

## **Perceptions of Deaf Adults Regarding Audiologists and Audiological Services**

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The role of attitudes is becoming more widely recognized as an important factor in the successful provision of clinical services. Consumer oriented articles have reported that many deaf adults have negative attitudes regarding audiologists and the effectiveness of audiological services. It is important that professional literature also documents these attitudes in order to assist in improving the quality of services. This article presents a categorical analysis of deaf adults' recollections of audiological services. Written essays were collected from 193 deaf adults and were analyzed for "emerging" categories. These categories are related to three general themes: (a) communication, (b) the relationship between audiologist and client, and (c) the clinical environment. Based on the attitudes and experiences expressed in these categories, implications and recommendations are made for clinicians and university training programs.

. . . The audiologist gave me a look that said I wasn't lucky. In the result of my story of my experience, I wish I have never gone to the audiology when I was young. It gave me negative feelings of myself of being deafness.

The above comment concludes an essay describing a young deaf woman's perceptions of repeated audiological testing during her childhood and adolescent years. Her story describes the long hours involved in travel to the office, in waiting for audiologists, in the seemingly senseless time spent in testing, and in the authoritarian and placating attitude of audiologists. There is a tone of humiliation and anger in this woman's words.

Articles published by the National Association of the Deaf have documented similar experiences:

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. . . we all went to the testing room. The audiologist handled Bernard by simply giving him an abacus with colored beads to move from one side to another each time he heard a sound. No explanation or human relationship with Bernard was offered to him by the audiologist. Clearly, our son was too frightened to do anything. He didn't understand what was expected of him (Hurwitz, 1982).

. . . In the early years, the choice was not mine. It was the choice of my parents, on the advice of supposed experts in the field of deafness, that I should learn to talk. This in itself was not a mistake, but shutting me off from manual communication was . . . (Christian, 1981).

Such circumstances are not isolated, and similar attitudes regarding audiological services seem to pervade the community of deaf people. It is important that professional literature and consumer literature continue to document these attitudes and make recommendations for the improvement of services based on the experiences and concerns of deaf and hard-of-hearing clients. The purpose of this article, therefore, is to present an analysis of deaf adults' recollections of audiological services and to draw implications and make recommendations for clinicians and university training programs based on these recollections.

### THE ROLE OF ATTITUDE

Educators often view student opinion as a strong indicator of teaching effectiveness. Training for audiologists, however, often emphasizes feedback from other clinicians with little instruction on how to elicit and use clients' opinions. Statements such as those at the beginning of this article can provide insights into the ways audiologists and audiological services are perceived by clients, and more importantly, help to improve services provided by audiologists.

Audiologists generally function under a clinical paradigm, and tend to focus on the pathological aspects of hearing loss. This view of hearing loss does have application, particularly in the fitting of amplification and in light of certain communication difficulties that inevitably arise during interaction with the majority "hearing" culture. However, sensori-neural hearing loss, itself, does not alter social or linguistic potential; rather, it is the impaired auditory channel that affects oral-aural communication in the auditory mode and acquisition of spoken and written language. Thus, the traditional view of deafness could be augmented by increased awareness of communicative and sociological characteristics of deaf people. Audiologists who have greater understanding of the linguistic implications of hearing loss, the "culture" that is deaf, the variety of *individuals* within that "culture," and the role of signing in general and American Sign Language (ASL) in particular, would be less likely to encounter the negative interactions, confusions, and misunderstandings that are apparent from the above quotations. As May (1983)

suggested, "the problem is how we are to understand the other person's world . . ." (p. 117).

### METHOD

This paper endeavors to "understand the other person's world" by utilizing the phenomenological method to analyze the written responses of deaf college students and faculty/staff at the National Technical Institute for the Deaf (NTID). The phenomenological method encourages "bringing the focus of research back to the individual and the experiences which affect individuals" (Meath-Lang, 1980, p. 24). Basically, in the phenomenological method "life material," collected and recorded in writing or interviews, is analyzed descriptively. Categories suggest themselves (emerge) from subject responses and researchers attempt to find "commonalities and discrepancies across biographical lines in the self-reported material" (Meath-Lang, Caccamise, & Albertini, 1982, p. 299). (For a more indepth discussion of the phenomenological method, and additional examples of its application see Meath-Lang, 1980; Pinar, 1975; Willis, 1979; McCutcheon, 1979; and Lanigan, 1977).

The following question was presented to NTID students and faculty/staff:

We are interested in the attitudes of deaf adults toward audiologists (people who test hearing and fit hearing aids). Describe your feelings about audiologists. Please include information from your past experiences. Explain the services you received, especially the behavior of the audiologists. Please write everything you can remember. Please be very honest.

Respondents were encouraged to discuss their experiences prior to NTID, although it was also permissible to describe experiences *at* NTID. Also, respondents were cautioned to exclude from their essays contacts with hearing aid dealers or speech pathologists. Faculty/staff received questionnaires by mail. For the students, the question was presented in NTID English and Communication classes, and was presented in both print and simultaneous communication.

The labels "positive" or "negative," "both," or "neutral" were assigned to each essay by two raters — first independently and then by collaboration.<sup>1</sup> These labels were defined as follows:

1. *Positive* — the essay described beneficial interaction between the client and audiologist and/or expressed satisfaction with the services received.
2. *Negative* — the essay expressed emotional or communication conflict between client and audiologist, lack of rapport, and/or criticism of audiological methods.
3. *Both* — the essay described a combination of positive and negative

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<sup>1</sup>The two raters were NTID faculty members. One rater holds an M.A. degree in Audiology; the second rater holds an M.A. degree in Curriculum and Instruction, and is himself a deaf consumer of audiological services.

experiences with audiologists.

4. *Neutral* — the essay described situations, people, and events, but gave no indication of feelings or perceptions.

Following “positive, negative, both, neutral” ratings, essays were analyzed along biographical lines for “emerging” categories; that is, classification themes which were suggested by the content of the essays. When a professional *other than* an audiologist was described, these essays were omitted. Three essays were thus excluded.

## RESULTS AND DISCUSSION

### Initial Categorization

A total of 193 suitable essays were received from NTID students (N = 167) and faculty/staff (N = 26). Analysis showed that there were 28 (15.0%) “positive” essays, 119 (61.7%) “negative” essays, 34 (17.6%) “both” essays, and 12 (6.2%) “neutral” essays.

**Table 1**

Distribution Response Type of Essay Statements  
Written by Deaf Students and Faculty/Staff (N = 193)

Response Type	Students N (%)	Faculty/Staff N(%)	Total N(%)
Positive	23 (13.7)	5 (19.2)	28 (15.0)
Negative	104 (62.3)	15 (57.7)	119 (61.7)
Both	29 (17.4)	5 (19.2)	34 (17.6)
Neutral	11 (6.6)	1 (3.9)	12 (6.2)
	167	26	193

Such a high number of “negative” descriptions of audiologists and audiological services leads one to ask “Why? What has occurred in the interactions between audiologists and these respondents to cause such a dramatic number of negative perceptions?” An analysis of the themes and emerging categories from the essays helps to answer this question. Conversely, careful attention needs to be given to the 28 positive essays in order to assist in identifying the behaviors, environmental factors, and attitudes which resulted in positive clinical experiences for deaf clients.

### The Emerging Categories

Analysis of essays led to the identification of emerging categories that related to three general themes: (a) communication, (b) the “self” in relation to the audiologist, and (c) the clinical environment (that is, audiological procedures and equipment). These are not mutually exclusive themes and

some overlap is evident in the responses discussed below; this overlap is primarily due to the pivotal role of the communication theme.

*Communication.* Communication was a crucial factor in many of the responses (N = 96; see Table 3). If audiologists were able and/or willing to explain the test results clearly to the deaf client, the tendency was for the client to be satisfied with the services received (see Table 2). For example, the following response supports the importance of shared information:

All the audiologists I was tested by were really friendly and very informative. I assume I was lucky to have "right" audiologists because I didn't get any bad experiences from them. It's important for the audiologists to have the ability to communicate well with deaf people at all levels. I once had an audiologist who didn't know how to sign and it was sort of frustrating so my mom had to interpret for me. Other than that — no problems.

**Table 2**  
Breakdown by Response Category of 28 Positive Statements  
Written by NTID Deaf Students and Faculty/Staff<sup>a</sup>

Category	Number of Essays Addressing Category
Communication	
Results explained clearly by audiologist	14
"Self" in relation to audiologist	
Audiologist offered good rapport	10
Clinical Environment	
Audiological services — beneficial	11
	Total 35

<sup>a</sup>Some essays contained more than one positive statement.

On the other hand, when communication was poor between audiologist and client, respondents (N = 19) expressed anger toward audiologists. Lack of sign language skills was a major source of this anger. Even more important, respondents expressed anger over misperceptions about *their* hearing losses that influenced how they felt about themselves and audiologists:

My feelings about audiologists, that they are not interested in deaf. Majority of them don't know how to sign at all! . . . They work with deaf and they don't how to sign at all. What a bunch of Hypotites! I'm sore at their communication methods! When I ever go to an audiologist, I never see them use sign language, except those who works at school for the deaf. I received only testing of my ear from audiologist's service. When I go to audiologist's office they just seat me in testing room and tell me what to do. They never told me results of the test. Just they tell me I need hearing aid, that's it!

Responses expressing communication difficulty between clients and audiolo-

gists involved four main categories: (a) sign language is the focus of perceived communication differences (N = 19); (b) a "communication breakdown" existed when the respondents did not understand the reasons for the test, did not know what was happening, or did not know about test results or hearing loss (N = 47); (c) misperceptions about hearing loss existed because respondents believed that hearing loss would improve over time, "patience" with hearing testing would encourage improvement of hearing loss, or the client would either "pass" or "fail" the test (N = 24); and (d) audiologists were not perceived as familiar with the problems and issues involved with profound hearing loss and deafness (N = 6; see Table 3). These four categories are evident in the following response:

**Table 3**  
Breakdown by Response Category of 119 Negative Statements  
Written by NTID Deaf Students and Faculty/Staff

Category	Number of Essays Addressing Category
<b>Communication</b>	
Sign Language	19
Communication breakdown	47
Misperception about hearing loss	24
Audiologists lack familiarity	<u>6</u>
Total:	96
<b>"Self" in relation to the Audiologist</b>	
Emotional conflicts	39
Deafness is acceptable condition	16
Guilt	12
Fear/nervousness	<u>20</u>
Total:	87
<b>Clinical Environment</b>	
Discomfort — audiologist caused	5
Test time is long	12
Hearing aids — limited use	24
Tinnitus/headaches	12
Client familiarity/decreased reliability	<u>9</u>
Total:	62

Over the past eleven years I have noticed that most Audiologists that I have met have *no* skill of using their hand in a way of communication with deaf adults and children who depend on their hands. The only way I got information was from the family audiologist, he always explained and tried to have me understand my problem with my hearing damage and loss. But almost all the others never bothered with me — always explained it to my parents. I also remember an audiologist that took that machine that pumps

air in your ear. I asked her what it was she said, "Don't worry about it, it's nothing new." I knew that I had the right to know what it was so I got into an argument with her. But I never found out . . .

Another comment implies a mistrust resulting from interaction with audiologists, and again reflects these "communication" categories:

The audiologists tried to trick some things to me to see how I was doing about my hearing. I must challenge myself but I made it most of the time. Of course I failed or made some mistakes, the audiologists showed their pitiful to me (depen on some audiologists).

Another example shows how communication was facilitated by an audiologist's use of speech and gestures and the deaf client's skill in lipreading and comprehension, and indicates sign language was a beneficial communication option:

. . . Most of the audiologists didn't know sign language and they tried hard to communicate by using their speech and gestures. I don't always have a problem communicating with them because I'm good in lipreading. Some audiologists know sign language such as fingerspelling and some basic sign languages . . . I came to \_\_\_\_\_ last summer for Summer Vestible Program. Mrs. \_\_\_\_\_, who was my audiologist, evaluated my hearing. She did a terrific job and used sign language. She told me everything about my hearing problems such as how much level of pitches I can hear, etc. . . . One of the things I don't like was that they never tried to explain what was my result or hearing problems. All I know was the amount of hearing loss I have. I prefer them to explain everything about the client's hearing problems and use sign language.

Another communication-related issue that arises during the diagnostic/counseling process is the use of professional jargon. It is appropriate *not* to overwhelm or confuse clients with too much unfamiliar audiological jargon. However, in following this rule of "jargon deletion," audiologists may omit valuable information that would allow clients to better understand their hearing loss.

For many clients and audiologists, a problem that arises is "to whom should the audiologist address the information about testing"? Often, hearing parents or other relatives accompany deaf clients to evaluation sessions. Thus, because of the communication difficulty between audiologists and clients, and because of time factors, results are often explained to hearing relatives with the assumption that the information will be relayed to clients at a later time:

After my mother discovered with my hearing problems when I was nine months old, she then took me to an audiologist at \_\_\_\_\_ Medical Hospital . . . I saw him often. He was very nice to my mother, but he never talked to me. I guess he thoughts he didn't know how to communicate with little kids. He was a very serious man as well as personality while he was testing me. He always put me in a hearing testing room without communi-

cating with me. It made me feel that I was put in a factory. The hearing test lasted about twenty minutes. My audiologist always reported to my mother about the results. I never learned either of them what the results meant. . . . When I entered at \_\_\_\_\_ last summer, I took an hearing test from an audiologist . . . The test was very long and very interesting. First, the audiologist took my hearing aids to make sure if they were good conditions. It was interesting to watch what he was testing them in the machine and the graph paper. He explained it very clearly and I understood it very well. Secondly, he put me to a hearing testing room. . . . The tests were very long. Finally, my audiologist explained to me with the full report, I learned a lot from him about my results. He was very patiently and considered. . . . I was glad that I finally understood what the results meant. I felt better knowing who I am now.

Statements such as the above indicate that knowing the results of testing and the reasons for testing can help clients to feel less isolated, more respected as individuals, and more knowledgeable about themselves.

A misperception that some respondents described was the notion that their hearing loss would be cured over time. Some respondents expressed tolerance of audiological procedures because they felt that the tests themselves might improve the hearing loss:

1. "I had some boring but important experiences with audiologists. I believe the audiologist is responsible for finding out the hearing loss from the person. To me, I am already profoundly deaf. I know I can't decrease my hearing loss but I never know it is miracle that my hearing get better in the future. That is why I have to go to audiologist . . ."
2. ". . . I alway going to audiologist after I was told from my mom but it never change my hearing loss. The reason I go there is that my mom always expected my hearing loss will imporve . . ."
3. ". . . It was worthless because I have never seen any improvements . . ."
4. ". . . When I was about 3 or 4 years old, my parents took me to the audiology. They wanted to know if my hearing was improving or not. The audiologist told them that I wasn't improving, but He suggested me to wear a heavy duty hearing aid. He thought that my hearing would get better if I wore a heavy duty hearing aid . . ."

Also, there was the concept of "passing" or "failing" the hearing test:

1. ". . . After the hearing test, the audiologists told me that I can receive a new hearing aid. He explained me that I passed the test with the sound and heard the four words . . ."
2. ". . . most of the time my ears were ringing during audiology and thought I heard the sound but there was no sound. So that means I loses some 'points' . . ."

Some respondents assumed responsibility for their own "failure" to improve their hearing loss because they did not listen properly. Unfortunately these



“misperceptions” (although they are logical and natural deductions encouraged by the medical component of audiology) were allowed to continue into adulthood because communication between audiologists and clients was insufficient. These “misperceptions” are significant, not only because they continue a false hope, but also because clients may tend to view themselves as somehow defective if indeed there is no “improvement” or “cure” for the deafness.

Also addressed was the notion that audiologists as a group are generally not familiar with the problems involved with profound hearing loss:

1. “Some audiologists . . . seem to insult the intelligence of a client (whatever). My case is unusual compared to most deaf students, so they forget that I don’t read sign language, they speak too slow, and too simple. They’re boring. They lack sensitivity, ie — don’t show enough interest in the client, don’t ask any other pertinent questions . . . or don’t provide any feedback whatsoever. I feel I talk to a brick wall, get frustrated because of the lack of support . . .”
2. “. . . My early experiences left me feeling that I was a pair of (bad) ears. My family moved as I was about to start High School and my medical records, for some reason, did not follow. This freed me for 3 whole years of the teachers walking up to me and shouting, ‘If you have any trouble hearing me, just let me know, in front of the entire class. (I am assuming that they were ‘informed’ of my hearing loss via the only person who would know, the district’s audiologist) . . .”
3. “Audiologists, as a whole, truly believe I can learn to hear. ‘It is my stubbornness that prevent me from hearing.’ I believe that the profession is lacking in empathy and understanding . . .”

A lack of experience with deaf adults may lead to awkwardness in making recommendations to parents of deaf children. Lack of experience with deaf persons and the means to communicate effectively and comfortably with them in and/or outside the clinical setting can lead to uneasiness and poor rapport. Many deaf individuals are aware of this problem:

. . . Sometime audiologist became in fear with me because we have no communicate at all, just pushed me there and tried to get over the audiologist test as soon as possible also avoid to communicate with me.

*The Self in Relation to the Audiologist.* The second general theme reflected in responses was “the self in relation to the audiologists” (N = 87; see Table 3). Four categories appeared: (a) emotional conflicts (N = 39), (b) deafness is an acceptable condition (N = 16), (c) the individual or the ears are *the problem* expression of guilt (N = 12), and (d) expression of nervousness or fear (N = 20). Some of these categories, particularly the one of emotional conflicts, are integrally related to communication categories:

1. “. . . those audiologists were kinda pushy on me and I dislike it . . .”

2. "... and I didn't like her ideas and ways of explaining things to me and my parents. I hated when she tried to force me to wear my hearing aid ... I can tell when she got upset over my complaints She made me feel like she owned me and tried to control my life ..."
3. "... So often I felt I was treated as one of the numbers by audiologists ..."
4. "... The audiologist showed the picture of me when I was young. The picture of me looked depressing. I was very cold and showed no emotion to the audiologist. The audiologist again explained to my mother that I'm profound deaf. The audiologist gave me a look that said I wasn't lucky ..."
5. "... I really hate audiologist because she act snob to me ..."

These responses describe feelings of mistrust and resentment. Other responses indicated that as communication becomes more natural and comfortable between audiologists and clients, feelings of mistrust and resentment become less of a problem:

... The audiologist was the same person that I met her before in 1978. She asked me how am doing so far in high school and other things. I felt better talking with her. I thought that she wanted me to be comfortable talking with her before taking the hearing test ...

Also significant in responses is the idea of the perceived superior or "snobish" attitude of the audiologists. The training of many audiologists places them in the role of "hearing-loss-expert" who must recommend change in deaf persons. This may account for the attitudes of "pity" and superiority as perceived by individuals who are viewed as handicapped or defective.

On the other hand, as stated previously, some deaf individuals have experienced positive interactions with audiologists (see Table 2):

1. "... I have the feeling that she respect me and understand how I feel about the hearing aids ..."
2. "... An audiologist evaluated on my hearing, but she explained me about purposing of the test before started to evaluate. I felt comfortable with her. Audiologist was really warmly personalities with me. I was really doing well in the audiologist ..."
3. "... You know, being concerned, thats it, he is very concerned and loves his job as well as the people ..."
4. "... My audiologist always told me things he has to tell me he would never hold back anything even if it was good or bad news about my hearing test. I still think an audiologist will still be helpful to me."

These respondents experienced "respect" and satisfactory communication with audiologists. Audiologists were perceived as "warm" and "direct" in their willingness to communicate with clients. These perceptions, as well as the negative descriptions, reflect *perceived* attitudes of audiologists, and also

are directly related to the communication categories discussed above.

A category addressed by 16 of the respondents, is the view that deafness is an acceptable condition, and audiological services are, therefore, of "little or no importance" for deaf individuals:

1. ". . . I was requested to have another hearing test after I have gone through that some years back. That is when I resent to take the test. I felt that I shouldn't go through this because I know I'm deaf and accepted that already and it gets me frustrated to go through this . . ."
2. ". . . The audiologist at my deaf school was very nice, I have nothing against him but him not accepting my deafness gets me mad. It still happens now, some say I'm hard of hearing even though my results was severely deaf! Therefore I don't enjoy seeing an audiologist."
3. ". . . I believe that an audiologists would not succeed in the future because I felt it never helped me to improve. I am hard of hearing and there is nothing I can do about it! I'm always proud of myself!"
4. ". . . I never go to the audiology to test my ears . . . I prefer to be in a quiet world . . ."
5. ". . . Why should I take my hearing test again and again? I am already deaf, therefore no one can make me into a hearing person . . ."

Respondents addressing this category appeared satisfied with themselves, and expressed pride in belonging to the "deaf culture." These respondents are no longer searching for a "cure" for their deafness, and they perceive that audiologists want to effect unnecessary change.

Twelve (12) respondents, however, adhered to the medical view of their condition by accepting the notion that they do have a problem, that they are defective, and perhaps guilty for their condition:

1. ". . . My early experiences left me feeling that I was a pair of (bad) ears . . ."
2. "Well, I don't like the way they look at me, when they tell me, I can hear it and I told them I don't understand and they still tell me that my hearing is (profound +) which they always made me feel bad because they never told me *why* does this have to happen to me. Also when I say, I *can't hear* it, they said 'of course you do' But I *didn't!* . . ."
3. "I hope In future the audiologists will more help deaf people because I need to deaf people to hear, and what say. I want the audiologist to keep forever because Deaf people have hard time with listen."
4. ". . . I must work like a dog to the future so I can greatly improve my speech and listening."
5. ". . . he made a high pitch which I hardly could hear. When I felt frustrated in struggling myself to hear, I decided to decieve him that the sound hurt my ear. Afterward, he claimed that I was unable to wear the hearing aid which were available. . . . in a hearing test room . . . The

audiologist knocked the wall across me to get my attention. I felt embarrassed because I didn't show proper manner . . ."

6. ". . . I wish I have never gone to the audiology when I was young. It gave me negative feelings of myself of being deafness."

A category mentioned by 20 respondents was expression of fear or nervousness for test situations and/or audiologists:

1. "When I was 8 years old, I had a test for my hearing loss. I was very frightened to enter the room with thick pads (soundproof) . . ."
2. "When I first went to an audiologist I was scared stiff but then realized that all they were trying to do was help me . . ."
3. "My past experiences with my audiologist were kind of rough for me. When I was between 8-14 years old, I remembered when I hated to go for tests and so forth. Mainly because, (she) my audiologist scared me . . ."
4. ". . . I really not like to take my hearing test because I am afraid that I would lose my hearing . . ."
5. ". . . She was an audiologist. She was so mean and acted like "Mother." I hated her. When she put headphones over my head, I was very scared and started to say "hey, Dad, Dad" because I thought it was like electric or something . . ."
6. ". . . My first feeling is nervous because it was my first time to meet my audiologist and I thought she was doing something serious on my ears like an operation. When she put me in the small room with machines, I was really nervous because I though the machines will hurt me but it was the speakers for the sounds . . ."

Many audiologists are involved in clinical evaluation for several hours daily. They are familiar with the equipment; therefore, the test suite and machines seem fairly innocuous. Hearing loss occurs with enough regularity to keep thousands of audiologists employed, and so "we" are not surprised when we see hearing loss on the audiogram. However, for 20 respondents, the test situation was *anything* but innocuous, with one respondent fearing the loss of the remaining hearing sensitivity. Again, the issues of clinician/client relationship and communication are involved.

*The Clinical Environment.* The third general theme that emerged from the essays was related to the clinical environment (audiological procedures and equipment). Five categories were apparent: (a) the audiologist was "rough" with the equipment/pain is associated with the testing procedures (N = 5); (b) the time involved in hearing testing is long and causes boredom (N = 12); (c) hearing aids are noisy, of limited use, and are associated with headaches and/or dizziness (respondents also mentioned the word "force" relating to hearing aid recommendations) (N = 24); (d) the tests are associated with tinnitus and headaches (N = 12); and (e) there appears to have been little or no change in testing procedures over the years and familiarity with the tests

decreased their reliability (N = 9; see Table 3).

The following respondents remind us that some audiological procedures are at least uncomfortable, if not painful (particularly tympanometry and earmold impression making):

1. “. . . I still saw my audiologist in \_\_\_\_\_ but her attitude seemed to change and was less careful putting headphones on and all that jazz. I really do not like it when she checked the pressure in my ears but she acted as if she doesn't care if it hurts or not. . . .”
2. “. . . The thing that I disliked the most was having new earmolds made. It was terrible having the audiologist put a piece of thread with a small cotton ball into both of my ears. Sometimes, the audiologist was mean because he couldn't feel the pain himself. Then he mixed and stirred some ingredients together. And he poured them into a huge plastic shot-gun, before he prepared to shoot it into my ears carefully. After waiting . . . he pulled the new molds out. That can be painful to some people. It was painful to me . . .”

Twelve (12) respondents commented on the length of time involved in testing and feelings of boredom:

1. “. . . So after I get used to it for the second or third time I got tired of it because of the long test and a long way back home . . .”
2. “. . . Every time I have an appointment, I always have to wait in the waiting room for my turn. Sometimes, the audiologists weren't available. It is like their schedule wasn't prepared.”
3. “The worst thing is that it requires many appointments in preparation to get a new hearing aid. It is very time-assuming.”
4. “. . . The test that audiologists gives out was boring . . .”

A possible explanation for the frequent expression of boredom may be related to the issues of “communication” and the medical environment of many clinics. If clients do not know the reasons for testing and perceive little or no benefit from testing, “boredom” may be a natural reaction. Also, in the medical situation it is common for clients to be guided blindly through a battery of tests. People often become conditioned, after years of testing to accept this situation, to accept non-understanding of the data collected through long tests, and to avoid questioning their examiners. One respondent wrote, “I might be a bit afraid that if I pursue it further, they'll push me into wearing an aid again & I didn't want that. . . .” Clients learn to accept the routine traditional roles, but too often with resentment as has been suggested by many of the responses.

The third category within the clinical environment theme was related to hearing aids. It was stated that these instruments are often noisy and of limited use to the respondent. Often hearing aids are perceived as causing headaches or dizziness, but respondents felt “forced” by audiologists to wear

hearing aids. Some of the responses indicated that audiologists may not have taken seriously clients' complaints about hearing aids:

1. "... An audiologist was friendly and made me to feel comfortable . . . Also, he explained me my hearing loss. He encouraged me to use a hearing aid, but I never used it . . ."
2. "... In facts I never like to wearing hearing aid during the classes because there were so much noise. When the students wanted to calling the teacher so, they yelling at the teacher. It was hurt my ear drums. Later on, it had turned me off. Some audiologists were upset that I stopped wearing hearing aid."
3. "When I was a little boy and was four years old, I went to \_\_\_\_\_ School for the Deaf. I never used my hearing aid. \_\_\_\_\_ School for the Deaf required hearing aid and lipreading but not sign language. My father bought a new hearing aid for me because the teacher said, you must used a hearing aid in the class. I wore my hearing aid with a harness everyday. Later I did not like my hearing aid because my hearing aid was noisy and took my headache. I turned off my hearing aid and hate it at first time . . ."
4. "... Since I have some residial hearing, I always have been press by the audiologist to make the most out of it. Because of the pressure, I have bought hearing aids two separate times only to have them used a week or two, then they were discarded due to very uncomfortable feelings, wasting lots of money."

Hearing aid problems, and their limited use, was the most commonly expressed issue within the "clinical environment" theme; 24 respondents stated various degrees of concern or frustration with hearing aids or hearing aid fitting procedures. Some respondents admitted that the only time they used hearing aids was during visits to audiologists to make audiologists believe they were realizing benefit from the aids. In reality, according to these respondents, the aids were too powerful, too noisy, and/or did not help speech understanding or even improve environmental awareness. This is not to imply that hearing aids are of no benefit to deaf people. Other respondents stated that they feel "naked" without their hearing aids, enjoy "contact" with the environment, and "depend" on their aids for various reasons.

Twelve (12) individuals commented that testing caused tinnitus and/or headaches (because of the intensity of pure tone presentation):

1. "... As a child I really disliked audiologists. Once they hit a frequency where tinitus would start, I couldnt hear much thereafter for hours. I especially disliked clumsy screening tests in school. In fact after a while I refused take them."
2. "... Another negative feeling about audiologists is dislike. This can be seen when audiologist put a sound on a high pinch during the hearing

test, she got mad. This example shows dislike because the person doesn't like when the audiologists put the sounds on a high pinch because it hurts her ears . . ."

3. ". . . during one of the evaluations, my ears start to ring loudly. I became confused because I could not distinguish the sounds from the ringing of my ears. So I immediately told the audiologist what was happening, hoping that he might do something about this, such as stopping the evaluation and wait for a short time till the ringings goes away or whatever. The only reply I got from him was a very slight nod and nothing else . . ."

One respondent in this category used the word "tricked," and felt that accurate testing did not occur because of tinnitus confusing the true detection of hearing sensitivity. Others expressed irritation that the sudden burst of sound intensity either startled them or caused actual pain. Both of these situations, from the respondents' point of view, lowered the credibility of audiologists and the hearing test results.

Finally, 9 respondents commented that there seems to have been little or no change in procedures over the years. Many deaf individuals are quite experienced at taking hearing evaluations since they are tested yearly. Respondents who wrote in this category stated that test results were less accurate because they had memorized the tests and could "fool" audiologists:

1. ". . . as I grew up, it was just same thing, same tests, it never bothered me because I was used to it."
2. ". . . Because everytime I went to audiologists — they recommend me to get new hearing aids. I have always got new hearing aids everytime I went to them . . ."
3. ". . . I'm tired of them checking my ears. I'm tired of going to see an audiologist because they wanted to test my ear. The tests are boring because these tests are the same . . ."
4. ". . . I find it easy to cheat, why? Simple, I follow his/her eye contact. I don't like cheat but . . . that makes it easier for me to hear."
5. ". . . I brought my kid to be tested, I had to explain the procedures to him . . . Even then, I could tell my kid the approximate order of words. My kid at 6 years looked at me & asked why he had to do this if I knew, step by step, what would happen. That shows the change in procedures over the years."
6. "Before I can express my attitude towards audiologists I have to explain my attitude toward being tested. Personally I am sick of being tested for my hearing loss which I pretty much know. The redundancy of such test makes me restless and an experienced listener. Unfortunately there's not enough words in the english vocabulary to compensate for the current words used over & over again like baseball, cowboy, airplane, etc. These words don't test my true ability to discriminate words

only because I'm an experienced listener . . .”

These essays expressed boredom and frustration at the repetitiveness of the hearing tests. Perhaps the frustration was influenced by the fact that many deaf individuals are *required* to be tested regularly by schools for the deaf or by support service organizations.

### RECOMMENDATIONS FROM RESPONDENTS

Twelve (12) essays provided recommendations for improved audiological services and improved relationships between audiologists and deaf clients. These recommendations reflected several of the issues that have been raised by this paper:

1. “. . . It's important for the audiologists to have the ability to communicate well with deaf people at all levels . . .”
2. “. . . I recommend all audiologists to be friendly and be aware of other patients.”
3. “. . . I would recommend that audiologists have sign language. In order to build up their communications skills better so that not only hard of hearing patients but deaf patients they test also. It would be best beneficial.”
4. “. . . My suggestions are about all of the audiologists need to know how to fit correctly for those deaf people who have problems to hear uncomfortable with those hearing aids . . .”
5. “An audiologist can not learn about deafness by testing young children and evaluating hearing aid for young children or for elderly people who are losing their hearing. Audiology is a science. I respect audiologists who have this expertise. But the study of audiology does not imply the understanding of deafness and its impact . . . I suppose the training of audiologist varies. Some programs focus totally on audiology as a science — others may try to bring some humanistic aspects into being an audiologist.”
6. “I beg for all audiologist to recognize the importance to communicate with their clients all that is taking place no matter how small of an effect it may have for the client. At least you would have done your part of providing necessary info.”

### IMPLICATIONS AND RECOMMENDATIONS

#### Implications for Clinicians

From the results of this study several implications can be drawn and recommendations provided for clinicians to enhance the quality of audiological services for deaf clients.

1. *Knowledge of and at least basic skill with manual/sign communication:*



Caccamise & Johnson (1978) have discussed the benefits of using sign communication with deaf clients. As they observed, "... a breakdown in the communication process is the major problem confronted by the deaf person. This breakdown can best be dealt with through a sharing of responsibility for communication by client and clinician" (p. 124). The responses presented in this paper pointed to a lack of audiologists' sign skills as a frequent cause for the "communication breakdowns" between clinicians and clients, and support the incorporation of sign language training into professional development plans for speech-language-hearing clinicians. Caccamise, Smith, Yust, and Beykirch (1981) described sign language instructional materials for speech-language-hearing professionals, and provided suggestions for the use of these materials.

2. *Interpersonal aspects of communication between clinicians and deaf clients:* Equally important, yet integrally related to the issue of using sign communication with deaf clients, are the issues of attitude toward deaf clients and non-verbal communication. Stokoe and Battison (1981) suggested a cultural perspective in providing services to deaf individuals:

It would help if specialists could view the deaf person not as a hearing person with something lacking but as a person who had learned different ways of receiving information about the world, different social survival skills, and different rules for personal interaction. The difference can be a crucial one in the testing, diagnosis and therapy associated with mental health services to deaf people (p. 193).

This cultural perspective should include knowledge about the variety of educational backgrounds and communication modes used by deaf individuals. As some respondents in this paper suggested, "deafness is an acceptable condition" that can include involvement in the "culture" that is deaf. Sign language skills can aid in providing greater awareness of this culture for clinicians, as well as increased awareness of information communicated through body language. Also, although deafness may be an acceptable condition, audiologists need to share information with deaf people that will enable them to understand the benefits of audiological services (e.g., profound deafness does not eliminate either the possibility of middle ear infection or the potential benefits of "appropriate" use of amplification). Also, deaf clients may be more willing to receive this information in an atmosphere of facilitative communication.

3. *Use of interpreters in the clinical setting versus direct communication:* From the above implications related to sign skills and interpersonal aspects of communication, the question arises, "In lieu of basic sign language skills, should an interpreter be used in the clinical setting?" Indeed, interpreters serve a valuable role in the communication process. However, interpreters do not provide communication at the level or quality that is possible with direct communication, and preference for direct communication is common among both hearing and deaf people (Caccamise & Johnson, 1978). As

Rupp (1977) stated: “. . . the commodity that the clinical audiologist has to offer is service — direct, personal, and professional service to clients who have hearing handicaps . . . the audiologist may use highly sensitive electronic equipment, but the ultimate findings which he records as data are those reported to him by his listeners” (p. 10).

4. *Awareness of issues related to the clinical environment and deaf individuals' possible reactions to this environment:* Respondents reported feelings of fear (particularly as children), physical discomfort, the routine nature of testing, tinnitus and headaches associated with testing. Clinicians who are aware of such issues are better prepared to address them, discuss problems with clients, provide information, and help alleviate these difficulties before or as they arise.

5. *Discretion during hearing aid fitting of deaf clients:* As mentioned previously, hearing aid problems and their limited use, was the most commonly expressed issue within the “clinical environment theme.” Audiologists need to be more discriminating as to whom they fit with amplification, and how they utilize powerful amplification systems. Perhaps extensive questioning regarding the clients' lifestyle and potential use for amplification, would do much to decrease the perception of “unnecessary fitting” of amplification. This is fairly straightforward if the deaf client is an adult. However, the solution of this problem becomes more circuitous if the client is a young child or infant.

#### **Implications for Audiological Training Programs**

In addition to the implications for clinicians, the results of this study suggested a major implication for university training programs, i.e., provision of training on the issues of sign language and cultural awareness of deafness. As stated above, a cultural perspective of deafness in the delivery of audiological services could have meaningful impact on the effectiveness of services to deaf clients. Included in this cultural perspective is knowledge of the role of signing in general and American Sign Language (ASL) in particular for deaf people and the deaf community. Many researchers have been and are conducting research to describe the syntactic and semantic principles that govern the use of ASL (Stokoe, 1969; Battison, 1974; Bellugi & Fischer, 1972; Fischer, 1979; Maestas & Moores, 1980). These researchers have shown that ASL makes use of principles that are common to other human languages, and that the stages of ASL acquisition parallel the acquisition stages documented in other languages. Such knowledge may serve to increase our understanding of effective ways to present spoken and written language to deaf clients (Albertini, Meath-Lang, & Caccamise, 1984; Caccamise, Brewer, & Meath-Lang, 1983).

There are other manifestations of the increased visibility awareness, and acceptance of deafness as a human condition. Some universities, recognizing the significance of signing in general, and ASL as a language, are offering

signed English and/or ASL courses for credit to their undergraduate and graduate level students. In addition, organizations of deaf individuals themselves, such as the National Association of the Deaf, are convening to influence legislation and stimulate public awareness of deaf people as a politically influential minority group. Interpreters for the deaf are more professionally trained in both sign and oral communication theory and practice, and more members of the "hearing" culture are becoming interested in and aware of sign language and communication devices for deaf people. The accessibility of "cultural" information on deafness makes more feasible the integration of this information into audiological training programs. Such information would help provide speech-language-hearing students with a heightened sense of rapport to deaf clients, as well as a stronger awareness of and ability to investigate the specific needs of deaf individuals.

### SUMMARY AND CONCLUSIONS

The categorical analysis of *both* the positive and negative statements of deaf and hard-of-hearing clients provides significant information regarding clinical environments, audiological procedures, and the quality of professional services. In the respondent essay statements reported in this paper, communication effectiveness was the major concern expressed. If audiologists knew sign language or were perceived to communicate the essential information to the client, the essays tended to reflect positive attitudes toward the services and/or audiologists since the clients felt "respect," "empathy," and "knowledge about themselves." On the other hand, many essays expressed dissatisfaction in the form of anger, frustration, guilt, or mistrust. Many misperceptions were apparent about the reasons for testing; there was confusion or ignorance about results of testing; audiologists were viewed as haughty, disinterested, and uncaring. Clients felt a lack of control over their own situation. In these "negative" situations, more effective communication of specific information, compatible attitudes between audiologists and clients and greater awareness of the perceived effect of clinical procedures on deaf clients might have resolved many of these difficulties. These clients could have better understood the test results and environment, and also made themselves understood where questions or uneasiness arose. Understanding deaf individuals from "their own world" and from their own perspectives could do much for improving audiological services for deaf people. Audiologists would be more easily able to investigate individual needs and provide services that are more relevant to the *individual* client. Audiologists would be "meeting halfway" the deaf individuals whom they serve:

... I hope that the next time I have to take a hearing test with an audiologist, I hope he or she will have the patience with us because we deaf people have patience to take hearing tests over and over again for the rest of our lives. If people want to become audiologists, they need to understand our sensitivity

and our behavior toward them because there are times when we hate to take those hearing tests. To some of us, a hearing test is not important especially me. Audiologists are wonderful people to work with if they have the time and patience for us . . .

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### REFERENCES

- Albertini, J., Meath-Lang, B., & Caccamise, F. (1984). Sign language use: Development of English and communication skills. *Audiology*, 9(8), 111-126.
- Battison, R. (1974). Phonological deletion in American Sign Language. *Sign Language Studies*, 5, 1-19.
- Bellugi, U., & Fischer, S.D. (1972). A comparison of sign language and spoken language. *Cognition*, 1, 73-200.
- Caccamise, F., & Johnson, D.D. (1978). Simultaneous and manual communication: Their role in rehabilitation with the deaf adult. *Journal of the Academy of Rehabilitative Audiology*, 11(1), 105-131.
- Caccamise, F., Brewer, L., & Meath-Lang, B. (1983). Selection of signs and sign languages for use in clinical and academic settings. *Audiology*, 8(3), 31-44.
- Caccamise, F., Smith, N., Yust, V., & Beykirch, H. (1981). Sign language instructional materials for speech, language, and hearing professionals. *Journal of the Academy of Rehabilitative Audiology*, 14, 33-61.
- Christian, S.H. (1981). It's okay to be deaf. *The Deaf American*, 34, 23-24.
- Fischer, S. (1979). Many a slip 'twixt the hand and the lip: Applying linguistic theory to non-oral language. In R. Herbert (Ed.), *Methatheory III: Application of linguistics in the human sciences*. East Lansing, Michigan: Michigan State University Press, 45-75.
- Hurwitz, A. (1982). The future is now. *The Deaf American*, 35, 17-23.
- Lanigan, R.L. (1977). *Speech act phenomenology*. The Hague: Martinus Nijhoff.
- Maestas Y Moores, J. (1980). Early linguistic environment: Interactions of deaf parents with their infants. *Sign Language Studies*, 26, 1-13.
- Maslow, A.H. (1971). Peak experiences in education and art. *Theory Into Practice*, 10, 149-153.
- May, R. (1983). *Discovery of being: Writings in existential psychology*. New York: W.W. Norton and Co.
- McCutcheon, G. (1979). Educational criticism: Methods and application. *Journal of Curriculum Theorizing*, 1(2), 5-25.
- Meath-Lang, B. (1980). Deaf students' perceptions of their English language learning: Rationale for an experience-based curriculum model. Doctoral dissertation, Rochester, New York: University of Rochester.
- Meath-Lang, B., Caccamise, F., & Albertini, J. (1982). Deaf persons' views on English language learning: Educational and sociolinguistic implications. In H. Hoeman & R. Wilbur (Eds.), *Interpersonal Communication and Deaf People; Working Papers #Five, Sociology of Deafness Conference Proceedings*. Washington, D.C.: Gallaudet College.
- Pinar, W.F. (1975). The analysis of educational experience. In W.F. Pinar (Ed.), *Curriculum theorizing: The reconceptualists*. Berkeley, California: McCutcheon.

- Rupp, R.R. (1977). The roles of the audiologist — a philosophical overview. *Journal of the Academy of Rehabilitative Audiology*, 10(1), 10-18.
- Stokoe, W. (1969). Sign language diglossia. *Studies in Linguistics*, 21, 27-41.
- Stokoe, W., & Battison, R. (1981). Sign language mental health and satisfactory interaction. In L.K. Stein, E.D. Mindel, & T. Jabaley (Eds.), *Deafness and Mental Health*. New York: Grune and Stratton.
- Willis, G. (1979). Phenomenological methodologies in curriculum. *Journal of Curriculum Theorizing*, 1(1), 65-79.