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SCHOLASTIC PERFORMANCE OF INTEGRATED CHILDREN WITH HEARING IMPAIRMENT AND THE ORGANIZATIONAL STRUCTURE OF MAINSTREAM SCHOOLS: A SURVEY

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Abstract

Poor scholastic performance and insufficient organizational structure are considered as few reasons for integrated students dropping out from studies. This research is an attempt to study the scholastic performance of integrated children with hearing impairment, organizational structure present in mainstream schools and the relationship between their scholastic performance and the organizational structure present in the mainstream schools. From Mumbai, 62 students from 35 mainstream schools and 12 parents participated in the study. The study adopted a mixed method. The study reveals (i) the integrated children perform better in other subjects than in language (ii) Insufficient organizational structure is present in most of the mainstream schools. (iii) No significant relationship is established between the scholastic performance and the organizational structure present in the mainstream schools.

Key words: organizational structure, scholastic performance, integrated children with hearing impairment

Introduction

Students' success is often judged by their scholastic performance. It is considered as one of the indicators of successful integration. Also, their performance is taken as a criterion in selection of the individuals to various vocational and professional courses. Successful individuals go for higher education. However, it is noticed that very few number of students with hearing impairment go for higher education. Unsuccessful school performance may be one of the reasons for not enrolling in higher education. One of the reasons for poor academic performance may be lack of organizational structure as indicated by many researchers. Some scholars point out the inadequacy of infrastructure in the mainstream schools as a reason for students' difficulty in coping with the mainstream education. According to Liversidge (2003), due to difficulties faced in the integrated setup students drop out from pursuing higher degree.

The present research attempted to study (i) the scholastic performance of integrated children with hearing impairment in different school subjects namely, language, Science, Mathematics and Social Studies, (ii) the organizational structure present in mainstream schools in terms of smaller classes, controlled noise level, illumination, seating arrangement, resource room and a resource teacher, and (iii) the relationship between scholastic performance of integrated CWHI and the organizational structure present in the mainstream schools.

Methodology

The present study used a survey method with quantitative and qualitative data.

Sample selected for the study

62 integrated students with hearing impairment participated from 35 mainstream schools from Mumbai. They were identified from the records of special schools. These students were trained on

oral aural approach of communication and presently studying in regular schools. 12 parents of these children were selected randomly and interviewed through semi-structured interviews.

Results and discussion

The first objective was to study the scholastic performance of integrated children with hearing impairment (CWHI, hereafter) in different school subjects namely, language, Science, Mathematics and Social Studies. School records were used for determining the scholastic performance of students. Average marks obtained by each student in the last three examinations namely 1st unit test, 2nd unit test and 1st terminal examination during that academic year were considered. Average marks obtained in individual subjects Language, Science, Mathematics and Social Studies were converted into percentages.

The mean score of overall performance of integrated CWHI in all subjects is 66.74. The mean score of Language is 59.98 whereas the mean score for Mathematics, Science, and Social Studies are 69.76, 68.61, and 68.60 respectively. There is a difference in the performance in Language when compared to the performance in other subjects. This leads to the interpretation that the integrated children's performance in language is lower than that of other subjects. This is because the students with hearing impairment have difficulty in developing language. The finding matches with the findings of the studies of Svirsky (2000) and Haynes and Naidoo (1991). They identified that the children have limited language skills and underperform when compared to a child without hearing impairment of his /her age. Performance in other subject areas is higher when compared to the performance in language. White (2006) studied the performance of CWHI in language area. His study reveals that hearing loss adversely affects the academic performance of children in the language area. Earlier researchers have found that students with hearing impairment have limited vocabulary and their language is limited because the process of hearing is complicated. It is because a child with hearing loss is unable to hear the whole speech sounds used in conversation that limits his/her exposure to hearing spoken language.

According to Nowell and Innes (1997), mainstream schools provide opportunities for the students with hearing impairment to interact with hearing children. In addition, the mainstream schools provide an environment with speech and language for promoting socialization, where CWHI are able to communicate and mingle with other children. However, it is essential for a CWHI to wear well-maintained hearing aids for listening the speech and language used in the environment. The natural linguistic atmosphere of the mainstream schools helps the CWHI in acquiring and developing language (Harrison, 1988, as cited in Angelides & Aravi, 2007). For utilizing this opportunity effectively for developing language, the students need to have sufficient acceptance by their hearing peers (Cambra, 2002). Due to non-acceptance of the hearing peers the self-esteem of the CWHI is affected curbing the socialization process. Secondly, students without disability may not have sufficient patience to speak distinctly to a hearing-impaired friend and may misunderstand him/her who has inefficiency in expressing with improper speech. Consequently, these circumstances limit the opportunities for socialization (Martin & Bat-Chava, 2003). Under this circumstance, the students with hearing impairment have to depend on written textbooks for the language development.

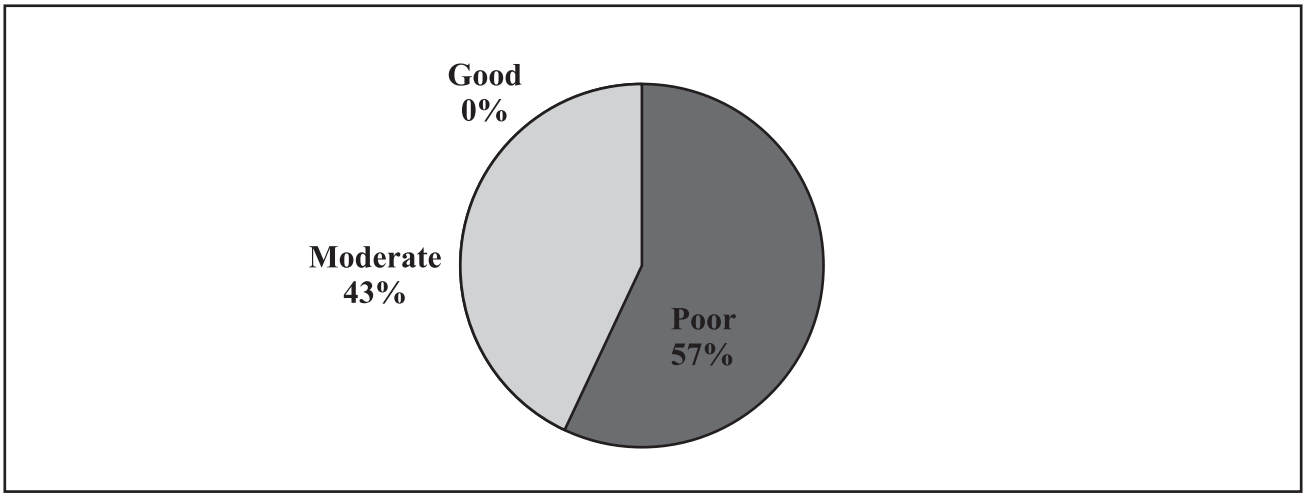
Paul and Quigley (1990) revealed that the reading process in students with hearing impairment is also affected since they have insufficient language development. Inadequate reading skill affects the students' ability to express. This can be traced in their written work. Sray & Robertson (2003, cited in Rangasayee, 2004) have revealed that the written language of CWHI is not comparable with that of children without disability. It is often observed that the language used by a student in the 10th

standard is equivalent to the language of 4th standard hearing students. Receptive and expressive languages are affected. Therefore, they have poor writing skills. This may be the reason for scoring less in language.

In schools, students' achievement is assessed in terms of marks secured in written examination. At school level, the examination conducted in language is intended to assess the students' ability to use language effectively. It means the students' expressive language is assessed. The present study also analyzed the marks obtained in written examination. There are no alternate assessment strategies followed in mainstream schools to examine the students with hearing impairment in language. Therefore, it is not surprising to know their low performance in language. Analysis of the present study also reveals that the performance of CWHI in language is much lower than the performance in other subjects namely, Science, Mathematics and Social Studies. Therefore, it is concluded that this finding of the present study is consistent with the study conducted by earlier researchers. The parents also confirmed that their children have difficulty in scoring in the language subject. The parents further stated that their children scored better in other subjects such as Mathematics, Science and Social Studies.

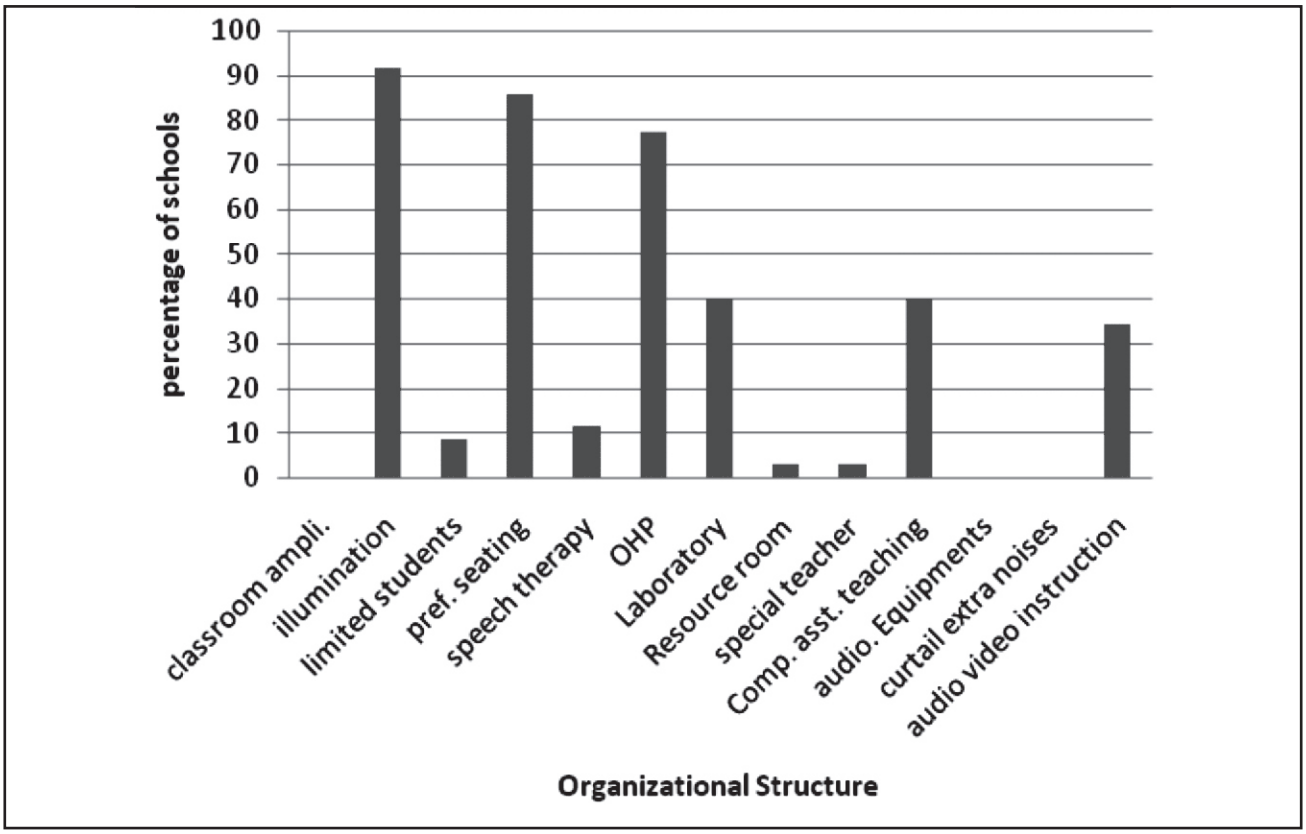
The second objective was to study the organizational structure present in mainstream schools in terms of smaller classes, controlled noise level, illumination, seating arrangement, resource room and a resource teacher. A checklist with 13 items was prepared to observe the infrastructure present in the mainstream schools in addition to the information given by the principals. The schools were categorized as 'poor', 'moderate' and 'good' on the basis of score obtained in the checklist**.** Semi-structured telephonic interviews were administered for collecting data from the parents to supplement the data collected.

Figure-1 : Organizational Structure of mainstream schools



More than half of the mainstream schools have poor organizational structure. The figure-1 shows that 57% of mainstream schools have poor facilities for educating CWHI and 43% of schools have moderate facilities. No mainstream school is found to have good organizational structure to educate CWHI.

Figure-2 : Bar graph showing Organizational Structure of mainstream schools



In the present study, it is found that 91% schools have well-light classrooms (figure-2). Rest of 9% schools have classrooms with inadequate lighting arrangement. Without sufficient light, a CWHI finds difficult to speech read others.

Only 86% of schools provide preferential seating arrangement for the students with hearing impairment. It is surprising to know that few schools refuse to give preferential seats to the children due to lack of awareness, thus curbing the child from speech-reading and getting maximum benefit out of the hearing aids. 14% of schools still need to have awareness to provide seating arrangement required for a CWHI. Only 11% of schools have facility for speech therapy. Laboratory facility is available only in 40% of the schools which is very essential for learning Science even for children without disability. Laboratory is important not only for CWHI but also for other children. It is surprising why this facility is not available in every mainstream school.

Other facilities pertaining to teaching CWHI are not given important. The mainstream schools have no facilities for amplifying the speech sound of the teachers such as group hearing aids or loop induction system and there are no facilities to curtail extra noise produced in the classrooms or entering into the classrooms. The present study shows that no school has carpeted floors, rubber capped furniture or soundproofed walls and doors. All these may be due to paucity of funds and infrastructure. Thus, the results of the present study reveal that the mainstream classrooms do not provide an environment with reduced noise level.

Less than 8% of the schools have 20 to 25 students in a class, rest 91.4% of the schools have children ranging from 50 to 75. Mainstream school teachers may find it difficult to give attention to a child with disability in such large classrooms. Except three schools, all the other schools have more than 25 children in a classroom. Due to this, even a whisper among children can create high noise level in the classrooms. In general, the classrooms in mainstream schools are noisy. During the school observation, the researcher noticed that the windows occupied at least one fourth of the wall of a typical classroom of the mainstream schools. Considering the poor acoustics of the classrooms, teachers can seek attention of the children before starting the lesson or reviewing the lesson after teaching to facilitate students' retention. Such practices not only develop the habit of listening but also help the students in managing the noise level present in the classrooms (ASHA, 2002).

Only 3% of schools have a resource room and a resource teacher to support the CWHI in their schools. 40% of schools use computers for instruction and 77% of schools have overhead projectors in their schools. It is found that only 34% of schools use audio-video instructional materials for teaching. It was also found that none of the schools offers any training to the teachers in handling the CWHI. Out of 35 mainstream schools taken for this study, none of the schools has good organizational structure for educating CWHI. 15 schools have moderate organizational structure and other 20 schools fall in the category of poor organizational structure.

When asked about the experience in mainstream schools, one of the parents stated,

> *"When I asked the teacher to allow my son to sit in the first or second row, she said, he is tall and it is a disturbance for other children so I cannot allow him. I told her, that he can be seated at the end seat of the first or second row. Even then, she did not consider my request in spite of my repeated requests."*

A parent from a school that has a resource room facility stated that

> *"The resource teacher is very helpful and approachable. She guides the parent and helps my son in understanding difficult concepts".*

However, few parents of CWHI commented about audio visuals used in the schools:

> *"As far as I know, audio visual are not used in the classrooms. They have computer classes once in a week. Only during that time, they can access the internet services. Two children sit on one computer and my son says that most of the time the computers were not working."*

Parents of CWHI are not aware of any facility supposed to be provided in the mainstream schools to their wards other than the language concession and preferential seating arrangement in the mainstream classroom. Until the parents are aware of the benefits offered to their wards, they will remain silent and do not demand for the facility. The mainstream school principals need to be sensitized regarding the organizational structure required for the children with disability and the mainstream education of CWHI.

The study conducted by Reddy and Sujathamalini (2006) about the infrastructure present in 76 mainstream schools in Chennai, Madurai, Chittoor and Hyderabad revealed that only one school has good facility and 49 out of 76 have moderate facility and 26 mainstream schools have poor facility to educate children with disabilities. The present study also shows similar kind of organizational structure existing in mainstream schools of Mumbai region. There are no studies conducted in Maharashtra or Mumbai to survey the organizational structure of the mainstream schools. Therefore, comparative data are not available. The study recommended the need for required organizational

structure for integrated children with disability as they have special needs arising out of handicap. Administrators and school principals need to be educated regarding the needs of children with disabilities. Presence of infrastructure or facility does not guarantee their regular usage for education purpose. Therefore, it is worth to study how often these audio-visual aids, computers and overhead projectors are used in the classrooms during teaching-learning process.

Finally, the relationship between scholastic performance and organizational structure of the mainstream schools was determined. The following table-1 indicates the result.

Table-1: Relationship between the scholastic performance of integrated CWHI and the organizational structure present in mainstream schools

Variables	N	Pearson Correlation	Sig. (two-tailed)	Whether Hypothesis retained or rejected
scholastic performance of integrated CWHI & organizational structure	62	.08	.54	The null hypothesis is retained.

Pearson Correlation test was used to find the relationship between the scholastic performance of integrated CWHI and the organizational structure present in mainstream schools. The value of 'r' is not found to be significant at 0.05 level. Therefore, it is interpreted that there is no relationship between the organizational structure and scholastic performance of the integrated CWHI. This shows that the scholastic performance of integrated CWHI is not dependent on the organizational structure of the mainstream schools.

Several researches have well documented the fact that there is a relationship between the academic performance and the acoustics in the mainstream schools (ASHA, 2005). Earlier researches show that factors like quality of services, facilities, usage of technology and the knowledge of professionals working with these people also affect the performance of the persons with hearing impairment (Rangasayee, 2004). Noise present in the mainstream classes poses difficulty in listening (Crandell & Smaldino, 2000). There are evidences showing that usage of educational technologies in the mainstream classrooms support the learning of students (Reddy & Ramar, 1995). But the result of the present study is contrary to the findings of earlier researches. Parents attributed the students' success to their hard work and extra coaching at home by themselves or by experts after the school hours and self motivation of their wards.

Conclusion

Analysis of quantitative data on scholastic performance reveals that the scholastic performance of students with hearing impairment in language is lower than that of other subjects. Performance in other subjects is comparatively higher when compared to the performance in language. While analyzing the organizational structure of the mainstream schools it was found that more than 50% of mainstream schools have poor facilities for educating CWHI and the study could not find a single mainstream school with adequate facilities and infrastructure to educate students with hearing impairment. And also the present study could not establish any significant relationship between

scholastic performance of integrated CWHI and the organizational structure of mainstream schools.

During the interviews, parents have accepted that the mainstream education has increased the possibility for higher education in the Universities. According to some parents, the stigma of special children could be overcome by sending them to mainstream schools.

To conclude, the scholastic performance of CWHI is a complicated process and there are several factors like age of onset of hearing loss, degree of hearing loss, age of intervention, parental support, usage of hearing aids intellectual ability and motivational level act upon. It is assumed that the combined effect of these factors enables a CWHI to perform academically. In such a condition, it is difficult to relate a particular variable to the scholastic performance of CWHI. The findings presented are sufficient to suggest strongly that scholastic performance of CWHI is not related to organizational structure. It does not mean that organization structure have no role in the mainstream education of CWHI.

As expressed by the parents, self-motivation and parental involvement contribute a great extent to the success in schools which is exhibited through the scholastic performance. The researcher finds it difficult to decide to what extent these particular research findings can be utilized in addressing self accommodation of CWHI in a mainstream school. Though the hearing peers are not comparable with CWHI in many respects the researcher can fairly conclude that children with good study habits, good experience with peers and teachers and supportive parents may take positive decisions for higher education.

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