Educational Concerns of Students with Hearing Impairment in Secondary and Higher Secondary Classes in Mumbai, India

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ABSTRACT

Purpose: *Although education, and higher education in particular, is considered a vehicle for empowerment, the enrolment of students with hearing impairment in secondary and higher secondary education is almost negligible in comparison to their hearing peers. This study was conducted in the city of Mumbai, India, with the aim of identifying the educational concerns of students with hearing impairment studying in secondary and higher secondary classes.*

Method: *The survey method was followed. A questionnaire, developed and validated by the researchers, was the study tool. The participants were 152 of the randomly selected 160 students with hearing impairment studying in secondary classes, and 42 of the randomly selected 45 students with hearing impairment studying in higher secondary classes. Percentage scores as part of descriptive statistics were calculated to arrive at the results.*

Results: *Various academic, administrative and personal concerns were identified among these students with hearing impairment in special schools.*

Conclusions: *As the focus of all educational programmes is on creating and promoting barrier-free education, the educational concerns identified in the current study cannot be ignored by schools, families and the community.*

Key words: *Educational concerns, students with hearing impairment (SWHI).*

INTRODUCTION

In India, the educational programmes for children with hearing impairment are spread across segregated, integrated and inclusive settings. Currently the emphasis is on promoting inclusive education rather than the other two.

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Segregated education has been promoted for a group of children with hearing impairment whose needs cannot be met in general schools. The severity of hearing loss and its impact have led these children to seek specialised intervention which is often offered only in segregated settings. Integrated and inclusive education programmes have created mainstream educational opportunities for children with hearing impairment and have facilitated education of all the differently-abled children in the country. In spite of this, the World Bank (1991) documented that more than one-third of children out of school have a disability, and fewer than 5% of children with a disability attain the goal of primary school completion. It is estimated that 77 million children are out of schools and have been deprived of access to education (UNESCO, 2006). The other facts include: (i) out of every 100 children, 19 continue to be out of school; (ii) out of every 100 children who enrol in primary school, 70 drop out by the time they reach secondary level; and (iii) out of the 77million children missing education, one-third of them are children with disabilities (UNESCO, 2006).

The number of special schools currently available in India cannot cater to the educational needs of 'all' children with hearing impairment. Children with mild/moderate hearing loss who do not require specialised support are given the opportunity to pursue their education in general schools alongside their hearing peers. However, for several reasons, there are fewer students with hearing impairment enrolled for higher secondary courses. Additionally, the students with hearing impairment who enrol in these higher classes face several challenges, which in turn hamper their academic growth.

Despite the developments in science and technology and the participation of a number of non-governmental organisations in spreading awareness and enrolling students with varying degrees and types of hearing loss in the secondary and higher secondary educational programmes, the retention of students with hearing impairment in secondary and higher secondary schools is a matter of concern for many parents and school authorities.

Gathoo (2006) reported that the major challenges faced by individuals with hearing impairment are related to (i) access, (ii) participation and equity, (iii) quality, (iv) relevance, and (v) management. All these have resulted in poor enrolment and retention of students in educational programmes.

According to Lang et al (2004) there are significant differences between the perceptions of deaf students and university staff regarding the accommodation

of deaf and hard-of- hearing students in classrooms. The researchers reported that the differing perceptions could be due in part to the lecturers having had little or no training to meet the communication needs of deaf learners. Semmel et al (1991) and Hutchinson and Martin (1999) mentioned that the general education teachers reported inability or unwillingness to adapt their teaching to meet the needs of individual students.

Lang (2002) reported that taking down lecture notes was described as "a difficult task" for deaf and hard-of-hearing students pursuing higher education. Spradbrow and Power (2000) documented that hard-of-hearing students in Australian universities reported that they miss information during lectures. Osguthrope et al (1980) mentioned that taking down lecture notes facilitated only recall and recognition, not concept acquisition and problem solving. Jacobs (1977) reported that it has long been recognised that deaf students did not receive as much information from the teachers' lectures as their hearing peers.

Deaf students appear to set a high value on content knowledge in teachers (Lang et al, 1993) and in tutors -. Matching of communication between interpreters and deaf students is also important (Winston, 1995; Seal, 1998). Foster (1998) reported that one of the greatest challenges that deaf and hard-of-hearing students faced in a mainstream university was learning through support services, because there is little direct communication between the lecturer and deaf students when information is accessed through the interpreted mode.

According to Asikhia (2010), due to the unavailability of financial resources, individuals are forced out of school and made to engage in hawking, selling packaged drinking water and the like in order to save money for their school expenses. Most often they cannot afford instructional material and are always at the mercy of examiners during examination time.

 Accessibility to the general education curriculum and remedial planning for high school students with disabilities have broadened their awareness of and preparation for post-secondary education. However, they still encounter many difficulties and challenges at the higher education level around the world. (Liversidge, 2003) and Isangedigh (1988) reported that the entire unattractive physical structure of the school building could de-motivate a learner's academic performance.

India is progressing towards a knowledge-based society. Every individual is expected to contribute not only to the bottom line but also to the system

(Dwivedi, 1997). Education is considered as a vehicle for empowerment of all students, even those with hearing impairment, and higher education in schools and colleges is considered as a key driver in providing economic and social benefits. However, Komesaroff (2000) states that deaf students are grossly under-represented in higher education worldwide. The scene is more or less the same in India. Though there is progress in terms of enrolment in schools and colleges for higher education, it is not so in the case of individuals with disabilities in general, and individuals with hearing impairment in particular (Gathoo, 2006). The enrolment of SWHI in secondary and higher secondary education is almost negligible as compared to their hearing peers.

This raises 2 major questions: (1) Do SWHI face challenges in pursuing secondary and higher secondary education? (2) If yes, what are these challenges? Identification of these challenges in different areas will help in the formulation of an appropriate plan of action to solve the existing problems and promote higher education among SWHI in the country.

OBJECTIVE

The current study was undertaken by the researcher with the aim of identifying the academic, administrative and personal concerns of students with hearing impairment who are in secondary and higher secondary classes.

METHOD

Survey method was adopted to explore the educational concerns of students with hearing impairment in secondary and higher secondary classes.

Participants

160 students with hearing impairment studying in secondary classes and 45 students with hearing impairment studying in higher secondary classes in Mumbai were selected on the basis of the following criteria: (i) those studying in secondary classes in special schools (ii) those with hearing loss more than 60dB in the better ear, (iii) those who used oral/total communication/educational bilingualism as a method of communication, (iv) those with no learning difficulties or additional impairment, (v) those who had English/Hindi/Marathi as the medium of instruction.

Study Tool

A researcher-made questionnaire, validated by an expert group of 5 special educators, was used as the tool for the study. The sample items in the questionnaire are given in Table 1.

Table1: Sample Items in the Questionnaire

Educational Concerns	Sample Items
Academic	Do you believe that adequate preparation about the course is essential before admission to Secondary /Higher Secondary course? Yes No If yes, tick the reasons for the same from the following (you can tick mark one or more): - Helps in self-preparation - Helps in arranging resources - Saves time, money and energy - Prevents dropping the course in between - Any other (please specify)
Academic	Did you receive adequate knowledge about the course prior to your admission? Yes No - If no, tick mark the possible reasons for the same (you can tick mark one or more): No such facility was available near my home - Most of the teachers whom I contacted do not have adequate information about the course - Information about the course was not available on the internet - Staff and senior students are not approachable - My friends and their parents were not ready to share - Any other (please specify)
Academic	Did you fear that your language competency and method of communication might affect your studies once enrolled in the course? Yes No - If yes, tick mark the reasons for the same (you can tick mark one or more): - Poor oral and written language skills - Majority may not comprehend what I am communicating verbally/manually - Poor speech reading skills - Majority may focus more on my weaknesses rather than my strengths in language and communication - Any other (please specify)

Admini-strative	Did you face problems in paying the admission and tuition fees of the school? Yes　　　　　No If yes, tick the reasons for the same from the following (you can tick mark one or more): - Only the private school/college offered admission - Very high fees - No scholarships available - Poor financial condition of the parents - Difficulty in raising the funds - No prior intimation from administrative staff - Difficulty in communicating with them - Any other (please specify)
Admini-strative	Do you face administrative problems in availing of academic and financial concessions and facilities? Yes　　　　　No If yes, tick mark one or more from the following: - Lack of knowledge about these concessions and facilities - Indifferent attitude towards differently-abled students - Delay in informing and forwarding applications Difficulty in communication - Any other (please specify)
Personal	In your personal school/college life, did you face any problems that emerged out of your hearing loss? Yes　　　　　No If yes, tick mark one or more from the following: - Less number of friends - Isolated in the group - A victim of teasing - Could not enjoy the school/college life fully - Could not project the real strengths and achievements - Many misunderstood because of the difficulties in communication - Any other (please specify)
Personal	Did you face any problem in using sign language in the college? Yes　　　　　No If yes, tick mark one or more from the following: - Shows pity - Sympathy - Any other (please specify)

The validated questionnaire was translated into the local Marathi and Hindi languages. The final questionnaire, comprising 33 objective questions, was given to each participant after getting written permission from the school authorities. Indian Sign Language interpreter services were provided for those who required it. The researcher personally collected data from the participants. Only 152 participants from the first group and 42 from the second group returned the filled-in questionnaires. The obtained data was compiled, coded, and percentage scores were calculated manually to arrive at the answers to the research questions formulated at the beginning of the study.

RESULTS and DISCUSSION

1) Academic Concerns of SWHI

Table 2 depicts the academic concerns reported by the students with hearing impairment in secondary and higher secondary classes.

Table 2: Academic Concerns - Responses of SWHI in Secondary and Higher Secondary classes

Academic Concerns	Responses of Secondary students with hearing impairment (in percentage)		Responses of Higher Secondary students with hearing impairment (in percentage)	
	Yes	No	Yes	No
Preparedness before enrolment	32.90%	67.10%	26.19%	73.81%
Language and communication	65.46%	34.54%	73.81%	26.19%
Literacy	27.30%	72.70%	71.43%	28.57%
Syllabus and content	56.58%	43.42%	95.24%	4.76%
Concession and facilities	15.79%	84.21%	19.05%)	80.95%
Teaching-learning methods and strategies	21.05%	78.95%	1.19%	98.81%
Evaluation	19.74%	80.26%	2.38%	97.62%
Teacher-student ratio	15.79%	84.21%	14.29%	85.71%
Learning environment	19.08%	80.92%	59.52%	40.48%
Peer support	20.39%	79.61%	00.0%	100.00%
Assistive devices and services	11.18%	88.82%	50%	50%
Overall	30.13%	69.87%	39.05%	60.95%

Table 2 shows that though the percentage of students with each of the identified concerns varied, the students with hearing impairment studying in secondary and higher secondary classes reported that they experienced academic concerns in the sub-areas of (i) preparedness before enrolment, (ii) language and communication, (iii) literacy, (iv) syllabus and content, (v) concession and facilities, (vi) teaching-learning methods and strategies, (vii) evaluation, (viii) teacher-student ratio, (ix) learning environment, (x) peer support and (xi) assistive devices and services.

The reasons for academic concerns are many. Among the group of students with hearing impairment who reported academic concerns, some indicated that they were forced to enrol in secondary classes by their parents (22.39%), friends (3.29%) and teachers (17.36%). On the other hand, it was reported that majority of the students with hearing impairment (52.38%) had enrolled in the higher secondary courses due to compulsion by parents. Hence, it may be assumed that preparedness before enrolment among these students was very minimal and they had continued their education in secondary and higher secondary classes as a result of compulsion, not from choice. In contrast, no compulsion was reported by those who did not share any of these academic concerns.

Conveying adequate information about courses is essential for better participation and reduction of concerns in education. However, 28.95% of the students with hearing impairment in secondary classes reported that they did not receive adequate information about the courses prior to enrolment due to the lack of facility and 5.92% reported that their teachers did not give adequate orientation about the selected courses.

Language and communication abilities of students with hearing impairment have been identified as a sub-area of concern. Among the study participants, 25% of the secondary and 47.62% of the higher secondary students reported that their language competency and method of communication were affecting their studies negatively in oral and written language skills. It was reported by 25% of the secondary and 47.62% of the higher secondary students with hearing impairment that other individuals could not comprehend what they were communicating verbally or manually. Furthermore, 20.39% of the secondary school students and 47.62% of higher secondary students reported that majority of the hearing individuals focus on their weaknesses rather than their strengths in language and communication. As a solution to this, 52.63% of the secondary students and 100% of the higher secondary students suggested that every school should have

an interpreter who can act as an interface between them and hearing individuals inside and outside the schools.

Creating a barrier-free environment through assistive devices is one way of overcoming the language and communication barriers. 57.89% of the secondary and 69.04% of the higher secondary students with hearing impairment felt that school authorities should take on the responsibility of creating a barrier-free environment by providing computer facilities, visual indicators, etc., to address their concerns.

The literacy level of students was identified as a factor contributing to their concerns. 16.45% of the secondary and 97.62% of the higher secondary students with hearing impairment reported that their courses demanded high literacy skills. 17.76% of the secondary students and 95.24% of the higher secondary students reported that their literacy skills could interfere with the quantity and quality of learning. However, only 7.89% of the secondary students and 95.24% of the higher secondary students felt that their literacy skills might reflect on their performance. Although there are several remedial programmes available to solve the literacy problems, 42.76% of the secondary and 2.38% of the higher secondary students with hearing impairment reported that they did not attend any short-term training course to improve their literacy skills prior to enrolment because of the lack of facilities near their homes. On the other hand, 42.11% of the secondary students reported that they were confident about meeting the demands of literacy skills with the support of others. 13.81% of the secondary students and 57.14% of the higher secondary students reported that until enrolment they never knew the literacy skills required for the selected courses.

The prescribed syllabi and content also play a significant role in either creating or not creating academic concerns among students with hearing impairment. Though majority of students did not report this as an area of concern, 35.53% of the secondary and 42.86% of the higher secondary students reported that they needed to study too many knowledge-based subjects and less of the skill-based subjects like computers. While fewer students in secondary classes complained of heavy language and content load (30.26%), there were more higher secondary students (95.24%) who reported that the prescribed syllabi carried high content and language load. Only 12.50% of the secondary students reported that there were limited options in choosing the subjects, whereas 45.23% of the students in higher secondary classes reported the same concern. While 2.63% of the secondary students reported that the prescribed syllabus was sketchy, 42.86% of the higher

secondary students reported the same. 8.55 % of the secondary and 85.71%of the higher secondary students reported that they were unaware of the content of each unit/lesson that needed to be studied. Only 3.29% of the secondary and 7.14 % of the higher secondary students reported poor planning in terms of coverage of syllabi.

Among the students who identified academic concessions and facilities as an area of concern, only 11.18% of the secondary students reported that they had received minimal concessions and facilities due to lack of awareness, cooperation and support from the school authorities, teachers and students. While 9.21% of the secondary students and 16.67% of higher secondary students reported difficulty in accessing the available concessions and facilities, 9.87% of the secondary students and 2.38% of higher secondary students reported that the available concessions and facilities did not suit their educational needs and demands.

Teacher-student ratio was yet another concern identified by the students in both groups. The teacher-student ratio in special schools is less in comparison to the ratio in mainstream schools. Only 3.29% of the secondary students and 2.38% of higher secondary students reported that the teachers paid less attention to them. On the other hand, 10.53% of the secondary students and 14.29% of higher secondary students reported that they experienced difficulty in comprehension of instructions and in speech reading the teachers. 5.92% of the students in secondary classes and 4.76% of students in higher secondary classes reported that they faced the problem of poor signal to noise ratio in the classrooms.

Learning environment was another sub-area of concern identified by the students in secondary and higher secondary classes. 5.26% of the secondary students and 2.38% of higher secondary students reported that they faced problems in the learning environment due to attitudinal differences between them, the staff and students. 12.50% of the secondary students reported that they faced problems due to the school environment. 7.24% and 59.52% of the students in secondary and higher secondary classes respectively reported that their seating arrangements were not good. 2.63% and 54.76% of the students in secondary and higher secondary classes reported that they faced problems with the infrastructure, including furniture and fixtures. As compared to students with hearing impairment in secondary classes, 50% of similar students in higher secondary classes faced more challenges in terms of assistive devices and services. A small percentage of those in secondary classes also had concerns related to

peer support (20.39%). However, such concerns were not reported by students with hearing impairment in higher secondary classes.

Academic concerns in general were reported by 30.13% of the study participants from secondary classes and by 39.05% of those from higher secondary classes. The remaining 69.87% of secondary students with hearing impairment and 60.95% of higher secondary students with hearing impairment reported that they did not have any specific academic concerns. An increase in the percentage of higher secondary students with hearing impairment who had academic concerns was found as compared to the students with hearing impairment of secondary classes.

As per the Persons with Disabilities Act (1995), children with hearing impairment who have above 60 decibel hearing loss in the better ear have been given the opportunity to study in segregated schools. As a result children with different degrees of hearing loss are enrolled in special schools. The students with hearing impairment in special schools have differential educational needs (Mathew, 2006). Among them, students with profound hearing loss have more number of needs than those with less degrees of hearing loss (Warnock, 1978). The students with more needs require supportive measures in schools but may not get enough to overcome their difficulties. Some of them might also have such significant difficulties that secondary or higher secondary education is not an ideal option. For this reason, the group of students who participated in this study had academic concerns that are reflected here.

The age of identification and intervention is another important factor that can contribute to the presence or absence of students' academic concerns. A variety of studies have demonstrated the benefits of early identification and intervention on early language, academic, and social–emotional development (Yoshinaga-Itano et al, 1998; Calderon and Naidu, 2000; Moeller, 2000). There is heterogeneity in the age of identification and intervention among students with hearing impairment in secondary and higher secondary classes who participated in the study.

The differing backgrounds of students with hearing impairment and the support they receive from parents and professionals can also have an influence on academic concerns. The greater the support, less are the concerns. Hence, it is obvious that a small percentage of students with hearing impairment might not have received adequate educational support from their parents, which could have led to the development of academic concerns.

Language and communication are considered to be the two wheels of education. As language acquisition is an auditory dependant phenomenon, hearing loss in children prevents them from acquiring and utilising language for various purposes in their lives including education (Northern and Downs, 1984). Most children with hearing impairment have a weak language foundation when they enrol in schools. Some of them compensate for the lost years through mediated language development programmes while others continue their education with the same weak foundation (Mathew and Mishra, 2010). A small percentage of students with hearing impairment in secondary and higher secondary classes who have a weak foundation in language and communication skills may harbour certain academic concerns that others do not have.

Additionally, the secondary and higher secondary schools for the present study were selected from segregated set-ups. Since these schools aim to promote the education of children with hearing impairment whose needs cannot be met through mainstream schools, they are specially designed and planned to offer a barrier-free environment for learning. The features and provisions available in these schools might have attracted the students to enrol in secondary and higher secondary programmes. In special schools, fewer students are given admission. While mainstream classes serve 40-60 students per class, special classrooms cater to only 6-10 students and special teachers maintain a good rapport with the students because of the limited numbers. Teachers in special schools receive specialised training that helps them to identify and meet the special educational needs of majority of the students with hearing impairment.

The curriculum followed in special schools is more or less similar to that of mainstream schools. The curriculum prescribed for each class is rigid with respect to its content, activity, time, language and evaluation system (Wadadekar, 2002). The curriculum including the language, subjects, teaching methods and evaluation practiced in special schools is developed on the basis of their hearing counterparts (Mathew, 2010). Hence, special schools attempt certain adaptations and accommodations as per the provisions of the Persons with Disabilities Act (1995). One-language formula is implemented in secondary classes and the students are given the opportunity to select some other subject instead of the language. Very often, the language used and content load act as impediments to learning. However, with remedial language enrichment programmes and adaptation of textbooks, many of the students' difficulties are solved. The methodologies and strategies used in special schools are modified according to the

students' needs and difficulties, and the emphasis is on learning through activity-centered methods. Hence, the percentage of students with hearing impairment in secondary and higher secondary classes who have academic concerns is less in comparison to others.

In special schools, the learning environment is tuned to some extent to meet the special educational needs of students. Noise-free environment, visual indicators and assistive listening devices are made available. Evaluation procedures are also partially modified. A variety of evaluation techniques are followed to bring equity and fairness in the evaluation of students with hearing impairment. Hence, the academic concerns of majority of students with hearing impairment in secondary and higher secondary classes are resolved. This is reflected in the present study.

2) Administrative Concerns of SWHI

Table 3 depicts the administrative concerns of SWHI in the secondary and higher secondary classes.

Table 3: Administrative Concerns - Responses of SWHI in Secondary and Higher Secondary classes

Administrative Concerns	Responses of secondary students with hearing impairment (in percentage)		Responses of higher secondary students with hearing impairment (in percentage)	
	Yes	No	Yes	No
Courses and subjects offered	54.61%	45.39%	45.24%	54.76%
Fees	30.92%	69.08%	85.71%	14.29%
Concessions and facilities available	16.45%	83.55%	11.90%	88.10%
Support and cooperation from administrators	20.39%	79.61%	00.0%	100.00%
Correspondence	36.18%	63.82%	7.14%	92.86%
Overall	31.71%	68.41%	30.00%	70.00%

Table 3 shows that though the percentage of students varies for each of the identified concerns, the participants reported that they experienced administrative

concerns in all the selected sub-areas such as fees, concessions and facilities, support and cooperation from administrative staff, and correspondence. These were the results obtained:

The reasons for the administrative concerns are many. High fees, difficulties in availing of concessions and facilities, lack of support and cooperation from administrative staff, and difficulty in correspondence are some of the reasons. 19.08% of the students reported that they did not receive options for choice of courses or subjects in the secondary course. 13.16% of the students reported that all courses did not admit differently-abled students. 20.39% of the students reported that the course demands did not match their profile. 2.63% of the students in secondary classes reported that the authorities did not show any interest in including differently-abled students in all the courses. On the other hand, 68.19% of students from secondary classes did not report any of the administrative concerns pertaining to subjects and courses. This may be due to their knowledge and understanding of the secondary course and the level of support that they might have received from the administrative staff.

In the secondary education programme, the state authorities offer limited options to choose the subjects and this applies to all students including those with hearing impairment. Majority of the subjects are compulsory and only choice in language is offered as a concession to their hearing loss. Students with hearing impairment who were aware of this might have accepted the course and the prescribed subjects easily, as compared to those who reported their concerns. In higher secondary classes, the situation was different. 42.86% of the students in higher secondary classes reported that they did not get the opportunity to enrol in a suitable course due to limited options. 4.76% of the students reported that though some options were available, the demands of those courses did not match their profile.

Fees were another sub-area identified by students with hearing impairment. Though the percentages vary, students with hearing impairment in secondary classes reported their major causes of concern as: admission in private colleges (2.63%), high fees (10.53%), lack of scholarships (3.29%), poor financial condition of the parents (15.79%), difficulty in raising the funds (5.26%), lapse on the part of administrative staff to inform about fees well in advance (0.66%) and the difficulty of students to communicate with the administrative staff (5.26%) to find out about admission and tuition fees.2.63% of the students reported that only the private schools offered them admission so they were forced to pay more

fees than in government schools. 10.53% of the secondary students reported that their schools charged very high fees, while 3.29% reported that no scholarship was received to enable payment of the school fees on time.

Higher secondary students and secondary school students with hearing impairment had more or less similar causes for concern in paying the admission and tuition fees of the school. Students in higher secondary classes reported the major causes of their concern as: admission only in private colleges (2.63%), high fees (4.76%), lack of scholarships (38.10%), and poor financial condition of the parents (57.14%).

Administrative staff play a crucial role in helping students access and avail of various financial concessions and facilities from the schools. 9.21% of the secondary and 11.90% of the higher secondary students reported that they lacked knowledge about concessions and facilities available for them. 1.97% of the secondary students reported the indifferent attitude of administrative staff towards them, whereas 3.29% reported delay in informing and forwarding applications to avail of such facilities. 5.92% of the students reported that they faced difficulty in communicating with the staff.

Only students with hearing impairment in secondary classes reported that their concern in the sub-area of support and cooperation from administrators was due to administrators' lack of interest in: (i) understanding the strengths and weaknesses of differently-abled students (17.76%), (ii) utilising the opportunities for them to interact (1.97%), (iii) addressing the needs of all students within a specific period of time (5.26%), and (iv) developing a favourable attitude (3.29%). 0.66% of students did not give any specific reason for their concern.

Written correspondence was another sub-area of administrative concern that was reported by students with hearing impairment in secondary classes. Their concerns were due to: the difficulties in communication (34.87%), getting staff to lend a patient ear (10.53%), and replying on time (8.55%). 10.53% of the students in secondary classes reported that the administrative staff considered written communication with them as an additional responsibility, while higher secondary students reported that their major cause of concern was the delay in replying (7.14%) to their written correspondence.

Certain individual characteristics and factors discussed under academic concerns could have influenced the administrative concerns. Additionally, the results obtained may be discussed in the light of the sub-areas selected in

the questionnaire. The sub-areas which might have the potential to create administrative concerns among both groups of students with hearing impairment were courses and subjects, fees, concession and facilities available, support and cooperation from administrators, and correspondence. A small percentage of students with hearing impairment in secondary and higher secondary classes reported that they held administrative concerns in all the sub-areas identified by the researcher. According to Luckner (2005), administrators set the tone of a school's culture, influence how services for students with hearing loss are provided, mediate disputes, and shape attitudes about family involvement in a child's education. Support from special education administrators has strong direct and indirect effects on the quality of education that a student receives in educational institutions (Gersten et al, 2001).It is possible that a small percentage of students with hearing impairment in secondary and higher secondary classes might not have received the required administrative support.

3) Personal Concerns of SWHI

Table 4 shows the personal concerns of SWHI in secondary and higher secondary classes.

Table 4: Personal Concerns - Responses of SWHI in Secondary and Higher Secondary classes

Personal Concerns	Responses of secondary students with hearing impairment (in percentage)		Responses of higher secondary students with hearing impairment (in percentage)	
	Yes	No	Yes	No
Hearing loss and amplification	32.46%	67.54%	15.87%	84.13%
Parental support	26.97%	73.03%	16.67%	83.33%
Financial support	31.58%	68.42%	66.67%	33.33%
Job	43.09%	56.91%	2.38%	97.62%
Overall	34.59%	65.41%	19.39%	80.61%

Table 4 shows that a small percentage of students with hearing impairment studying in secondary and higher secondary classes expressed personal concerns in all the selected sub-areas.

Among the many reasons for the personal concerns of students with hearing impairment in secondary and higher secondary classes, the impact of hearing loss was one. The students in secondary classes reported that due to hearing loss they had fewer friends (21.71%), were isolated in the group (16.45%), and became victims of teasing (19.08%). Many of them (20.39%) reported that they were not enjoying school life fully and very often were misunderstood by others due to difficulties in communication (24.34%). It was reported by 19.08% of them that they could not project their real strengths and achievements because of hearing loss. Secondary students with hearing impairment further reported that they faced problems with amplification because they became the centre of attention (16.46%) and indifference of others (6.58%). 20.39% of the students reported that they struggled to get good signal to noise ratio to enable good listening, and 1.97% had difficulties in maintaining the hearing devices regularly. As a solution, many recommended the use of sign language for communication. Among them, a few faced difficulties in using sign language because others look at them with pity (24.34%) and sympathy (28.29%).

Like the secondary students with hearing impairment, students with hearing impairment in higher secondary classes also reported that the impact of hearing loss caused them personal concern. They reported that due to hearing loss they had difficulties in projecting their strengths and achievements (7.14%) and many people misunderstood them because of difficulties in communication (40.48%). Others did not specify any reason for their concern.

Regarding parental support as a personal concern, students with hearing impairment in secondary classes reported that they had concerns because their parents were not interested in their education (14.47%). Indifferent attitude (9.87%) and poor financial conditions (15.79%) were also identified as reasons for personal concern. Another reason which was reported by the students (4.61%) was that their parents were not ready to send them for studies independently. Similarly, for higher secondary students with hearing impairment, the major reasons for concern were parents not interested in their education (16.67%), indifferent attitude (11.90%) and poor financial conditions (14.29%).

Financial support was yet another personal concern identified by the students with hearing impairment in secondary and higher secondary classes. The major reasons reported by secondary students were difficulties in: (i) getting pocket money (19.74%), (ii) paying fees, travel expenditure, food and lodging (21.05%), and (iii) maintaining amplification devices (17.76%). Similarly, the major reasons

reported by higher secondary students were difficulties in: (i) getting pocket money (61.90%), (ii) paying fees, travel expenditure, food and lodging (57.14%), and (iii) maintaining amplification devices (50%). 40.48% did not report any specific reason for their concern.

Regarding support while searching for a suitable job of short or long-term duration, students in secondary classes reported that they did not receive any support or cooperation from schools because the institutions: (i) made no such facilities available for them (41.45%), (ii) were not interested in providing such facilities (5.26%), and (iii) were interested but not aware of the firms that hire differently-abled students (7.24%). 19.74 % of students did not specify any reason for their concern. The secondary students also reported that their course was not useful in helping to secure a good job (23.68%); this might have contributed to their personal concerns. The higher secondary students reported that no facilities for finding jobs were available to them (4.76%).

CONCLUSION

India possesses a higher education system which offers facilities and training in almost all subjects: arts and humanities, mathematical and social sciences, engineering, medicine, agriculture, education, law, commerce and management, music and performing arts, national and foreign languages, culture, communications, etc. In size and diversity, India has the third largest higher education system in the world, next only to China and the United States. All these developments are the result of sound primary, secondary and higher secondary programmes in the country.

Educational programmes are planned and implemented to meet the educational needs of all children and youth, including those with disabilities. The Education for All Global Monitoring Report (2010) documented that 35% of people with disabilities are in the age group of 10-29 years. Hence, it is essential to support every one of these individuals through secondary and higher secondary education so that the goal of higher education is reached. Among the study's group of students with disabilities attending secondary and higher secondary classes, some have opted to continue their education in special schools and others in mainstream schools.

A World Bank study (2004) revealed that children with disability are five times more likely to be out of school than children belonging to scheduled castes or

scheduled tribes. Additionally, when children with disability do attend school, only a few reach the secondary and higher secondary levels (Singal, 2009). According to Singal (2009), there is an absence of research which examines the experiences of children with disabilities in special settings. The findings of the present study lead to the conclusion that SWHI in secondary and higher secondary classes face several challenges in the pursuit of education. Though the percentage facing such challenges varies, their educational concerns cannot be neglected. By addressing these concerns at the earliest, rehabilitation workers will be able to reduce school dropouts and promote accessibility to higher education among individuals with hearing impairment.

Limitations

The participants in this study were chosen only from special schools in Mumbai that were affiliated to the State Board and offering secondary and higher secondary education on a full-time basis to SWHI.

Implications

Secondary and higher secondary education lay a strong foundation for higher education. Deaf students are grossly under-represented in higher education all over the world, and the situation is more or less similar in India. The findings of the current study present the school authorities, principals, special educators, social workers and parents with data that can help revamp school education and develop a more barrier-free education system. This will improve accessibility of higher education among SWHI as recommended by all national and international legislation.

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