

## Maternal and fraternal role in parenting children with hearing impairment

<sup>1</sup> Sarika Manhas, <sup>2</sup> Kanika Gupta, <sup>3</sup> Shallu Gupta

<sup>1</sup> Assistant Professor, P.G. Department of Home Science (Human Development), University of Jammu, Jammu, India

<sup>2</sup> Research Scholar, P.G. Department of Home Science (Human Development), University of Jammu, Jammu, India

<sup>3</sup> Student, P.G. Department of Home Science (Human Development), University of Jammu, Jammu, India

### Abstract

Hearing impaired children require special parenting consideration and participation of both the father as well as the mother. The present study analysed and compared fathers and mothers role in parenting their hearing impaired children. Parents (half mothers and fathers) of 60 hearing impaired children in the age group of 6-18 years formed the core group of the study. Random and purposive sampling technique was used to select the sample. The sample was selected from J&K Samaj Kalayan Kendra of Shahidi Chowk of Jammu District. Tool used for gathering the data was Parenting Relationship Questionnaire (Kamphaus and Reynold, 2006).

Analysis of the parent child relationship reveals that most parents, both mothers and fathers shared average attachment, discipline practices, involvement with their children and also had average satisfaction with their school. Further, most mothers showed average but most fathers had below average level of communication with their hearing impaired children. However, most parents (41.1% of mothers and 53.8% of fathers) were not confident about their parenting and scored below average on this dimension and had upper extreme degree of relational frustration. Sample fathers and mothers varied significantly only on the dimension of communication. This implies that for sample hearing impaired children both their fathers and mothers showed similar parenting patterns. The various dimensions of parent child relationship were significantly inter-correlated with each other implying that different aspects of parenting tend to influence each other reciprocally.

**Keywords:** parenting, mothers, fathers, hearing impaired children

### Introduction

The ear is a marvellously complex and sensitive organ. Unfortunately, damage to the organ, whether through disease, physical injury, long term exposure to excessive noise, some drugs or simply the effects of aging, can cause the ear to malfunction. The result of malfunction is usually to produce some degree of deafness. Hearing impairment is most frequent sensory deficit in human population, affecting more than 250 million people in the world (Garg *et al.*, 2009) [6]. Consequences of hearing impairment include inability to understand speech sound, decreased capability to communicate, delay in language development, economic and educational backwardness, social isolation and stigmatization. In India, 63 million people (6.3%) suffer from significant hearing loss. The National Sample Survey (NSS) 58th round (2002) surveyed disability in Indian households and found that hearing disability was 2nd most common cause of disability and top most cause of sensory deficit. In urban areas, loss was 9% of all disability and in rural areas, it was 10%. Depending upon the extent of a person's inability to properly hear, the degree of hearing disability was ascertained. It was estimated that the number of person with hearing disability per 100000 persons was 291; it was higher in rural (310) compared with urban regions (236). In the same survey, about 32% of the people had profound (person could not hear at all or could hear only loud sounds) and 39% had severe hearing disability (person could hear only shouted words). The survey results revealed that about 7% of people were born with a hearing disability. About 56% and 62% reported the onset of hearing disability at  $\geq 60$  years of age in the rural and urban areas,

respectively. The incidence of hearing disability during that year was reported to be 7 per 10, 0000 population (NSS, 2003) [9].

People with communication disorders caused by hearing loss may present complex manifestations involving linguistic, cognitive, behavioural, psychological and social alterations. The causes can be isolated or associated to clinical aspects of different neurological or genetic problems. Children with hearing loss (HL) may be considered as a high risk population due to the presence of indicators such as: language delay, which involve communication skills, low academic progress and social emotional level (Calderon, 2000) [4]. The presence of such impairments may cause some difficulties concerning the development of the children and the relationship with their parents. Some preventive measures should be taken more actively including the primary ones which reduce the birth incidence of children with hearing loss and secondary ones that help in its early detection (Gatto & Tochetto, 2007) [7]. In a literature review about family relationships and presence of children with hearing loss, it was observed that mothers were less equalitarian and spontaneous with deaf children than with the other children, but they were also more restricting and controlling (Brito & Dessen, 1999) [3]. The relationship of the fathers with the children with hearing loss tends to be somewhat absent. The mothers assumed the care of the children and, consequently, their education (Brito, 1997). Fathers participated less intensively in the development of the children using more rational justifications, culturally more accepted, as the necessity of being absent due to work. However, fathers tend to present the same anguish and anxiety

feelings reported by mothers (Canho *et al.*, 2006) [5]. Parents obviously have the most important role to play in the growth and development of their children. With the new life that is brought into the world come an awesome responsibility and a sense of self-worth and satisfaction (Oliver, 1996) [10]. The attitude and behaviour of the parents directly affects the attitude and behaviour of the child and vice versa. Therefore a concerned parent who provides the basic necessities for growth and development like food, clothing, shelter, protection and belonging must be anxious why a child is behaving in the way he/she is (Maslow, 1987) [8]. The parent must acquire the ability to identify the developmental tasks that the child is working on. Developmental tasks include: learning to control their bodies, getting along with others, communication, independence, problem solving (Albrecht, 1992) [1]. Parents must also develop the skill of reflective listening and this enables them to bring the child in touch with his own feelings. Children do not know how to explain their anger, frustration, or even their joy and more so difficult for the hearing impaired. Therefore, listening through paying close attention to children’s verbal and non-verbal messages and allowing children to learn by solving their own problems is important (Barnes, 1991) [2].

According to Umadevi and Venkatramalah (1993) parents tend to deny the reality of the disability, requesting further medical tests, trying to “cure” the disability, for example by sending their child to witchdoctors and preachers, and hoping for a miracle cure. When this does not work, parents may then deny the existence of the child itself. They feel their social status is lowered and do not want to be associated with their child who is hearing impaired. Parents may feel ashamed of the situation. This can lead to hiding children with disabilities from the public. Parents experience anger, directed at themselves or immediate family members. For instance, parents start blaming each other for the disability and such conflicts can lead to some parents divorcing. Anger could also be directed at God, at the doctors and other professionals. There is also the risk of the anger being directed at the child. Parents lose their temper towards the child or even abuse the child. This only raises more guilt feelings and hinders the ability to cope (Sylvia, 2002) [12]. With this as background the present study has been designed to assess Parent Child Relationship in families with hearing impaired children which provides deeper understanding of parent child relationship existing in families with hearing impaired children in context of parent’s sex-mothers and fathers.

**Research Methodology**

The sample for the study was selected from families with hearing impaired children.

**Sample Size**

Parents of 60 Hearing Impaired children in the age group of 6-18 years formed the core group of the study.

**Locale**

The Hearing Impaired children were drawn from the school for hearing impaired run by J&K Samaj Kalyan Kendra at Shahidi Chowk, Jammu. Once the children were identified, their parents were contacted and made part the sample group.

**Criteria for Selection**

1. Parents with Hearing Impaired children in the age group of 6-18 years were selected.
2. Only those parents whose children were enrolled at the J&K Samaj Kalyan Kendra hearing impaired school were selected.
3. Those parents whose children who were hearing impaired for at least past 2 years or more were selected.

**Sampling Technique**

Random sampling technique was used to select the sample for the study. There is only one school in Jammu for hearing impaired children namely ‘School for Hearing Impaired’ run by J&K Samaj Kalayan Kendra at Shahidi chowk. This school formed the universe for the study. Personal visits were conducted to the school and list of children enrolled was prepared. From this list, another list of families fulfilling the sample criteria was drawn and then from this a sample of 60 parents was selected randomly.

**Tools used for Data Collection**

Parenting Relationship Questionnaire (PRQ) developed by Kamphaus and Reynolds in 2006 was used. The PRQ instrument helps capture parent’s perspective on the parent-child relationships with two forms – preschool (ages 2-5) aged child and adolescents (6-18).The PRQ assessment can be completed in 10 to 15 minutes by the mother, father, or other primary caregiver. The PRQ evaluation reports on traditional parent-child dimensions such as attachment, communication and involvement- and also present information on parenting style, parenting confidence, stress and satisfaction with the child’s school.

**Data Analysis**

Data was analyzed primarily by quantitative procedures. Data gathered through the use of PRQ scale was scored and tabulated as per the coding categories presented in the manual. Frequencies and percentages of respondents falling in the various scale categories were calculated. Statistical package namely, IBM SPSS statistics were used for the computation of Mean, Standard Deviation, and Chi-square.

**Results and discussion**

The results of the study are presented and discussed as follow:

**i) Background/ Demographic Profile**

The demographic details of the parents comprising of their age, educational qualification and occupation are represented in this section.

**a) Age of sample Parents**

**Table 1: Age of Sample Parents**

Age (in years)	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
30-40	25	96.1	-	-	25	41.6
40-50	1	3.84	33	97.0	34	56.6
50-60	-	-	1	2.9	1	1.6
Total	26	100	34	100	60	100
Mean±S.D	37.0±2.69		40.9±4.4		44.4±2.82	

Table 1 reveals that the mean age of parents is 44.4±2.82 years (mother’s 37.0±2.69 years and fathers 40.9±4.4). Majority of mothers (96.1%) were in the age group of 30-40 years while majority of fathers (97.0%) were in the age group of 40-50 years of age.

**b) Educational Status of Parents**

**Table 2:** Educational Status of Parents

Educational Qualification	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
8 <sup>th</sup>	6	23.0	11	32.3	17	28.3
10 <sup>th</sup>	18	69.2	17	50	35	58.3
12 <sup>th</sup>	2	7.6	6	17.6	8	13.31
Total	26	100	34	100	60	100

Overall, majority (58.3%) of the parents were matriculate. Majority of the mothers were (69.2%) 10<sup>th</sup> pass, 23% of them were middle school pass and 7.6% had passed 12<sup>th</sup> standard. Similarly, majority of the fathers (50%) were 10<sup>th</sup> pass, 28.3% were 8<sup>th</sup> pass and 13.3% were 12<sup>th</sup> pass.

**ii) Parent-child relationship in families with hearing impaired children**

The parent-child relationship is often considered to be the most enduring and significant relationship in one's life. The term parent-child relationship refers to the unique and enduring bond between a caregiver and his or her child. To understand the parent-child relationship, the following dimensions were used: attachment, communication, discipline practices, involvement, parenting confidence, satisfaction with school and relational frustration.

**a) Attachment between Parents and Hearing Impaired Children**

**Table 3:** Attachment between Parents and Hearing Impaired Children

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	1	3.8	1	2.9	2	3.3
Significantly below average	6	23.0	4	11.7	10	16.6
Average	18	69.2	26	76.4	44	73.3
Significantly above average	1	3.8	1	2.9	2	3.3
Upper extreme	-	-	2	5.8	2	3.3
Total	26	100	34	100	60	100

$\chi^2 = 2.838$  p=0.585

Table 3 shows the level of attachment the parents had with their Hearing Impaired children. Overall, 73.3% of parents showed average attachment with their children. This was followed by 16.6% who had significantly below average attachment with their children. When considered separately, majority of the fathers (76.4%) and mothers (69.2%) also showed average attachment with their children with special needs. They were concerned about the welfare of their children but probably with the passage of time had accepted the disability status of their children and hence didn't feel the need to be excessively attached to them. Chi-square value reveals insignificant difference between the attachment of fathers and mothers with their children. However, mothers outnumbered

the fathers in showing significantly below average attachment; whereas more fathers showed higher levels of attachment.

**b) Communication between Parents and Children**

**Table no.4:** Communication between Parents and children

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	4	15.3	1	2.9	5	8.3
Significantly below average	3	11.5	11	32.3	14	13.3
Average	19	73.0	19	55.8	38	63.3
Significantly above average	-	-	3	8.8	3	5
Upper extreme	-	-	-	-	-	-
Total	26	100	34	100	60	100

$\chi^2 = 8.455^*$ , p=0.037, significant at 1%

Majority, 63.3% (73.0% of mothers and 55.8% of fathers) of the parents showed average communication with their children. Only 13.3% (11.5% of mothers and 32.3% of fathers) of the respondents had significantly below average communication. Even though most sample parents felt that they could communicate on any matter or issue with their special children, however, in some cases parents felt uneasy in communicating on sensitive issues. They could understand the feelings and emotions of their children without even saying anything but sometimes due to other pre-occupations; communicating becomes a tedious task. Calculation of chi-square reveals significant difference in the parent-child communication, according to sex of the parents, as more mothers had scored average than the fathers, while more fathers fell in the significantly below average category of communication. The primary care giving responsibility remains associated with mothers. Here, also the results show that it is mostly the mothers who communicate with their special children than the fathers.

**c) Parental Discipline Practice**

**Table 5:** Parental Discipline Practice

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	-	-	-	-	-	-
Significantly below average	2	7.6	4	11.7	6	10
Average	24	92.3	29	85.29	53	83.3
Significantly above average	-	-	1	2.94	1	1.6
Upper extreme	-	-	-	-	-	-
Total	26	100	34	100	60	100

$\chi^2 = 1.091$ , p=0.57

Table 5 indicates the level of discipline practices, which reflect a general sense of the parent in the establishment of rules for their children. Majority of the sample parents, 83.3% (92.3% of mothers and 85.29% of fathers) scored average on discipline. 10% of the parents scored significantly below average on discipline practices. Majority of the mothers (92.3%) and fathers (85.29%) scored average on discipline practice. This indicates that the sample parents were not too strict about discipline of their children. Calculation of chi-square reveals insignificant difference in the discipline practice of the fathers and mothers of hearing impaired children.

**d) Involvement of Parents with their Hearing Impaired Children**

**Table 6:** Involvement of Parents with their Hearing Impaired Children

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	1	2.9	-	-	1	1.6
Significantly below average	2	5.8	1	3.8	3	5
Average	23	67.6	21	80.7	44	73.3
Significantly above average	7	20.5	2	7.6	9	15
Upper extreme	1	2.9	2	7.6	3	5
Total	26	100	34	100	60	100

$\chi^2 = 3.531, p=0.437$

**e) Parenting Confidence**

**Table 7:** Parenting Confidence

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	2	5.8	4	15.3	6	10
Significantly below average	14	41.1	14	53.8	28	46.6
Average	14	41.1	7	26.9	21	35
Significantly above average	4	11.7	1	3.8	5	8.3
Upper extreme	-	-	-	-	-	-
Total	26	100	34	100	60	100

$\chi^2 = 3.801, p=0.283$

Table 7 shows the level of parenting confidence, which refers to parents feeling of confidence when making parenting decisions. Most of the sample parents, 46.6% (41.1% of mothers and 53.8% of fathers) had significantly below average parental confidence. This was followed by 35% (41.1% of mothers and 26.9% of fathers) parent who had average parental confidence. Another, 10% of sample parents (5.8% of mothers and 15.3% of fathers) had lower extreme parenting confidence. These results indicate that most of the sample parents were not very confident of their parenting and their parent decisions. Since, parenting a special child is a challenging and a difficult task; probably these parents were not very sure of their parenting. Calculation of chi-square reveals insignificant difference in the level of Parenting Confidence of sample fathers and mothers, as most of them scored from average to significantly below average.

**f) Parental Satisfaction with School of Hearing Impaired Children**

**Table 8:** Parental Satisfaction with School of Hearing Impaired Children

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	-	-	-	-	-	-
Significantly below average	-	-	8	23.5	8	13.3
Average	26	100	23	67.6	49	81.6
Significantly above average	-	-	3	8.8	3	5
Upper extreme	-	-	-	-	-	-
Total	26	100	34	100	60	100

$\chi^2 = 10.3, P=0.005$

As far as parental involvement with their children was concerned, most sample parents (73.3%) here also showed (67.6% of mothers and 80.7% fathers) average involvement. 15% (20.5% of mothers and 7.6% of fathers) of parents had significantly above average involvement. Many parents reported that in managing their work they tend to get little opportunity for interacting with their own children yet they made it a point to take part in the everyday life of their special children. Only 5% (5.8% of mothers and 3.8% of fathers) parents reported having upper extreme involvement with their children because they felt that their hearing impaired child required more parental involvement and attention. Calculation of chi-square reveals insignificant difference between involvement of fathers and mothers with their children.

Overall results show that majority 81.6% (100% of mothers and 67.6% of fathers) of the respondents reported having average level of satisfaction with the school of their Hearing Impaired children. Only 13.3% (23.5% of fathers) of the respondents shows significantly below average satisfaction with schooling. Calculation of chi-square reveals insignificant difference between mothers and fathers regarding satisfaction with school. This low level of satisfaction can be attributed to factors including distance between school and home; lack of school infrastructure and lack of vocational avenues after schooling.

**g) Relational Frustration**

**Table 9:** Relational Frustration

Level	Mothers (N=26)		Fathers (N=34)		Total (N=60)	
	N	%	N	%	N	%
Lower extreme	-	-	-	-	-	-
Significantly below average	-	-	1	2.9	1	1.6
Average	4	15.3	3	8.8	7	11.6
Significantly above average	5	14.7	8	23.5	13	21.6
Upper extreme	17	65.4	22	64.7	39	65
Total	26	100	34	100	60	100

$\chi^2 = 1.435, P=0.697$

Table 9 depicts the level of relational frustration between the parents and their children. Most of the sample parents, 65% (65.4% of mothers and 64.7% of fathers) had upper extreme relational frustration. Another 21.6% (14.7% of mothers and 23.5% of fathers) scored significantly above average on relation frustration and 11.6% (15.3% of mothers and 8.8% of



fathers) had average relation frustration. Very few 1.6% parents (2.9% of fathers) scored significantly below average. This indicates that most parents of Hearing Impaired Children tend to suffer from higher degrees of relational frustration. Parenting a special child is a difficult task and hence the

parent-child relationship is full of frustration and complexities. Calculation of chi-square reveals insignificant difference between the relational frustration of fathers and mothers. These parents reported that managing children is a demanding job requiring effort and patience.

**iii) Inter Correlation among Parenting Dimensions**

**Table no.10:** Correlation among Parenting Dimensions

Variable	Attachment	Communication	Discipline Practice	Involvement	Parenting Confidence	Satisfaction with School	Relational Frustration
Attachment	1						
Communication	.312*	1					
Discipline Practice	.155	.363**	1				
Involvement	.356**	.102	-.034	1			
Parenting Confidence	.235	.231	.195	-.044	1		
Satisfaction with School	.353**	.414**	.426**	.303*	.189	1	
Relational Frustration	-.210	-.472**	-.360**	-.202	-.280*	-.533**	1

\*Correlation is significant at 0.05 level

\*\*Correlation is significant at 0.01 level

The various dimensions of parent child relationship were inter correlated with each other.

The results showed that the various parenting dimensions were positively correlated with each other. Attachment shared positive significant correlation with communication ( $r=.312, p<0.05$ ), involvement ( $r=.356, p<0.01$ ) and satisfaction with school ( $r=.353, p<0.01$ ). Communication also shared positive correlation with discipline practice ( $r=.363, p<0.01$ ), satisfaction with school ( $r=.414, p<0.01$ ) and negative significant correlation with relational frustration ( $r=-.472, p<0.01$ ).

Discipline practice further, also shared positive significant correlation with satisfaction with school ( $r=.426, p<0.01$ ) and negative significant correlation with relational frustration ( $r=-.360, p<0.01$ ). Involvement also shared positive significant correlation with satisfaction with school ( $r=.303, p<0.05$ ).

Parenting confidence also shared negative significant correlation with relational frustration ( $r=-.280, p<0.05$ ) and satisfaction with school also shared negative significant correlation with relational frustration ( $r=-.533, p<0.01$ ).

Most correlations were positive in direction meaning that when parents showed higher attachment with their children, they had better communication; those who communicated well also had better discipline; those who were more involved were also more satisfied and so on. However, relational frustration had negative correlation with most other dimensions. This means that those who had higher relational frustration had lower communication, discipline, parenting confidence and satisfaction with school and vice-versa. These results highlight the reciprocal relationship most parenting dimensions share amongst each other.

**Conclusion**

Hearing impairment is most frequent sensory deficit in human population, affecting more than 250 million people in the world. In India, 63 million people (6.3%) suffer from significant hearing loss. Children with hearing impairment form majority of special needs population across the world. It is responsibility of society to emancipate such children. Parenting children with special needs is difficult and often a complicated process. These children due to their disability

status require constant monitoring and supervision.

The findings of the study reveal that majority of the sample parents of hearing impaired children scored average on the various dimensions of parent-child relationship. Majority of the fathers and mothers showed average attachment with their children with special needs. They were concerned about the welfare of their children but probably with the passage of time had accepted the disability status of their children and hence didn't feel the need to be excessively attached to them. Even though most sample parents felt that they could communicate on any matter or issue with their special children, however, in some cases parents felt uneasy in communicating on sensitive issues. Leigh, *et al.* (1999) assessed the relationship between parent communication variables and the parent bonding factors of care and over protection, it indicated that parental care and over protection were negatively correlated, as were maternal care and over protection. Most sample parents were not too strict about discipline of their children and showed average involvement. Many parents reported that in managing their work they tend to get little opportunity for interacting with their own children yet they made it a point to take part in the everyday life of their special children. Most of the sample parents had significantly below average parental confidence because they were not very confident of their parenting and their parental decisions. Many parents of hearing impaired children tend to suffer from higher degrees of relational frustration. To summarize, parenting a special child is a difficult task and hence the parent-child relationship is full of frustration and complexities. In addition, the results point out that both fathers and mothers score similar on most parenting dimensions meaning that both the parents irrespective of their sex contribute to the lives of their hearing impaired children.

Further, when the coefficient of correlation was calculated, it was found that most components of Parent-Child Relationship shared significant positive correlation among each other except for relational frustration where, negative significant correlation were available. These findings have implications for understanding that parental dimension such as attachment, communication, involvement and discipline tend to co-exist even in families with hearing impaired children. Quittner *et al.* (2010) in a study found that parenting stress affects Parent

Child Relationship and important child outcomes. Higher levels of parenting stress have been related to poorer social and emotional development and higher rates of behavior problems in both deaf and hearing children. Here, also the results highlight that parent child relationship in such families is fragile and in many cases the relationship may be susceptible to conflicts and unique problems.

## References

1. Albrecht G. The disability business. London, 1992, 323-347.
2. Barnes C. Disabled People in Britain and Discrimination: A Case for Anti-Discrimination Legislation. London: Hurst, 1991.
3. Brito AMW, Dessen MA. Deaf children and their families: An overview Psychology: Reflection and Criticism. 1999; 12(2):429-445.
4. Calderon R. Parental involvement in deaf children's education programs as a predictor of child's language, early reading, and social-emotional development. Journal Deaf Studies and Deaf Education. 2000; 5(2):140-155.
5. Canho PGM, Neme CMB, Yamada MO. His Father's experience in the process Canho rehabilitation of children with Hearing Impairment. Studies of Psychology. 2006; 23(3):226-269.
6. Garg S, Chanda S, Malhotra S, Agarwal AK. Deafness Burden, Prevention and Control in India. National Medical Journal of India. 2009; 22(2):79-81.
7. Gatto CI, Tochetto TM. Infantile Hearing Loss: Implications and solutions. Revista CEFAC. 2007; 9(1):100-500.
8. Maslow AH. Motivation and Personality. (3rd Ed.) New York: Harper and Row, 1987.
9. NSS National Sample Survey Organization. Disabled persons in India. NSS 58th round (July- December 2002) Report no. 485 (58/ 26/ 1). New Delhi: National Sample Survey Organization, Ministry of Statistics and Programme Implementation, Government of India, 2003.
10. Oliver M. Understanding disability: From theory to practice. Basingstoke: Macmillan, 1996.
11. Quittner AL, Barker DH, Cruz I, Snell C, Grimley ME, Botteri. Parenting Stress among parents of deaf and hearing impaired children: Association with language delays and behaviour problems parenting. 2010; 10:136-155.
12. Sylvia M. Attitudes of Pre-school Teachers towards Inclusive Education for Children with Hearing Impairment. Unpublished Master's Thesis: Kenyatta University, 2002.
13. Umadevi L, Venkatramalah P. A Study on Attitudes and Aspiration towards Their Deaf Children. Hearing Aid Journal. 1993; 90:120.