Parents' perceptions on the quality of information given by professionals regarding their deaf children

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Parents' Perceptions on the Quality of Information Given by Professionals Regarding Their Deaf Children

MSSE Master's Project

Submitted to the Faculty
Of the Master of Science Program in Secondary Education
Of Students who are Deaf or Hard of Hearing

National Technical Institute for the Deaf
ROCHESTER INSTITUTE OF TECHNOLOGY

By

Charles Phillips

_________________________________________
Student Signature

In Partial Fulfillment of the Requirements
For the Degree of Master of Science

Rochester, New York

May 26, 2006 (date)

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Abstract

Many deaf children have delayed language development that would greatly affect their future academic success (Marschark, Lang, & Albertini, 2002). Information given by professionals to parents could be a significant factor in overcoming this delay. To assess the quality of this information six parents of deaf children in the Rochester NY area, three deaf parents and three hearing parents were selected to participate in an interview and survey.

After the data was examined, it was found that the majority of the parents in this study felt that the information they received from professionals concerning their child’s language development was adequate but could use further improvements. These parents posted suggestions on possible ways that might help make the experience of working with professionals easier.

More widespread research needs to be done on this topic, and possibly a guideline for professionals on how to work with parents of deaf children could be developed. Hopefully, this would help parents make easier and better decisions, which could ensure a more successful future for the deaf child.
Introduction

Many deaf children have challenges due to a delay in language development (Moores & Meadows-Orlands, 1990). Hearing children start to acquire language from the day they are born because they have full access to a spoken language, since they are able to receive the language through audition. Deaf children of deaf parents share a similar experience with hearing children because those deaf children receive full access to a visual language, American Sign Language, that is the primary language of their parents and the Deaf community (Marschark, Lang, & Albertini, 2002). However, ninety percent of deaf children are born to hearing parents (Center for Demographic Studies, 1984). Those deaf children face a language development challenge because they are not exposed to a fully accessible language similar to deaf children with deaf parents, and hearing children with hearing parents. A significant factor that causes deaf children to have delayed language development is the lack of a regular communication system between children and their parents. Learning a language after the “critical period of language development” has a big impact on a child’s success in school, and may therefore be indicated in these statistics: “on average, 18- year-old deaf students leaving high school have reached only a fourth to sixth grade level in reading skills” (Marschark, Lang, & Albertini, p. 157). It is understandable that parents of deaf children experience some mental anguish when they discover deafness in their children and need time to process this.

The goal of this research project was to examine parents’ perceptions of the adequacy of information that professionals give regarding factors related to deaf child’s language development. It was based on the research conducted by C. Jonah Eleweke and
Michael Rodda (2000). In addition, comparisons concerning information given to hearing parents and deaf parents of deaf children will be analyzed. It is very important for parents of deaf children to receive unbiased and complete information from professionals so that they can make educated decisions regarding their children.

Literature Review

This literature review will discuss various factors that influence the success of language skills in deaf children. First of all, factors that influence parents in choosing a communication mode to use with deaf children will be discussed. It is very important for deaf children to receive early intervention in order for them to have access to language as soon as possible. Secondly, the age at which deaf children are first exposed to a language affects their vocabulary ability. Also, there’s an age effect related to neurolinguistic development in deaf children. Thirdly, sign language intervention is very beneficial to the deaf child and the family. Lastly, the relationship between the parents’ ability to communicate with deaf children and those deaf children’s self-esteem will be discussed.

Mode of Communication

C. Jonah Eleweke and Michael Rodda (2000) conducted a study to examine factors that influence parents’ decisions to choose a particular mode of communication with their deaf children through interviews with two different families in England. Those deciding factors included information provided by professionals (e.g., teachers of the deaf and audiologists) attitudes of those professionals, knowledge of assistive technology, and how well support services were provided for those deaf children. The two families with
preschool-aged children with hearing loss who were attending the audiological clinic shared similar experiences. The professionals these parents interacted with were shown to have given very limited information concerning available communication modes and were not willing to share information regarding all communication options. The professionals were giving advice based on their own philosophies and attitudes. For an example, one family was not informed on communication alternatives because of the philosophy of the head of the department and his/her policy, which emphasized oralism. In addition, the parents sometimes were given false hope concerning how assistive technology could help their children develop their residual hearing and speaking skills. Neither of the parents believed their deaf child benefited from the use of hearing aides. Professionals sometimes recommended support services such as those provided by counselors and speech pathologists that the parents' felt were not beneficial nor appropriate for the child's language needs. The researchers believed that parents should have received more accurate information about different communication options, and that professionals should have informed parents about which assistive technology could or could not work for their deaf children. Information parents receive from professionals has a direct influence on their choice of communication with their children to use at home (Eleweke & Rodda, 2000). In turn, that has a big impact on children's language development since communication at home can help or hinder the acquisition of language skills needed for the future.

Besides getting unbiased information from professionals, it is very important for parents and their deaf children to have an early systematic intervention to strengthen their home communication system (Greenberg, Calderon, & Kusche, 1984). Systematic
intervention can mean that parents have regular teacher visits or attend counseling on a regular basis. In addition, parents may need to receive sign language lessons. In the Greenberg, Calderon, and Kusche study, which consisted of data from 24 families, it was discovered that deaf children in systematic intervention programs used more vocabulary and had a higher communicative competence rating than those who did not have any systematic intervention. That study showed that an early systematic intervention program helped parents learn how to communicate with their deaf children more effectively. This is very positive because a home communication system is the key to vocabulary growth and early language skills. Even though it is often very difficult for parents to make decisions related to education and communication due to biased information, finding the right mode of communication to meet the individual needs of the deaf child is crucial. Also, it is extremely important for the deaf child to have a support system at home that includes using efficient communication. Both of these factors are essential for the future academic and linguistic success of deaf children.

In many cases, manual communication/sign language may be most effective for complete language development in deaf children. It is extremely important for deaf children to be exposed to signs at an early age because due to hearing loss. Those children would be able to process “visible” signs without difficulty. Several studies show that signs help deaf children acquire better language skills. In the Notoya, Suzuki, and Furukawa study (1994), deaf children who were exposed to signs while they were infants produced sign communication that was equivalent to spoken communication production in hearing children at the same age. Oral communication tends to be delayed when deaf
children are one or two years old but signs help them to “catch up” with the spoken production in hearing children. In a similar study Norden stated, “that the use of signs in total communication has a beneficial effect on the general adjustment of the children. It also accelerates language development and does not impede the use of speech” (p. 407). Some parents think that the use of sign language will hinder a child’s speech skills, which actually is a myth. Another study showed that young profoundly deaf children who were instructed in total communication scored higher on the Verbal, Quantitative, General Cognitive, and Memory Scales than those of the auditory/oral group according to the McCarthy Scales (Weiner, 1980). Laura Goppold’s review of various studies (1988) indicated that, “...manual communication is more effective than oral communication in the area of language development. Of the 12 investigations described, nine favor total communication/early intervention before the age of 2” (p. 287). In conclusion, those studies showed that signs were very beneficial for deaf children regarding their language development. Unfortunately, there were concerns that parents often receive biased information concerning manual communication including American Sign Language as a possible mode of communication.

Effects of Age

Research has shown that early identification of hearing loss and intervention has a significant effect on deaf children’s expressive vocabulary development. Mayne (1998) conducted a study of two different groups of deaf children on their vocabulary achievement. One group had deaf children who were diagnosed with hearing loss before
they were 6 months old and received early intervention. The other group had deaf children who were diagnosed after 6 months of age. The MacArthur Communicative Development Inventory (CDI) was used to assess deaf toddlers and infants’ vocabulary. The study found that the group whose hearing loss was identified before 6 months old had significantly better expressive vocabulary than the other group. Although deaf children with early identification and intervention did better on vocabulary, those deaf children still fell under the 25th percentile when compared with children who had normal hearing. However, another study showed that a boy named Rasmus whose deafness was detected at 4 months and also was exposed to sign language right away had linguistic and social skills appropriate for his age compared to another boy, William, who had not been detected until the age of 2 (Magnuson, 2000). In addition, Moeller (2000) discovered that there was a correlation between age of enrollment in an educational program and language outcomes at age five. A similar study showed that age of language exposure had an effect on neurolinguistic development (Leybaert & D'Hondt, 2003). The left-hemispheres of deaf children who were exposed to a sign language early had more specialized capacity for language processing than those of deaf children who learned a sign language later in life. This showed that the age of exposure has an effect on cerebral organization for language. The authors of the study discuss how important it is for deaf children to acquire a language at a very early age. If those children pass the critical period for language development without exposure to language, they will have difficulty learning a language when they are older. Therefore, professionals need to communicate this information to ensure that the deaf child begins to get the assistance needed as soon as possible.
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Benefits of Family Language Intervention

Takala, Kuusela, and Takala (2000) performed a study, which indicated that hearing parents and their deaf children benefitted from early language intervention. The study of 81 families occurred in Finland where children and parents had to learn sign language at day care centers, at schools, or in their homes. Based on parents’ responses to the study questionnaires, it was found that parents who actively participated in the intervention advocated for the use of sign language for their deaf children. The ability to communicate among family members helped develop a strong relationship in the family. Another study showed that the mother’s interaction style was related to the deaf child’s communication competence (Lee, 1979). Communication between parents and their deaf child at home is the key for language development. Greenberg (1983) conducted a study on early intervention and its effect on mothers of deaf children. Based on questionnaires that were given to 24 families, he discovered that the mothers who were involved in early intervention had lower stress than those in the control group. Low stress had a positive effect on a mother’s relationship with her deaf child and subsequently their language development. Family language intervention has numerous benefits and should be included and addressed in the information provided to parents by professionals.

Self-Esteem

Debra D. Desselle and Lynn Pearlmutter (1997) examined the relationship between parents’ ability to communicate with their deaf children and the deaf children’s self-esteem. Based on their questionnaire related to communication completed by parents and the Modified Self-Esteem Inventory completed by their deaf children, the deaf children
whose parents were able to communicate in sign language were shown to have had a higher self-esteem than those with parents who did not know sign language. This study pointed out that it is very important for parents to be able to communicate with children not only for the development of deaf children's language skills but also their self-esteem.

In the Takala, Kuusela, and Takala study (2000), deaf children whose parents could sign had a higher level of self-esteem compared to those whose parents did not sign.

The studies in this review indicate that early intervention services with complete information concerning communication options for their deaf children will benefit both the parents and the deaf child in numerous ways. Parents should be encouraged to communicate with their deaf children in a language (any mode of communication) with which those children are able to have full access. The limitation in the Eleweke and Rodda study (2000) was that they only had interviews with two different families related to professional advice and factors impacting parents' selection of a communication mode. They clearly did not include a broad view of many different families. Other research by Desselle and Pearlmutter (1997) was not generalized to deaf children across the United States because it focused only on a residential school in the South. Due to these limitations, more information needs to be gathered to provide valid results on a greater number of parents.

Method

The major research question is, whether information given by professionals on language development for deaf children in the Rochester area is similar to that found in the study by Eleweke and Rodda (2000). Information given to deaf parents and hearing parents of deaf children will be compared as well. The parents in the study will
specify recommendations for professionals on how to better work with families of deaf children.

Subjects

The subjects in this research are parents of deaf and hard of hearing children from kindergarten to 12th grade in the Rochester area. The sample includes three families with hearing parents and three families with deaf parents. It is beneficial to have an equal number of the two distinct subject groups in order for the information given regarding language development to be better compared. The first parent to participate in this study was a fellow classmate. The chairperson of the Masters of Science in Secondary Education for the Deaf and Hard of Hearing and also the parent who had initially participated in the study were asked for names of other parents to contact. This is called snowball sampling which means “the researcher begins with a few participants and then asks them to nominate or recommend others who are known to have the profile, attributes, or characteristics desired” (McMillan, 2004, p.115). This sampling is convenient because it is a part of a network where subjects would be more likely to be willing to participate in the research. Therefore, the subjects selected would probably be very informative and forthcoming about the topic being studied. Letters were sent to those parents so that they could contact the researcher if they were interested in participating in the research. The letter included the purpose of the research and what would be required of parents in the study (see Appendix A). Those who were willing to participate had to sign the informed consent form (see Appendix B).
Procedure

An appointment was made at the convenience of each family selected. A meeting, which consisted of only the parent/parents and the researcher, was held at the appointed time. Those parents had to fill out a survey, which contained statements with likert scales for each. Those questions are divided into 4 different areas: modes of communication, assistive technologies, support services, and perceptions of the professional’s attitude (Appendix C). Parents had to use likert scales to reflect their beliefs about the statements. After completing the survey, parents were given choices of how they wished to deal with interview questions. Those choices included parents being interviewed on videotape or writing answers to the questions on the interview form. The interview questions were the same for all of the parents. The interview was very structured. The purpose of using the videotape was to aid the researcher in translating the interview from American Sign Language into English. Some parents who were not very fluent in American Sign Language were more comfortable writing answers to the questions. They were given more time to do that and the completed form was emailed to the researcher. Interview questions were similar to the survey because they were divided into 4 areas (see Appendix D).

Results

The survey included statements with likert scales for each. The subjects of this study had to use likert scales to express their belief for each statement. Like questions used in the interview, those statements were divided into 4 areas: attitude of professionals, modes of communication, assistive technology, and support services. The results of the
survey for each group of parents were reported in raw numbers (see Appendix E and F). The results were mixed. It is difficult to find any significant patterns based on these results. However, where the survey information supported findings from the interviews, it will be mentioned.

Once all the interview data was collected from the two distinct groups of parents, it was examined for similar patterns. Those patterns were assumed to indicate similar perspectives of some parents outside the research. Also, it is very important to mention that parents' beliefs toward information given by professionals regarding language development may indicate the diversity of their backgrounds not related to their own hearing status. Background may include the degree of hearing loss of their deaf children and their education. Information gathered from deaf parents and hearing parents will be compared along with their recommendations to professionals.

*Description of Subjects*

Three families of deaf parents participated in this study. Deaf parent #1 (#1DP) had two Deaf children. Those children were both profoundly deaf. Both were currently in middle school as mainstreamed students. Deaf parent #2 (#2DP) also two children. However, this parent’s son was hard of hearing while the daughter was profoundly deaf. Both were mainstreamed students in middle school and elementary school. Finally, Deaf parent #3 (#3DP) had one Deaf child who attended a deaf school.

Three families of hearing parents also participated. Hearing parent #1 (#1HP) had two deaf children. The older son attended an elementary school as a mainstreamed student. The younger son was in a preschool program at a deaf school. Hearing parent #2
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(#2HP) had a deaf daughter who was mainstreamed at an elementary school. The third Hearing parent #3 (#3HP) also had a deaf daughter and she was mainstreamed at an elementary school as well.

**Deaf Parents: Modes of Communication**

In general, Deaf parents felt they already knew which modes of communication were the best to utilize with their children when information was first provided by professionals such as teachers and audiologists. All of the Deaf parents had confidence in making decisions regarding modes of communication because they felt they knew which would be effective for themselves and for their children.

#1DP: “I already knew which mode of communication should be used with my children when I discovered that my children were Deaf. At home, we communicate in many different modes of communication such as American Sign Language, English Sign, and spoken English. Since I am Deaf, my children and I are very much alike and have no problem communicating with each other. Often, I explain to the professionals that since those professionals are hearing, they need to reinforce the correction of kids’ speech when necessary during speech sessions.”

#2DP: “I knew what was the best for my children because I am Deaf myself and basically knew what to do. The audiologist suggested to me that my son (who is hard of hearing) should practice speaking. I had no problem with that because I had skills in speaking.”
#3DP: “Social workers and audiologists suggested to me to teach my child spoken English, but a teacher of the Deaf thought sign language was very important for my child to be able to communicate. However, all professionals suggested the use of English Sign in order for my child to be exposed to the English language. I did not agree with what they had suggested. Those professionals left me alone because I already knew ASL (her native language) and knew what to do with my child.”

It is very interesting to notice that the choice related to mode of communication lead to further challenges in the educational system. This was because some professionals were not fluent in American Sign Language nor did they have enough experience in working with Deaf children.

#1DP: “Due to the limited skills of interpreters and teachers of the Deaf in using ASL (receptively and expressively), even when using their best ability in Signed English, the information is not consistent to the child’s mode of communication. This creates challenges because not all signed vocabulary matches ASL in proper grammar and content. This forces kids to do some guesswork.”

#3DP: “Since American Sign Language is a natural language, my child has no problem at understanding the concepts in American Sign Language. However, Signed English is ineffective for her when
working on developing concepts but it may be a benefit for her writing skills.”

However, #2DP felt that the mode of communication has not affected her children because they have done very well in school with interpreters.

**Deaf Parents: Assistive Technology**

Assistive technology is a kind of technology that helps deaf and hard of hearing children use their residual hearing. Not all deaf children are given the same recommendations from professionals (especially audiologists) concerning which assistive technology should be used. Some are effective for deaf and hard of hearing students in their classroom. However, some deaf children may not experience any significant benefit from assistive technology. It is very important to keep in mind that deaf and hard of hearing children have unique needs and are very diverse due to the degree of hearing loss and particular mode of communication.

#1DP: “When all of my children got cochlear implants (for environmental purpose - to be able to detect some important sounds in the environment), the teacher suggested the FM system to be used in class. The FM system helps my daughter because with that system she is able to listen directly to a teacher without any interruptions. However, my son prefers to use an interpreter, unlike my daughter which has skills in reading lips.”

#2DP: “My children use hearing aids which were suggested by professionals. Those hearing aids help my children be able to
recognize sounds in the surroundings and assist my children with reading lips.”

#3DP: “They suggested my child use hearing aids at the Rochester School for the Deaf. However, it could not improve or benefit my child’s hearing ability because she is profoundly deaf. Also, I rejected the idea of the cochlear implants suggested by professionals.”

The majority of parents felt that assistive technology helped their deaf children according to the survey (Appendix E, Assistive Technology #1)

_Deaf Parents: Support Services_

All of the Deaf children of Deaf parents in this study received speech therapy. Speech therapy was viewed as being very helpful to those children, except the child of #3DP.

#1DP “My children attend speech sessions two times a week. It helps them for everyday conversation in the real world and with classmates. Since the kids are in the Deaf world most of the time and their parents are deaf, we could not help correct their pronunciations.”

#2DP “It is very useful because it helps children communicate with peers and be prepared for the real world. School, community, and home give support to my children in learning to speak.”
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#3DP “My child doesn’t benefit from speech therapy.”

#3DP mentioned another support service. She attended meetings where parents supported each other and shared general ideas and experiences concerning topics related to deafness.

Deaf Parents: Attitude of Professionals

Two Deaf parents mentioned that professionals appeared very neutral while providing information on the various modes of communication available to their deaf children. The professionals let those Deaf parents take control in the decision-making.

#1DP “Even though they did not volunteer their opinion, maybe due to their limited knowledge of ASL, they just said nothing and did the best they could.”

#2DP “Although professionals encouraged my children to learn how to speak English, they knew that my family used American Sign Language as the first language and they did not criticize the use of American Sign Language.”

In contrast, the other Deaf parent experienced a neutral attitude on mode of communication but a negative attitude of professionals toward American Sign Language.

#3DP: “Social workers and audiologists were concerned about my child being deaf because they told me that my child needed to learn to speak English. Personally, I preferred to use American Sign Language because it is a native language and used in the Deaf community. Also, most professionals had a negative attitude toward ASL and suggested to me to use Signed English with my
child. They let me make decisions but they were very disappointed that I did not follow their suggestions. However, there were some teachers who were very fluent in American Sign Language who highly supported the use of American Sign Language in communication.”

That was consistent with the responses found in the survey (Appendix E, Attitude of Professionals #3) in which all parents agreed that professionals were neutral while giving information on modes of communication.

Hearing Parents: Modes of Communication

All of the hearing parents shared similar experiences when they started to work with professionals after discovering that their children were deaf. In general, the first professionals to work with the parents were audiologists because they were the ones that diagnose hearing loss in children. In general, hearing parents felt that those audiologists were not especially helpful to them, and they could not tell the parents where to go for needed help. For those parents, it was a very frustrating experience.

#1HP: “When we found out our son was deaf, we were handed a stack of brochures to go through (at the Otolaryngologist and audiologist office). We did not know anything about deafness, so the information was of no use what-so-ever.”

#2 HP: “The audiologist gave me a couple pamphlets - that’s it; said to call Early Intervention. I was totally lost.”
#3 HP: “I had to discover the technology online.”

Unlike Audiologists, Early Intervention specialists gave those parents a lot of resources. For these hearing parents, the resources were very beneficial.

#1HP: “We met with Early Intervention, and they helped explain all of the options out there, what may or may not be easier for us and our son. We had our son go to Rochester School for the Deaf, and they worked with him within their guidelines. Early Intervention gave us a variety of options and explained pros and cons for each - cued speech, ASL, signed English, and oral. Rochester School for the Deaf did try to accommodate parents with their requests. We, as parents decided on what would be the easiest for our son to learn quickly, and communicate quickly - we decided on ASL and signing in English word order. ASL was successful in allowing our son to communicate effectively. As he got older, we transitioned into signing in English word order, to bridge into reading English.”

#2HP: “I was given information [by Early Intervention] on ASL, cued speech, and maybe more from what I remember. However, we chose ASL and we communicated successfully with that.”

Two parents felt that the mode of communication their children used had a positive affect on their academics.

#1HP: “He has done very well [in school]”
#2HP: “She developed ASL as her primary language, now she’s learning English because of having cochlear implants.”

**Hearing Parents: Assistive Technology**

All of the hearing parents were consistent about their children’s experience with assistive technology. Those parents said that cochlear implants were not mentioned when different kinds of assistive technology had been suggested. However, they felt that the types of hearing aids their children used were not very helpful.

#1HP: “Initially he had hearing aids - 3 different types - he had no benefit with them all. At the age of 3 ½, our son got a cochlear implant - it is extremely beneficial - he signs and speaks, and can hear within a normal speech range when he has his implant on.”

#2HP: “She got no benefit from them [hearing aids] until we decided to implant her. Now with the implant, she has much better access to sound and is now mainstreamed setting and has good speech.”

#3HP: “I would have had my daughter implanted 18 months earlier if I had known [about the cochlear implant]. Chances are she would have had a greater ability to process sound if her brain had access to sound earlier.”

All of the hearing parents indicated a strong disagreement with the idea that assistive technology suggested by professionals was helpful for their deaf children. (Appendix F, Assistive Technology #1)
Hearing Parents: Support Services

Two of the hearing parents had positive experiences with support services provided to their families.

#1HP: “Our support service consisted of Early Intervention, RSD, the teachers, meetings, social events, and especially important - other parents. These mainly formed on their own. We were given information on meetings, and events, etc. We found that the thing that was the most beneficial, were other parents of deaf children. They were/are going through the same things as us. It was our way of immersing and feeling comfortable in a different territory - it also gave our family an opportunity to practice sign language, meet new friends, maintain our son’s comfort level.”

#2HP: “Speech at school [her daughter had] and we went to sign classes and also had home sign classes. At the time, the sign classes were helpful for us until implanted. Speech at that time wasn’t as helpful, now it’s critical.”

Hearing Parents: Attitude of Professionals

After learning that their children were deaf, the parents interviewed did not feel supported by a professional who understood their fears and concerns about their child’s future.
#1HP: “No. We have found throughout the last 7 to 8 years, that the best advocate for a child is parents/guardians. Our son would not be where he is today, if we relied solely on the professionals.”

#2HP: “From the audiologist that told me she [her daughter] was deaf, no. Some other professionals yes - Also the ENT supposed the best around told me you are a mother you will figure it out.”

#3HP: “Both the teachers and the audiologist (as well as the ENT) working with RSD kept us in the dark.”

Two of the parents somewhat felt that professionals had a biased attitude concerning various modes of communication available to deaf and hard of hearing children.

#1HP: “Once we decided to go through Rochester School for the Deaf, the form of communication was mainly ASL - with a bit of signed English an speech if parents wanted it”

#2HP: “I believe they gave the information but were biased on which to choose - but all the information was overwhelming. I had decided to learn sign.

As the survey indicates, all parents strongly agreed that professionals informed them about their preference of mode of communication (Appendix F, Attitude of Professionals #2)

Fortunately, two families of hearing parents were given power in decision-making. Both chose sign language because they thought it was the best way to facilitate
communication between themselves and their children. In turn, parents felt it would help children develop their language more effectively.

Hearing and Deaf parents had different experiences working with professionals and making decisions related to which mode of communication should be used with their children. Deaf parents had an advantage because they felt confident that they already knew what was best for their children since those parents experienced growing up deaf themselves. Those parents already knew sign language as their primary language for communication. Deaf parents had no problem making the decision to choose American Sign Language - the native language of the Deaf community. However, hearing parents were usually overwhelmed with a lot of information on different modes of communication because these were new concepts for them. Those hearing parents wanted to find a mode of communication that would ease communication problems between themselves and their children. It took some time before they reached a decision. That process was very difficult for hearing parents.

Suggestions offered by parents on how to make the experience working with professionals easier are listed below.

Deaf parents’ suggestions:

1. Professionals need to be honest about their limited knowledge of Deaf culture and ASL so parents and professionals can work together better.

2. All teachers of the deaf and interpreters should take ASL classes and attend ASL silent dinners every year in order for them to practice their sign language skills.
3. Professionals should understand that parents may be the ones that know what is the best for their child.

4. Professionals should be open-minded and be sensitive to any culture, especially to Deaf culture.

Hearing parents' suggestions:

1. It is usually very overwhelming and scary for parents. They need to have someone to talk to. Another parent that has gone through the same experiences would be very helpful. It is very important for professionals to refer those parents to a support group.

2. The professionals have to take an interest in the parents and give them the benefit of the doubt.

3. The professionals have to understand that these parents are new to deafness and may need questions answered that they may not even have thought of yet.

4. The professionals have to offer options when the parents/guardians are capable of receiving information.

5. Good communication should be established between professionals.

6. Professionals need to be reminded that parents are with their children a lot more than anyone else and notice different behaviors.

7. Professionals and parents need to work together with the same common goals.

It is very important for all professionals to be prepared when working with parents of deaf children, regardless of if they are deaf or hearing. Professionals need to consider the suggestions provided by parents who have dealt with them. Those suggestions could
be the key to successful teamwork between professionals and parents.

Discussion

Based on answers to interview questions and surveys, most parents felt that information given by professionals regarding language development in deaf children was adequate, but recommended improvements needed in professionals working with parents of deaf/hard of hearing children. Professionals often gave biased information related to different modes of communication to parents. The influence of the professionals’ own philosophies and beliefs made it difficult to be neutral and separate feelings or ideas from facts. For example, one of the Deaf parents experienced with professionals reacting negatively related to using ASL. That professional suggested using Signed English with her child in order for the child to improve English skills. All hearing parents and one Deaf parent felt that the assistive technology first suggested by audiologists was not helpful because hearing aids did not benefit their children. Almost all parents agreed that social services helped meet communication needs for both parents and children. Most parents said that the speech therapy provided to their children will help prepare them for future interactions with hearing people. Also, the parents’ recognized that sign language classes helped them improve their ability to communicate with their children.

This research consists of information obtained from a selected group of parents in Rochester, NY, which probably has some of the best professionals in the United States because Rochester has one of the largest deaf communities. Parents in cities that have a big deaf community may share similar experiences. However, less favorable experiences may occur in many other vicinities including rural areas where there are few deaf children.
Consequently, the professionals in these places may have limited experience working with deaf children and knowledge of deafness. The current research study has some limitations. There are still not enough subjects to give a broad perspective on the practice of professionals. There may be some errors in the survey because some statements are not specific enough for those parents to accurately state their beliefs. Also, parents may have different perspectives on the definitions of beliefs on the likert scales. In future research, information from parents of deaf and hard of hearing children across the United States should be used in order to give a more valid picture of the range of professionals and advice. Also, a guideline for professionals on how to best work with parents of deaf children should be developed and become standard practice. Hopefully, this would help parents make easier and better decisions, which will ensure a more successful future for their deaf children.
References


Dear Parents,

I am a Graduate Student attending the Rochester Institute of Technology and working towards my Master of Science in Secondary Education for Deaf and Hard of Hearing Degree. Currently, I am in the process of collecting data for a research project to determine the quality of information given to parents of deaf children by professionals regarding language development.

If you have a deaf child with severe to profound hearing loss and would possibly be willing to share information related to your child’s mode of communication and language development, please contact me. Only a completed survey and a short interview at your convenience will be needed. Names will be kept strictly confidential and will not be published. Your help would really be appreciated.

Please e-mail me at wadep81@aol.com.

Thank you for your help,
Charles Phillips
Appendix B

**Project Title:** Quality of Information Given By Professionals Regarding Language Development to Parents of Deaf Children  
**Investigator:** Charles Phillips  
**Email:** WadeP81@aol.com

I am doing a research study in the Masters of Science in Secondary Education of Deaf and Hard of Hearing (MSSE) at NTID. The purpose of this research is to determine whether the information given by professionals regarding language development in deaf children is adequate to parents and whether information given to hearing parents is similar to that given to deaf parents.

If you would like to participate in the study, you will be asked to complete a survey, which will be mailed to you. It has 14 questions, which can be done in less than 30 minutes. Also, we will need to arrange the date and time for our interview. This can be held in your home or at another place that is convenient for you. The interview should take about an hour. There are questions concerning four different areas: information given by professions regarding language development in deaf children, attitude of professionals, assistive technology, and support services. There is no risk involved in the study.

Everyone participating in this study may not directly benefit, but the outcome might help other parents with deaf children. With the results found, the benefit of this study would be that professionals could improve communication tactics with parents and be more willing to give as much unbiased information as possible to help parents make the best choice for their children regarding language development.

To ensure confidentiality, names and addresses will not be put on survey papers and/or videotapes. Each subject will be assigned a number and that number will be used on the survey/videotaped interview given by the subject. There will be no names used in the published research, and no one other than myself will have access to the identity of the subjects.

Participation in this study is completely voluntary, and you have the right to quit the study if you feel uncomfortable. There will be no penalty.

If you have any questions, I would be glad to answer your questions during our interview time. By the way, you will have a copy of this form after you sign it.

If you want to participate in this study, please sign your name.  
*I, ______________________, want to participate in this research study.*

(Print your name here)  
(Sign your name here)  
(Date)
Appendix C

Survey

Direction: Please circle the most appropriate response to each question.

Information given by professions regarding language development in deaf children

1. Professionals (such as teachers, social workers, and audiologists) gave information on all possible choices of modes of communications for you to use with your deaf child.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

2. Information regarding language development given by professionals was adequate.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

3. Professionals gave both pros/cons for each mode of communication.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

4. Professionals gave unbiased information on each model of communication.

A. Strongly Disagree
B. Somewhat Disagree
Attitude of Professionals

1. Professionals were open-minded while giving information on different possibilities for you to communicate with your deaf child.
   A. Strongly Disagree
   B. Somewhat Disagree
   C. Neutral
   D. Somewhat Agree
   E. Strongly Agree
   F. N/A

2. Professionals informed you about their preference of mode of communication.
   A. Strongly Disagree
   B. Somewhat Disagree
   C. Neutral
   D. Somewhat Agree
   E. Strongly Agree
   F. N/A

3. Professionals were neutral while giving information on modes of communication.
   A. Strongly Disagree
   B. Somewhat Disagree
   C. Neutral
   D. Somewhat Agree
   E. Strongly Agree
   F. N/A

4. Professionals were enthusiastic to give a variety of information on different kinds of modes of communication.
   A. Strongly Disagree
   B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

Assistive Technology

1. Assistive technology (such as hearing aids and cochlear implants) suggested by professionals was helpful for your deaf child.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

2. The form of assistive technology suggested was explained in terms that you understood completely.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

3. Professionals gave both pros/cons for each form of assistive technology.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

4. Professionals gave information as to where the assistive technology suggested could be acquired.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

**Support Services**

1. Professional provided support services (such as ASL course and speech therapy) on a regular basis.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A

2. Support services were suggested and explained.

A. Strongly Disagree
B. Somewhat Disagree
C. Neutral
D. Somewhat Agree
E. Strongly Agree
F. N/A
Appendix D

Interview Questions

Information regarding language development in deaf children given by professionals

1. What kind of information on modes of communication did professionals such as teachers and audiologists provide you with when they started to work with your deaf child?

2. Was the mode of communication that your deaf child used based on what was suggested and provided by professionals successful for him/her in communicating with you? Why or why not?

3. How has this mode of communication affected your deaf child academically?

4. Did professionals give you information on all possible modes of communication that you could use with your child?

5. Did you feel completely informed, were all your questions answered, and did you feel confident in the decisions made?

Attitude of Professionals

1. Did you feel supported by a professional that understood your fears and concerns about your deaf child's future?

2. What was the professional's attitude toward providing information on the various modes of communication available?

3. Do you feel you were given an active part in all the decisions made concerning your child?

4. What suggestions could you offer that would have made your experience with the professionals easier?

Assistive Technology

1. What types of assistive technology were suggested?

2. Was the type of assistive technology that your child used helpful? Why or why not?
3. What effects did the assistive technology have on your child's education?

Support Services

1. What types of support services were suggested by the professionals?
2. Were those done on a regular basis? why or why not?
3. Were those support services helpful for your child's communication and education?

Conclusion

1. How would you rate your experience with the professionals?
2. Do you have any suggestions that would be helpful or any other comments?
## Appendix E

### Deaf parents

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Deaf parents' responses to survey questions in Appendix C
### Appendix F

#### Hearing parents

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