

Educational Needs Assessment of Student with Hearing loss from their parents' the point of view

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Abstract

Background: Developing appropriate curriculum for the education of hearing loss children depends on identifying the needs of this group. The main purpose of the present study was to assess special needs for Student with Hearing loss from the point of view of their parents'.

Materials and Methods: The sample of the study consisted of 100 parent's students with hearing loss in special schools in Tehran, 38 males and 62 females. Were selected using convenience sampling. A special needs scale was developed and used in assessing special needs

Results: The results indicated that the student with hearing loss from the point of view of their parents in dimensions Communication needs, Audiological rehabilitation needs, Academic needs and Learning style exhibit high needs and dimensions Social and emotional needs, Personal needs, and Behavioral needs exhibit medium needs. Furthermore The finding indicate the Priority Needs assessment student with hearing loss of the dimensions of the need Audiological rehabilitation needs (first priority), Academic needs (second priority), Communication needs (third priority), Learning style needs (fourth priority), Behavioral needs (fifth priority) Social and emotional needs (sixth priority) and Personal needs (seventh priority).

Conclusion: It seems that parents should be supported by training workshops and consulting. Furthermore supplying the schools for children with hearing loss with services needed by hearing loss students, such as, speech and language therapy, audiological rehabilitation, and professional educational interpreters; and providing this group of students with counseling services in order to help them obtaining social and psychological adjustment

Keywords: Hearing Loss, Parenting, Educational Needs Assessment, Special School.

Introduction

Hearing loss affects about 15–26% of the world’s population, with the highest prevalence in low-income Countries (Agrawal, Platz, & Niparko, 2008; Beria et al., 2007). Roughly seven per 10 000 people in the general population are in this group (Bubbico, Rosano, & Spagnolo, 2007; Mitchell, 2006). Hearing loss is associated with large heterogeneity in cognitive, social, and emotional development (Kral & O'Donoghue, 2010). Availability and frequency of medical interventions, worldwide variations in access to hearing loss education, societal attitudes, and opportunities for hearing loss people contribute to these differences. Communities, known as hearing loss communities, are made up of individuals with severe deafness who prefer to use sign language and whose social inter course defines a distinctive culture referred to in some reports (Hauser, O'Hearn, McKee, Steider, & Thew, 2010). Hearing loss is the most frequent sensory deficiency in communities, which affects more than 250 million people in the world (Fellinger, Holzinger, & Pollard, 2012).The auditory function, has a crucial role in the main stages of child development. The importance of early intervention for children with hearing loss has been demonstrated persuasively in areas including speech perception, production and spoken language, cognitive skills, adaptive behavior, social and emotional outcomes that may drastically limit the quality of life of deaf people (Schorr, Roth, & Fox, 2009). The Joint Committee on Infant Hearing (Joint Committee on Infant Hearing, 2007). has advocated hearing screening for all newborns, with the goal of confirming hearing loss before 3 months of age and beginning hearing rehabilitation before 6 months of age. Several issues have a bearing on decisions about the beneficial effect of very early CI for the development of age appropriate spoken language in infants and children (De Giacomo et al., 2013). Hearing loss coincides with inability to communicate, delay in language acquisition, educational disadvantage, social isolation, withdrawal, rejection, depression and anxiety. This factors lead to decrease of mental as well as general health (Arlinger S, 2003). In the domain of planning and training, need assessment as an essential component is considered as the backbone of the planning process (Murry & Lewin, 2014; Parhoon et al., 2014). Therefore, wherever the issue of codifying plans and adopting a set of educational policies are proposed, the need assessments are frequently mentioned (Fathi-Vajargah, 2010, Parhoon, Bodaqi, Movalleli, Hasanzadeh, & Amrai, 2015). Indeed, the need assessment is the infrastructure of planning, management and training, so the firmer the foundation is, the more invincible the structure is. Due to the fact that personalized education, as an area which seeks to provide a variety of educational services for individuals with disabilities, is explicitly intertwined with the concept of need assessment; it is obvious that need assessment in personalized education, which is related to special characteristics of students with special needs, has enjoyed a great position. Hence, the purpose of training students is to help them to achieve self-sufficiency in finding occupations and enabling them for living a life in the future. This, without identifying their educational needs, never comes true. Because any in kind of programming having up-to-date information regarding the needs of hearing impaired students is both logical and necessary (Batler & Hool, 2007). Several researchers have attempted to assess the training needs of the hearing loss students among

which (Dimling, 2010) indicates that deaf and hearing impairment students may need special vocabulary intervention in order to improve their recognition, production, and comprehension of the words and phrases. It also (El-Zraigat, 2013) Show that hearing loss students in Jordan exhibit needs on (Communication, Audiological rehabilitation, Social and emotional, Personal, Behavioral, Academic, learning style). Furthermore (Wolters, Knoors, Cillessen, & Verhoeven, 2011) show that hearing impairment students have severe language problems compared to their hearing classmates. To address increasing needs of students who are hearing loss for speech and language services, (Houston & Perigoe, 2010) report that this group of students needs access to skilled professionals who can improve receptive and expressive language throughout planned programs can improve receptive and expressive language throughout planned programs. Furthermore (Gilbertson & Ferre, 2008) present major difficulties when making educational decisions regarding students who are hearing impairment. According to these evidence the hearing loss students comprise the largest group of students who are currently attending Iranian schools (Exceptional Organization, 2013), and there are many problems with their both adaptation and education in special schools. The present study aiming at need assessment of children with hearing loss, from the point of view of their parents', is seeking to answer the following questions

Questions of the Study

1. *What are the Special Needs of Students with hearing loss from the point of view of their parents'?*
2. Priority Needs assessment student with hearing loss of the dimensions of the needs from the point of view of their parents?
3. *What are the Most important sources of information about needs student with hearing loss from the point of view of their parents?*
4. *What are the institutional supports for rehabilitation services for parent's student with hearing loss in order of priority from the point of view of their parents?*
5. *What are the most important barrier to successful education of children with hearing loss?*

Materials and Methods

The study adopts a pure descriptive approach. The total of the sample reached 100 subjects, 38 males and 62 females distributed among Tehran, Iran. Were selected using convenience sampling. The researcher asked participants to complete the surveys and identify others to become members of the sample. There are no gatekeepers to this population given the method of recruitment. All participants were given informed consent prior to completing the surveys. They understood the purpose and any risks that were associated with the study. They were also advised of the benefits of participating in the study and that the information they provided about the attitudes of including students with hearing loss will benefit the teaching community. They understood that they were free to withdraw at any time and that refusal to participate would have no effect on future services from the involved university. They were told that their names would not be associated with the research findings in any way, their identity will remain anonymous, and the answers they gave could not be linked to the participant. The consent

stated that the data would be stored in a secure location so that only the researcher will have access study. Finally, they were given the contact information of the researcher if they have any questions or concerns. To study the needs assessment of students who are hearing loss in special schools in Tehran, a Special Needs of Students who are hearing loss Scale has been developed. The needs assessment Scale was developed through four steps: the first step of preparing the needs assessment Scale was the pilot study which focuses on obtaining information about students who are hearing loss in special education school in Tehran, The second step consisted of reviewing the related literature of special needs of students who are hearing loss. In the third step, the investigator prepared the needs assessment Scale. The last step, distributing the needs assessment Scale of assessing the needs of students hearing loss among the experts (judges) in order to achieve the content validity. The content validity was based on asking 8 experts to evaluate the needs assessment Scale with specific directions to make their judgments depending on two major questions: are the dimensions related to special needs of students who are hearing loss? Are the items of the dimensions related to section they put in? The items were accepted by the experts and were used in the present study. This process produced a Special Needs of Students who are hearing loss Scale in Tehran. The needs assessment Scale is consisting of 74 sub-items divided within seven core dimensions. The items of (needs assessment questionnaire) were included of four-grade Likert Scale items ranging from strongly disagree to strongly agree to reflect the level of the needs were assigned with statements as follows: 1= strongly disagree, 2= disagree, 3= agree, and 4= strongly agree. The reliability coefficient with the Cronbach's alpha method has yielded 95% for this research. After completing data collection, the data was analyzed according to SPSS21 program. Descriptive statistics were used in analyzing the data.

Results

Data on the demographic information of the study sample indicate that 38 males and 62 females. The breakdown of the sample can be found in table 1 below

Table 1: Demographic Data of Participants (N = 100)

Variable		N	%
Gender	Male	38	38
	Female	62	100
educational	Diploma and lower	46	46
	MS	38	84
	MA	16	100
Age	20-35	42	42
	35-45	44	86
	45 and above	14	100

What are the Special Needs of Students who are hearing loss in special education school in Tehran, Iran?

This question has been answered by calculating the frequency of the participants as showed in the following table.

Table 2: Needs assessment student with hearing loss from the point of view of their parents

dimensions	Low	Medium	High
Communication needs			*
Audiological rehabilitation needs			*
Social and emotional needs		*	
Personal needs		*	
Academic needs			*
Learning style needs			*
Behavioral needs		*	

The data in the table indicates that hearing loss students in dimensions Communication needs, Audiological rehabilitation needs, Academic needs and Learning style exhibit high needs and dimensions Social and emotional needs, Personal needs, and Behavioral needs exhibit medium needs.

Table 3. Priority Needs assessment student with hearing loss of the dimensions of the needs

dimensions	%	Priority
Audiological rehabilitation needs	28/32	first
Academic needs	30/19	second
Communication needs	16/41	third
Learning style needs	12/33	fourth
Behavioral needs	34/10	fifth
Social and emotional needs	63/7	sixth
Personal needs	67./5	seventh

The data in the table indicates that Priority Needs assessment student with hearing loss of the dimensions of the need Audiological rehabilitation needs (first priority), Academic needs (second priority), Communication needs (third priority), Learning style needs (fourth priority), Behavioral needs (fifth priority) Social and emotional needs (sixth priority) and Personal needs (seventh priority).

Table 4: most important sources of information about needs student

dimensions	%
Teacher	22/35
A non-governmental organization (NGO)	46/18
consultant	19/17
Speech Therapist	12/38
audiologist	25/9
Mass media	54/6
Books and websites available	43./6
Successful family	5/42

The data in the table indicates that as follows, Teacher, A non-governmental organization (NGO), consultant, Speech Therapist, audiologist, Mass media, Books and websites available, and Successful family.

Table 5: Institutional support for rehabilitation services for parent's student with hearing loss in order of priority

dimensions	%
State Welfare organization	42/65
A non-governmental organization (NGO)	26/38
Exceptional organization	9/66
Friends and acquaintances	9/43

The data in the table indicates that in order of causal Priority State Welfare organization, a non-governmental organization (NGO), Exceptional organization and Friends and acquaintances.

Table 6: The most important barrier to successful education of children with hearing loss

call-parents	%
Lack of Rehabilitation facilities	23/21
Indiscrimination and Early Intervention	18/44
Lack of resources in schools	14/26
Insufficient knowledge of teachers	11/32
The lack of experienced educators and literate non-cooperation parents with together	9/74
Lack of cooperation between schools and families	6/27
Lack of rehabilitation centers	5/39
Lack of educational facilities	4/54
Insufficient knowledge of parents	2/83
The unavailability of special facilities	2/43
	1/57

Discussion

The present study was to assess special needs for students with hearing loss from the point of view of their parents in special education school in Tehran. The finding indicate the student with hearing loss from the point of view of their parents in dimensions Communication needs, Audiological rehabilitation needs, Academic needs and Learning style exhibit high needs and dimensions Social and emotional needs, Personal needs, and Behavioral needs exhibit medium needs. These results agreed with the findings of the studies by(El-Zraigat, 2013; Johnson & Seaton, 2012; Parhoon et al., 2015; Parhoon et al., 2014., and Smadi 2012), The results of the present study clearly indicated that hearing impaired students require particular services which are tantamount to their own needs, the services that should be provided by trained instructors

in equipped schools. For instance, they require a personalized curriculum that is consistent with their needs both to grow and change. These results agreed with the findings of the studies by (Dimling, 2010; El-Zraigat, 2013; Johnson & Seaton, 2012; Wolters et al., 2011). Furthermore The finding indicate the Priority Needs assessment student with hearing loss of the dimensions of the need Audiological rehabilitation needs (first priority), Academic needs (second priority), Communication needs (third priority), Learning style needs (fourth priority), Behavioral needs (fifth priority) Social and emotional needs (sixth priority) and Personal needs (seventh priority). The results of the study clearly indicated that hearing-loss students need special services to be offered to them by well-trained teachers and schools fitted with the equipment needed in order to meet their unique needs For example, they need special curricula that meet their developmental tasks. Hearing loss students need special educational services to be offered to them, such as, speech and language therapy, audiological rehabilitation, professional educational interpreters, modified curricula, adjusted special instructional materials, and special teaching methods. Facilities needed by hearing loss students that are delivered by schools for children with hearing impairment in in special education school in Tehran are not enough because of limited financial support of these schools in Iran. Therefore, hearing loss students need special services, for example, speech and language therapy, audio logical rehabilitation, professional educational interpreters and so forth. We should take into consideration that the lack of services offered will negatively impact the development of hearing loss students. Consequently, this will lead to cognitive, speech and language, social and emotional, academic difficulties. In relation to the third question: *What are the* Most important sources of information about needs student with hearing loss from the point of view of their parents our findings indicates that in order of causal priority Teacher, A non-governmental organization (NGO), consultant, Speech Therapist, audiologist, Mass media, Books and websites available and Successful family. These results agreed with the findings of the studies (Asghari Nekah, Bahmanabadi, & Kazemi, 2013). *It is worth pointing out* In relation to the fourth question *based on what are the* institutional supports for rehabilitation services for parent's student with hearing loss in order of priority from the point of view of their parents. Findings indicate that in order of causal Priority State Welfare organization, A non-governmental organization (NGO), Exceptional organization and Friends and acquaintances. As well as In relation to the fifth question *based on What are the* most important barrier to successful education of children with hearing loss *our finding suggest that* call-parents in order of causal priority as follows Lack of Rehabilitation facilities, Indiscrimination and Early Intervention Lack of resources in schools, Insufficient knowledge of teachers, The lack of experienced educators and literate, non-cooperation parents with together, Lack of cooperation between schools and families, Lack of rehabilitation centers, Lack of educational facilities, Insufficient knowledge of parents, The unavailability of special facilities.

Limitations

The findings of this study could have implications for the successful implementation of inclusive education, student with hearing impairment, but there are some limitations that must be considered. Firstly, only a small number of participants were chosen for the study. Furthermore the lack of standardized needs assessment scale to assess the special needs of students who are hearing loss in special education school in Tehran.

Recommendations

Based on the findings and the discussion of this study, the investigator recommends the following strategies in order to meet the special needs of hearing loss students: helping the hearing loss students to overcome the difficulties resulting from their hearing loss; modifying and developing special curricula that meets their unique needs; supplying the schools for children with hearing loss with services needed by hearing loss students, such as, speech and language therapy, audiological rehabilitation, and professional educational interpreters; and providing this group of students with counseling services in order to help them obtaining social and psychological adjustment.

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References

- Agrawal, Y., Platz, E. A., & Niparko, J. K. (2008). Prevalence of hearing loss and differences by demographic characteristics among US adults: data from the National Health and Nutrition Examination Survey, 1999-2004. *Arch Intern Med*, 168(14), 1522-1530. doi: 10.1001/archinte.168.14.1522
- Arlinger S. (2003). Negative consequences of un-corrected hearing loss a review. *Int J Audiol*, 42(2), 17-20
- Asghari Nekah, S. M, Bahmanabadi, S, & Kazemi, S. (2013). Needs assessment training; Rehabilitation of hearing damaged children's parents in Khorasan Razavi province, Iran. *Audiol*, 22(3), 63-73.
- Beria, J. U., Raymann, B. C., Gigante, L. P., Figueiredo, A. C., Jotz, G., Roithman, R., . . . Smith, A. (2007). Hearing impairment and socioeconomic factors: a population-based survey of an urban locality in southern Brazil. *Rev Panam Salud Publica*, 21(6), 381-387.
- Bubbico, L., Rosano, A., & Spagnolo, A. (2007). Prevalence of prelingual deafness in Italy. *Acta Otorhinolaryngol Ital*, 27(1), 17-21.
- De Giacomo, A., Craig, F., D'Elia, A., Giagnotti, F., Matera, E., & Quaranta, N. (2013). Children with cochlear implants: cognitive skills, adaptive behaviors, social and emotional skills. *Int J Pediatr Otorhinolaryngol*, 77(12), 1975-1979.
- Dimling, L. M. (2010). Conceptually based vocabulary intervention: second graders' development of vocabulary words. *Am Ann Deaf*, 155(4), 425-448.
- El-Zraigat, I. A. (2013). Assessing Special Needs of Students with Hearing Impairment in Jordan and Its Relation to Some Variables. *International Education Studies*, 6(2), 23-31.
- Fathi- Vajargah, K. (2010). *Educational Needs Assessment(Models & Techniques*. tehran: Ayeezh.
- Fellinger, J., Holzinger, D., & Pollard, R. (2012). Mental health of deaf people. *Lancet*, 379(9820), 1037-1044. doi: 10.1016/s0140-6736(11)61143-4

- Gilbertson, Donna, & Ferre, Scot. (2008). Considerations in the identification, assessment, and intervention process for deaf and hard of hearing students with reading difficulties. *Psychology in the Schools, 45*(2), 104-120. doi: 10.1002/pits.20286
- Hauser, P. C., O'Hearn, A., McKee, M., Steider, A., & Thew, D. (2010). Deaf epistemology: Deafhood and Deafness. *Am Ann Deaf, 154*(5), 486-492; discussion 493-486.
- Houston, K, & Perigoe, C. (2010). Speech-Language Pathologists: Vital Listening and Spoken Language Professionals. *Volta review, 110*(2), 219-230.
- Johnson, C, & Seaton, J. (2012). *Educational audiology handbook*. Australia, United State: Delmar: Cengage Learning.
- Joint Committee on Infant Hearing, Year 2000 position statement: principles and guidelines for early hearing detection and intervention programs. (2007). *Pediatrics 106*, 798-817.
- Kral, A., & O'Donoghue, G. M. (2010). Profound deafness in childhood. *N Engl J Med, 363*(15), 1438-1450. doi: 10.1056/NEJMra0911225
- Mitchell, R. E. (2006). How many deaf people are there in the United States? Estimates from the Survey of Income and Program Participation. *J Deaf Stud Deaf Educ, 11*(1), 112-119. doi: 10.1093/deafed/enj004
- Murry, Susan, & Lewin, Linda. (2014). Parenting Support Needs Assessment: Screening for Child Maltreatment Risk in Young Families. *Journal of Pediatric Health Care, 28*(3), 208-216. doi: <http://dx.doi.org/10.1016/j.pedhc.2013.02.002>
- Parhoon, K, Bodaqi, M, Movalleli, G, Hasanzadeh, S, & Amrai, K. (2015). Needs Assessment of Regular and Itinerant Teachers of Children with Hearing Impairment in Tehran's Inclusive Schools. *MEJDS, 4*(8), 1-11.
- Parhoon, K, Hassanzadeh, S, parhoon, H, & Movallali, G. (2014). Educational Needs Assessment of Student with Hearing Impairment in Inclusive School. *International Journal of Academic Research in Progressive Education and Development, 3*(2), 35-44. doi: 10.6007/IJARPED/v3-i2/910
- Schorr, E. A., Roth, F. P., & Fox, N. A. (2009). Quality of life for children with cochlear implants: perceived benefits and problems and the perception of single words and emotional sounds. *J Speech Lang Hear Res, 52*(1), 141-152. doi: 10.1044/1092-4388(2008/07-0213)
- Wolters, N., Knoors, H. E., Cillessen, A. H., & Verhoeven, L. (2011). Predicting acceptance and popularity in early adolescence as a function of hearing status, gender, and educational setting. *Res Dev Disabil, 32*(6), 2553-2565. doi: 10.1016/j.ridd.2011.07.003