faced by teachers while teaching students in visual and hearing impairment schools. For this Study, a qualitative method was used. The data was collected by the researchers by conducting the interviews of 10 visual and hearing impairment schoolteachers. 5 teachers were selected from visual impairment school and 5 teachers were selected from hearing impairment school. The data was obtained from the semi-structure interviews, transcribed, and analyzed through thematic analysis using open and axial coding technique. The findings suggested that the teachers did face challenges while teaching visual and hearing impairment students. Several facts were identified that could ease these teachers' challenges. These challenges include behavior issues, teaching material issues, emotional issues and methodology issues.

Keywords: visual impairment, hearing impairment, challenges faced by teachers.

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Introduction

Visual function is an important aspect in understanding visual impairment. Visual functions refer to the way the eye works (Hathibelagal, Mulani & Dave, 2021). Aspects of visual function will include, for instance, structural conditions of the eye, reflexive reactions, eye movements, visual acuity, and visual field (Bharadwaj, Joshi, Kumbale, Shastry, Panimozhi, & Choudhury, 2020). Visual impairment is a low incidence disability and therefore affects a relatively small proportion of the world's population. Individuals referred to as 'visually impaired' form a diverse group of people ranging from those who are completely blind to those who have some blurry vision (Aljedaani, Aljedaani, Mkaouer & Ludi, 2023). 'Blind' is a term used in most literature to refer to visually impaired people whose vision is reported as light perception or less (Neca, Pinto & Borges, 2023). Thus, a person can be considered blind if she/he cannot perceive any light at all, or if she/he can perceive light but is unable to use her/his vision in any meaningful way (Suubi, 2012). Most blind people can perceive some light, ninety per cent of all those persons labeled as 'blind' have some light perception whereas only ten per cent are totally without vision. Visually impaired people can be further categorized into two distinct groups, depending on the age of onset of the impairment (Hunt. et al, 2023). Those with congenital visual impairment are either born with the condition or acquire it early in life. Thus, they have no knowledge or recollection of normal vision. People with congenital blindness are sometimes said to have early onset blindness. Those with adventitious or acquired visual impairment lose their sight at a later age and are, therefore, able to remember what it is like to have normal vision (Susanto & Nanda, 2018).

Effects of Visual Impairment

Visual impairment affects will vary from one person to another depending on factors such as the age of onset (congenital versus acquired visual impairment), type of visual impairment (whether a person is blind or has low vision), family and community attitudes, as well as opportunities for education and habilitation (Rogow, 1999). Research in the development of children with visual impairment shows that there is no single characteristic pattern which can be associated with all visually impaired individuals. Visual impairment can severely inhibit a child's development, especially if the child has congenital visual impairment (Asamoah, Ofori-Dua, Cudjoe, Abdullah & Nyarko, 2018). The effects associated with visual impairment are many and varied. Some of the aspects of life which may be affected by a visual impairment include language development (communication), physical and motor development, concept development, psychosocial development, cognitive development, perceptual development, and social and emotional development (Landsberg, 2011). The six areas that were related to the psychological impact of visual impairment,

independence, social relationships, self-actualization, physical well-being, emotional well-being, planning and strategic development. For the social development of a visual impairment child, there are a number of factors. These factors entail acquisition of social information, positive parent-child relationships, learning to use visual and environmental cues, and interpersonal skills (Rogow, 1999). Intervention strategies for visually impaired children should, therefore, focus on helping them in acquiring these skills. Many researchers who have written about the effects of visual impairment on an individual's development concur that early intervention can and does limit or even remove the negative effects of visual impairment (Landsberg, 2011; Rogow, 1999). In the words of Landsberg (2011), "Children with visual impairment need purposeful and planned support from birth to prevent their impairment from becoming a disability."

Visual Impairment and Access to Information

Visual impairment greatly affects a person's ability to read printed materials, thus reducing his/her ability to gain information and thereby making him/her more dependent on others. In the case of students, it impacts their ability to access educational material. Teaching children with visual impairment requires that they be taught how to read and write Braille as well as the use of computers in order to enable them to access information. (Rogow, 1999)

For a blind person to be able to read, the material must be presented to him/her in one of two forms: auditory or tactile. Braille is the most common form of representing text in a tactile form and is the basic literacy tool for blind people. Braille is a system of representing letters by patterns of raised dots. Braille is used widely by visually impaired people as a means of accessing the written word (Omvig, 2002). But because some visually impaired children with additional difficulties were unable to use it efficiently, a less complex system known as 'moon' was introduced. Moon, unlike Braille, is based on the print alphabet and was originally invented for people who lost their sight in adulthood. The relative dearth of reading materials in moon makes it a less viable option for use than Braille (Salisbury & Laconsay, 2020). Braille characters are larger than print letters and it is usually embossed on heavier paper than is normally used to write print on. Thus, a Braille version of a long print book can consist of several volumes in Braille. To save space, some words can be represented as abbreviated forms. This kind of Braille is contracted and is known as Grade 2 Braille (Richards, 2020).

Academic Challenges of Visually Impaired, Blind Students

Our world, today, is technologically powered with information as its fuel and is, needless to say, driven by knowledge. This knowledge, the quality of education - modern life currency, many will say - is a necessity for all. It's not an option that can be overlooked. The five senses gifted to humans are vision, hearing, smell, taste and touch. Hence, many educational settings are based around these five senses (Giudice, 2018). The rate by which the children are going blind in the world is one child per minute. That, this rate, means 500,000 children in only a year. In accordance with NFB (2012), US (alone) has 485,500 blind children. One of the reasons for this rate of blindness is the consumption of tobacco (Gogate, Rishikeshi, Mehata, Ranade, Kharat, & Deshpande, 2009). All the children that are consuming tobacco cannot read print. To put in simpler words, they are print-disabled. Now, to keep this large group of individuals deprived of quality education would result catastrophic for our knowledge driven economy. So, these individuals are assisted technologically. They, these individuals, are getting empowered by the use of screen-reader BVI (and other assistive technologies). This, the technological assistance, has helped them in resolving day-to-day challenges. It has helped them in a) accessing information from the sighted world and in b) communicating their thoughts with it as well. New avenues for these BVI individuals are now being surfaced by the increasing innovations in the field of educational technology. These innovations entail Audio-Math and tactile graphics (Sánchez & Flores, 2005). In tactile graphics, needless to say, printed images have a raised surface that helps the BVI individuals in seeing them by feeling them with hands. but, even when the picture is appearing quite rosy after all these facts, the inaccessibility of learning material and rapidly increasing focus on visual curriculum still pose so many challenges for BVI individuals.

Therefore, needless to say, the understanding and appreciation of the challenges faced by their individuals is imperative. Even the understanding of various strategies that are utilized by these individuals in mitigation of their challenges is imperative (Giudice, 2018).

Hearing Impairment

Deaf study is a relatively young field, and academics are still grappling with issues of defining people with hearing impairment “as an aggregate of sorts - be it social, linguistic, or even just medical or psychological”. These people that are deaf form a distinctive group with their own language and culture, living within a world of primarily hearing individuals. Deafness is an invisible impairment (Thouten hoofd, 2000). Consequently, its effects on the deaf individual and his/her family are underestimated. Perhaps it is because deaf people have traditionally been marginalized. (Easterbrooks & Huston, 2008).

There are two prominent views in the understanding of deafness and hearing loss: the socio-cultural perspective, and the medical/audio logical perspective. What a person uses to describe deaf people reflects his/her ideological position regarding Deaf Culture and Deaf identity (Magongwa, 2008).

People with hearing impairments are often seen objecting to terms that are used to define them. These terms entail auditory handicaps, disabled, hearing impaired and people with hearing loss. These terms, according to these people, focus on their impairment and not on them as an individual. Thus, these terms put a negative label on them (Suubi, 2012). These people, however, have no objection whatsoever to being called deaf. Because deaf people are known to use sign language for communication as an alternative, they kind of fall under a distinctive linguistic and cultural group. Sign language is even, needless to say, considered as a natural language that has equal worth and depth as any of the spoken languages (Omvig, 2002).

In early modern England, prelingually deaf people were referred to by terms such as 'deaf and dumb' and 'deaf-mute' (McIlroy & Storbeck, 2011). Hearing impairment, as we've come to know, has its occurrence in two ways. These two ways mean that either a person is completely deaf or is hard of hearing (has trouble in hearing). The term 'deaf' refers to individuals with hearing loss that precludes the understanding of speech through hearing alone, with or without the use of auditory amplification. In simpler words, a deaf person cannot rely only on speech even when aided by the hearing aid devices. The occurrence of hearing loss before birth or soon after birth is referred to as 'Congenital hearing impairment'. And, If this occurrence happens after birth, it is referred to as 'Acquired hearing loss' (Fellinger, Holzinger & Pollard, 2005).

Deafness which occurs before the acquisition of spoken language skills is termed trilingual deafness, while deafness occurring after the acquisition of spoken language skills is referred to as post lingual deafness (Heward & Orlansky, 1992). Trilingual and post lingual deafness both have different consequences for and implications on the deaf individual and different intervention measures are needed for each of these deafness (McIlroy & Storbeck, 2011).

Educational Implications of Deafness

In education, because deaf people have more trouble than that of their hearing counterparts, in accordance with Thoutenhoofd (2000), deaf people are lagging behind in educational achievements.

Of all the reasons behind this underachievement, goes without saying, communication challenges are on the top. The lack of awareness on teachers' and other professionals' parts when it comes to educating deaf people also gives its fair share in this underachievement. And, the societal attitude towards these deaf people doesn't help much either (Neild, Graham & Taylor, 2023).

Controversy in the education of deaf learners has revolved around three issues: how, where, and what to teach them. The 'how' question regards the

methods that should be used in their education and concern mainly the issue of language use: whether to use speech and residual hearing, or sign language and finger spelling. The 'where' question is largely one of placement, i.e. whether to educate deaf learners in mainstream or in specialized schools. The 'what' question refers to the curriculum that should be taught to deaf students: whether it should be the curriculum used in mainstream schools or whether it should be a special curriculum (Moore, 1990). Communication mode and the education method entailed by the choice of a particular communication mode is a contested issue in deaf education. There are two major communication and educational approaches in deaf education: sign language and oralism (McIlroy & Storbeck, 2011). The majority of children with hearing loss have residual hearing left which can be utilized to enable the child to receive speech primarily through hearing. A child should be encouraged to use audition from an early age, otherwise its benefits will be lost. Audition enables the child to learn to communicate effectively by being able to both hear others and himself/herself. Audition is the most natural way through which a child can acquire language by using the oral approach. Parents do not need to adapt unnatural or unusual ways to communicate with their deaf children (Giudice, 2018).

Storbeck (2011) points out that this mode is associated with the Deaf Culture movement. It is now accepted that deaf people should be viewed primarily as a linguistic and cultural minority rather than as people with an audio logical disability.

Deaf people see the use of spoken language in deaf education as oppression and feel that deaf people have a right to be taught in sign language. Deaf children exposed to sign language from an early age acquire language skills at a normal pace and find it easier to learn spoken language. The teaching approach for deaf/hard of hearing learners was an important milestone in deaf education because it indicated a recognition by educators of deaf people that sign language was an essential part of deaf education (Storbeck, 2011).

Many practitioners in the field of deaf education now believe that the bilingual approach to deaf education provides the best option in solving the educational challenges faced by deaf learners (Swanwick & Marschark, 2010; Magongwa, 2008). It, this approach, stresses the importance of sign language as the first and natural language of an individual who's deaf and, hence, gives it precedence. Sign bilingualism gives deaf/hard of hearing children a chance to learn sign language as well as to acquire skills in spoken and written language. Spoken languages, however, are taught as second languages. Emphasis is on the recognition of both languages as equal languages and giving them equal importance (Storbeck, 2011; Swanwick, 2010). Disagreements among deaf educators also exist around the question of where to educate deaf learners (Storbeck, 2011; Moore, 1990). Using sign language interpreters in regular

classes has led to a significant increase in attendance of learners with hearing impairment. Deaf/hard of hearing learners in inclusive educational settings require support services such as the availability of a resource room (or, where it is not available, an itinerant teacher). Specialized teachers in the resource room provide additional support to deaf/hard of hearing students either individually or in groups. Itinerant teachers are specialized teachers who move from school to school offering support to teachers where there are not enough students with special needs to warrant a resource room teacher for each school. They, these specialized teachers, provide consultation and support services to students with hearing impairment and their teachers (Magongwa, 2008).

Effects of Hearing Impairment

Deaf people, as established earlier, form a unique population with distinct culture and linguistic. Because 90% of the deaf children have parents that can hear, in accordance with Arnold (1999), their world is divided in two fragments (the hearing world and the world of the deaf). The fact that the children that are deaf and are born to parents that are deaf too fare much better is of no surprise. Hearing parents that have deaf children lack effective ways of communication which inevitably results in delaying their development (Marschark, 2006).

In accordance with Hauser (2012), children that are deaf and are born to deaf parents are able to develop their language skills just as rapidly as their counterparts because their parents already have a grip on sign language (an appropriate and alternative communication method for deaf). Many of the language development delays that happen to deaf children are also caused by the fact that they cannot access auditory information, let alone make use of it. They, these children, have to be exposed to visually encoded information for proper development (Spencer & Meadow-Orlans, 1996). All in all, most of these children are behind their agemates in schools because they were never able to acquire adequate language skills (Marschark, 2006).

Academic Challenges of Deaf Children

One way to ensure better social development of a deaf child is by teaching him/her language skills (spoken or sign) early in life (Andrews, 2004). Most of the challenges that are faced by deaf people usually result from a lack of developed language skills (Marschark, 2006). This language development can be given to these deaf people by anyone (parents, peers or an early intervention staff). The sooner they developed their language skills the better and easier it gets for them (Andrews, 2004). Patterns of onset of deafness have implications for the psychological development and functioning of deaf children and adults. This is especially so if there are other additional limitations a person may have depending on the etiology of deafness. (Andrews, 2004). According to Marschark (2006), an approximate of 40% deaf individuals have their learning affected by the presence of other syndromic or non-syndromic conditions.

Marschark (2006) explained that the use of inappropriate intelligence tests has led to some people believing that deafness leads to reduced cognitive abilities. Marschark (2006) has majorly expanded on this issue in his writings. Arlinger (2003) also noted that there is no evidence directly linking hearing loss to reduced cognitive functioning. Hard of hearing individuals tend to have more restricted social lives as compared to people who are profoundly deaf. (Fellinger, 2007). Fellinger, (2007) concluded that the partly deaf people who took part in their study without learning sign language were dissatisfied with their social lives because they lacked the support the signing deaf got from other deaf people and that they were also disadvantaged by the hearing environment in which they lived. In comparison to existing knowledge about deafness, not enough is known about hard of hearing people. Children with mild to severe hearing loss have even been referred to as 'forgotten'. Hearing people often hold negative and stereotypical attitudes towards deaf people, attitudes which deaf people may internalize, and which may affect their feelings of self-worth and negatively affect their personality (Nikolaraizi & Makri, 2004).

Teachers' Attitudes toward Their Students with Disabilities

In contemporary education, needless to say, the most contentious policy reform is that of the inclusion of disabled students into general classrooms. And, this prevalence has increased substantially and consistently in recent years even when there's a lack of unequivocal empirical support (Longley & Craigo, 2023). In his recent analysis of Annual Reports to Congress, it is indicated by McCleskey that from 1988-89 and 1994-95 the inclusive placements increased upto 60%. In simpler words, in United States over 2 million students that were disabled were included in general education classes and that they spent 79% of their school time in those general education classes. Hence, the primary determinant of educational outcomes for this ever increasing group of disabled students is the quality of this inclusive education.

One of the largest bodies of research investigating the critical area of inclusion is represented by the teacher attitudinal studies. This, goes without saying, is because of the perceived importance of teachers' attitudes. Optimistic findings have been yielded from the literature on teachers' attitudes because teachers, more often than not, exhibit positive attitudes towards the general inclusion and its whole concept (Scruggs & Mastropieri, 2010). Even though the teacher attitudinal literature regarding general inclusion has mostly been focused on students that have mild disabilities, it's a given that teachers have also shown positive and healthy attitude towards students who have severe or moderate disabilities (Kielblock, & Woodcock, 2023).

For included students with disabilities, a parsimonious and more potent predictor of quality education is represented by the teachers' attitudes towards their included students instead of their opinions regarding this abstract inclusion concept. The fact is that the interactions between students and teachers (and other relevant educational opportunities) are, needless to say, directly impacted the attitudes of teachers towards their students (Gulya, & Fehérvári, 2023).

Objectives

The objectives of the research were as follows:

- To find the approaches and methods of teaching used by teachers when teaching visual and hearing impairment children.
- To find the challenges teachers face while teaching visual and hearing impairment children.
- To find the strategies used by teachers for overcoming challenges of teaching visual and hearing impairment children.

Research Questions

1. What challenges do teachers face while teaching visual and hearing-impaired children and how do they overcome them?
2. What approach and methods of teaching do the teachers use to teach visual and hearing impairment children?

Methodology

This was qualitative research. The methodology of the research includes data collection, research design, sample size, sample collection, and data analysis.

Research Design

This was a qualitative study. The main objective was to find the challenges faced by teachers in teaching visual and hearing impairment children and how they try to overcome them. Qualitative research approach can provide answers to the questions of Who, What, When, Where, and how relevant to a particular research problem. The natural setting in this case was a classroom where the teaching process occurred. Special needs education teachers were observed in the developmental disability, what challenges they faced, and how they tried to overcome these challenges.

Population of the Study

The population of the study comprised of four visual and hearing impairment schools of Lahore.

Sample of the Study

Purposive sampling was used for this study. The sample of the study was 10 teachers. 5 teachers were selected from visual impairment schools and 5 teachers were selected from hearing impairment schools. The sample was selected from 4 schools in Lahore city.

Research Instrument

Data was collected through interview protocol.

Data Collection

Researchers collected data personally by interviewing teachers who were teaching visual and hearing-impaired children.

Data Analysis

The data obtained from these structural interviews was transcribed and analyzed with thematic analysis using 'open and axial coding' techniques.

Analysis of Visual and Hearing Impairment Teacher's Challenges

The researchers analyzed the visual and hearing impairment teachers' challenges. The teachers faced challenges when teaching visual and hearing impairment students.

Teachers faced behavior issues, emotional issues, material issues, parental expectation issues and many methodological challenges.

Findings

This study investigated the challenges faced by teachers while teaching hearing and visually impaired children at schools. For this, the qualitative method was used, the structured interview was conducted to explore the in-depth knowledge from teachers who taught in visual and hearing impairment schools. Thematic analysis was used for interpretation of collected data and the data obtained from the semi-structured interview was transcribed and analyzed with 'open and axial coding' techniques. The major findings of the research are mentioned below.

Teacher's interview (Hearing impaired children)

Discussions based on the analysis of teachers' interviews presented in the following part.

Teaching material

Teachers responded that they face challenges regarding teaching materials. Two out of five teachers face the challenge of finding material that benefits everyone. Two teachers face the challenge of preparing material. One teacher responded that working with these children is a challenge.

Behavioral issues

Teachers responded that they face challenges in children's behavioral issues. Three out of five teachers face challenges to deal with children with behavioral problems. One teacher faces the challenge that children do not sit properly in the class. One teacher faces the challenge that children have a few behavior issues because they are aware of their shortcomings.

Lack of Time

Teachers responded that lack of time is a challenge. Most of the teachers responded that they have to work with many other things so there is always a problem of time.

Parental Expectations

Teachers responded that expectation of parents towards their child is a challenge. Most teachers responded that parents are not open-minded towards the child's disability and their not accepting this fact becomes very hard.

Building self-esteem

Building self-confidence is a challenge, so most teachers responded that children have low self-esteem and that is why it is difficult to encourage them.

Emotional Issues

The reaction of the foremost teachers was it gets difficult for them when the children have emotional issues and it influences their education.

Teaching Methodology

Teachers responded that they use different methods to meet the needs of their students. Most teachers responded that they use sign language to teach hearing-impaired children.

Overcoming Challenges

Teachers responded that they use selective educational strategies that are deemed appropriate by the educationists, they give basic training to the parents, too. They even assign responsibilities to parents and convince them to support and encouraging their child by creating a judgement-free space.

Teachers' Interview (Visual Impairment Teacher)

Discussions based on the analysis of teachers' interviews is given in the following part.

Teaching Material

Teachers responded that they face challenges regarding teaching materials. Two out of five teachers responded that its hard for the students to understand their lesson.

Behavioral issues

Teachers responded that they face challenges in children's behavioral issues. Most of the teachers face challenges when students do not easily sit in the classroom and keep on creating disturbance in the classroom.

Emotional Issues

Teachers responded that they face challenges in children's emotional issues. They also reported that children have mental issues and that they consult the psychiatrist for child mental health.

Conclusion

The following conclusions are based on findings drawn from the current research. All in all, goes without saying, if the right support is provided to deaf-blind children, these learners will thrive in their educational contexts. Children who are deaf-blind also have the right to access teachers who have specific knowledge and training on deaf-blindness, and also to information and resources specific to their needs. Training needs to cut across the following areas: knowledge training on disability and specifically deaf-blindness, skills development on managing children with deaf-blindness and communication strategies for the deaf-blind, and it should be considerate to the individual cultural and linguistic characteristics of the learner. Providing constant support to educators and educators of deaf-blind students would also ease the external challenges negatively affecting their role. Therefore, there is a need for a

collaborative model of delivering inclusive education that will encompass educators and families of children with deaf blindness as a means of supporting the learner who is deaf and blind.

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