

# **An Assessment Scale of Hearing Handicap for Use in Family Counseling**

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Counseling of the hearing-impaired adult should include family members. While many attempts have been made to assess the handicapping effects of hearing impairment on an individual, to date there has been no systematic tool for assessing the attitudes of family members. This study involves the development of a self-assessment tool to measure the psychological, social and vocational effects of hearing impairment as reported by the hearing-impaired individual and a family member. Use of the scale for family counseling is discussed.

The handicapping effects of hearing impairment acquired during adulthood have been of concern to audiologists for several decades. Yet traditional dependence on audiometric data for prognostic and rehabilitative purposes has proven inadequate as illustrated in the classic example of two hearing-impaired adults with identical audiograms and very different communication problems. The limitations of depending solely on audiometric information has led to the consensus that effective aural rehabilitation programs cannot be developed without information about the hearing-impaired individual's attitudes and communication functioning. Indeed, the recent proliferation of hearing handicap assessment scales suggests audiologists are attempting to develop individualized aural rehabilitation programs based on the unique needs of the individual hearing-impaired person.

Perhaps the initial attempt to quantify the functional effects of hearing impairment was the Social Adequacy Index (Davis, 1948). However, this early attempt was limited in its reliance on two audiometric measures — the speech reception threshold and speech discrimination score. Since that time, researchers have chosen to utilize a self-report format to augment audiomet-

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ric data. These assessment scales have attempted to provide information about the impact of hearing impairment on the individual by rating its effects in various situations. The major scales developed to date include: the Hearing Handicap Scale (High, Fairbanks, & Glogi, 1964), the Hearing Measurement Scale (Noble & Atherly, 1970), the Social Hearing Handicap Index (Ewertsen & Birk-Nielsen, 1973), the Denver Scale of Communication Function (Alpiner et al., 1974), the Profile Questionnaire for Rating Communicative Performance in Various Environments (Sanders, 1975), the Hearing Performance Inventory (Giolas, Owens, Lamb, & Schubert, 1979) and the Hearing Handicap Inventory for the Elderly (Ventry & Weinstein, 1982). Each of these scales has contributed to further refinement and development of tools which provide information about the nature and extent of communication handicap.

A review of the self-assessment tools developed to date suggests that the use of a single, comprehensive measure with all hearing-impaired adults may be unrealistic and inappropriate for obtaining some types of information. Consequently, the use of different assessment scales with different individuals might be necessary to obtain appropriate information for rehabilitation planning. With this in mind, this study was undertaken.

If the purpose of self-report scales is to provide information on the effects of hearing impairment on everyday functioning for rehabilitative planning and management, then it is imperative that the scales provide information for use in counseling. Informational and affective counseling are both well-accepted elements of adult rehabilitation. Therefore, knowledge of the person's counseling needs is essential for effective planning and treatment.

The degree to which the various scales provide information regarding counseling needs varies. However, an underlying principle in effective counseling appears to have been omitted in all of the presently used assessment scales; i.e., the effects of hearing impairment are not simply limited to the individual, but rather influence the entire family (Pollack, 1978). Therefore, if counseling is to be effective, inclusion of family members in the counseling process is vital.

Based on that premise, it was hypothesized that a family member's assessment of the handicapping effects of the hearing impairment could provide invaluable, additional information for counseling purposes. The purpose of this study, therefore, was to develop a self-assessment tool to measure the handicapping effects of hearing impairment as reported by the hearing-impaired individual and a family member.

## METHOD

### Scale Development

In order to acquire information for use in counseling, three areas of interest were assessed in the scale developed: the psychological, social and

vocational effects of adult hearing loss. The authors generated 100 items representing aspects of each of these areas and organized them into a self-assessment questionnaire format. The items were presented in statement form and required a written response indicating the appropriate adverb. Response choices were: always, usually, sometimes, rarely or never. Wording of the items included positively worded (e.g., I admit I have a hearing loss to most people) and negatively worded (e.g., I tend to avoid people because of my hearing loss) items in order to eliminate response biases. Responses were weighted from 1-5 so that a response representing maximum handicap was assigned 5 points. For example, a response of "NEVER" to a positively worded item and a response of "ALWAYS" to a negatively worded item would each carry 5 points, suggesting an area of difficulty for the individual.

The initial form of the scale was administered to 100 adults (21-50 years) with acquired sensorineural hearing loss of 30 dB HL or greater at two or more octave interval frequencies from 250-4000 Hz in the better ear. Subjects had no previous aural rehabilitative therapy but had all undergone an audiological evaluation within six months prior to completion of the scale. In order to determine the test-retest reliability of each of the items, a randomized form of the scale was readministered to these same subjects after two weeks. Pearson product-moment correlation coefficients were computed and 34 items fit the proposed criteria of .80 or higher correlation. Items which did not fit this criteria were eliminated. Internal consistency was also assessed for these 34 remaining items using Cronbach's alpha method. Good consistency was suggested by the .81 coefficient. Based upon the high degree of reliability demonstrated, these 34 items were incorporated into the final version of the scale.

#### **Scale Administration**

Sixty additional subjects conforming to the criteria described in the initial part of the study were administered the 34 item scale. Psychological (items #1-10), social (items #11-24), and vocational (items #25-34) effects of hearing impairment were assessed (Appendix A, Form A). In addition, a family member of each of the subjects completed a parallel form of the scale which differed from the subject's form by presenting items in third person format (Appendix B, Form B). The family members were required to be adults who resided in the same household as the subject. In order to eliminate discussion and/or collaboration, the scales were administered by the authors in person.

#### **Analysis Procedures**

Correlation coefficients were computed for the psychological, social, and vocational subsections of the scale by comparing the responses of the hearing-impaired subjects with the responses of the family members. Each subject's subsection rating totals were calculated and then correlated with

subsection totals for her/his family member. Overall sample correlations were cast into a matrix table for analysis. In addition, internal consistency (Cronbach's alpha) was estimated for each of the three subsections for both the hearing-impaired subjects and the family members.

### RESULTS AND DISCUSSION

Results of reliability testing are shown in Table 1. The high correlations obtained for each of the three subsections showed consistency and stability for the scales administered to the hearing-impaired subjects (Form A) and to the family members (Form B) as measured by Cronbach's alpha. The high degree of internal consistency suggested the items were assessing two sets of prevailing attitudes representing the psychological, social, and vocational effects of hearing impairment. In combination with the high test-retest reliability shown with these items, this scale appears to be a reliable measurement tool.

**Table 1**  
Reliability Results Using Cronbach's Alpha Method for Each of the Subsections for the Self-Assessment Scale (Appendix A, Form A) and the Family Member Assessment Scale (Appendix B, Form B)

	Self-Assessment	Family-Assessment
Psychological Subsection	.79	.80
Social Subsection	.87	.85
Vocational Subsection	.79	.85

Table 2 displays the correlation coefficients obtained in comparing the responses of the 60 hearing-impaired subjects and their family members. These data suggest an overall low level of agreement between the subjects and family members for items representing the psychological, social, and vocational parameters. Inspection of the table suggests a relatively higher degree of agreement for the psychological subsection. However, a coefficient of .43 cannot be accepted as an indicant of strong agreement.

The low correlations obtained suggest that the relationship between the responses of the subjects and family members was not strong. However, this information should not be discounted as negative. The differences detected by this study may provide important information on which to base effective family counseling in the aural rehabilitation process.

The reasons for the disparity in the responses of these two groups should be examined. In interpreting the results, it should be remembered that while the perceptions of feelings and behaviors may be very different for a hearing-impaired individual and her/his family member, a judgment cannot

**Table 2**

Correlation Coefficients Generated by a Comparison of the Responses of the Hearing-Impaired Individual with the Responses of the Family Member for the Three Subsections of the Self-Assessment Scale (Appendix A, Form A) and Family Member Assessment Scale (Appendix B, Form B)

	SELF-ASSESSMENT		
	Psychological	Social	Vocational
FAMILY-ASSESSMENT			
Psychological	.43		
Social		.21	
Vocational			.29

be made that one position is accurate and the other is delusional. This study required that the subject introspectively assess her/his own feelings and behaviors while the family member was asked to respond "objectively" about the hearing-impaired individual. Each individual's perceptions of a situation were shaped by her/his own life experience. Inasmuch, the differences in responses demonstrated on this scale may have been the results of multiple processes related to family dynamics.

First, the hearing-impaired subject may have failed to accept, understand, or deal with her/his hearing problem. Yet her/his family member may have been keenly aware of and strongly affected by the hearing impairment. Second, the subject and/or family member may have been unable to recognize, understand, or cope with the hearing impairment. Third, the two may have failed to agree on the identification of problem areas and the behaviors associated with them. Or finally, any combination of these may have occurred.

Therefore, because the individuals in this study were closely involved in the problems being examined, it would be erroneous to assume that agreement should occur on items which represent such emotionally charged topics. Rather, the information obtained relative to disagreement on these issues suggests areas in need of family counseling.

Tyler (1969) describes counseling as the process of helping a client make a decision in such a way as to maximize the probability that her/his future development will be satisfactory and useful. In other words, counseling emphasizes the development of possibilities in dealing with a problem area. For the hearing-impaired individual, counseling can lead to satisfactory adjustment by providing options for dealing with the hearing loss.

Any discussion of options available to the hearing-impaired individual must be realistic in terms of the person's total life situation. Because of this, the inclusion of family members is both logical and widely advocated. Indeed, the Committee on Rehabilitative Audiology as published in *ASHA*

(1980, p. 461) proposed that professionals providing aural rehabilitation should demonstrate a special knowledge of "... counseling information and techniques used with hearing-impaired persons and their families in matters relating to management of psycho-social, educational-vocational, communication, and economic problems associated with hearing impairment."

Further support for inclusion of family members in counseling is furnished by Oyer (1982). He recommends that future efforts in aural rehabilitation should focus on the personal and interpersonal problems associated with acquired hearing loss in adults with particular attention to such variables as marital tensions and family solidarity. This study represents an initial effort to systematically determine the attitudes and relationships of hearing-impaired individuals and their families. As such, knowledge of these attitudes provides a basis for effectively providing options for dealing with the hearing impairment to both the individual and family members.

Additional research with this scale is recommended and ongoing. The low correlations obtained should be further examined by administering Form B to additional family members and/or friends. Examination of responses between family members themselves could provide interesting information about scale construction as well as family dynamics. For example, comparisons of the responses of the wife and the son of a hearing-impaired man might reveal important differences in their reactions to the hearing impairment. Results might also suggest closer agreement with the hearing-impaired individual for one family member or the other. In addition, further item analysis is needed in terms of the influence of wording and content on the low correlations obtained. In particular, the influence of negative versus positive phrasing of items should be investigated. Results of these additional analyses will perhaps lead to modification and/or expansion of each of the subsections. In its present form, however, the scale can provide direction for the audiologist by highlighting the unique needs of the hearing-impaired individual and her/his family. By administering both forms of the scale, a comparison of the responses can be undertaken. To facilitate scoring, a profile form has been developed which provides a visual representation of the responses from both forms (Appendix C).

### CONCLUSION

In conclusion, as an important part of the aural rehabilitation process, it is essential that counseling include family members. In order to provide effective counseling, it is necessary to identify the effects of the hearing impairment on both the hearing-impaired person and her/his family. The scale developed in this study systematically assessed the attitudes and reactions of hearing-impaired adults and their family members. The results support the need for inclusion of family members in counseling and help to provide a basis for aural rehabilitation planning and management.

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## APPENDIX A

THE McCARTHY-ALPINER SCALE OF HEARING HANDICAP  
(THE M-A SCALE)

by

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## FORM A

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Time: \_\_\_\_\_

Occupation: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Hearing Aid: Yes \_\_\_\_\_ No \_\_\_\_\_ Onset of Hearing Loss \_\_\_\_\_

Type \_\_\_\_\_

How Long \_\_\_\_\_

Satisfaction \_\_\_\_\_

Audiogram: Date of Examination \_\_\_\_\_

Examiner \_\_\_\_\_

Category of Hearing Loss \_\_\_\_\_

Right Ear	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Air						
Bone						

Left Ear	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Air						
Bone						

Speech Reception Threshold:

Speech Discrimination:

Right Ear \_\_\_\_\_ dB HL

Right Ear \_\_\_\_\_ %@ \_\_\_\_\_ dB HL

Left Ear \_\_\_\_\_ dB HL

Left Ear \_\_\_\_\_ %@ \_\_\_\_\_ dB HL

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**DIRECTIONS**

The following questionnaire will be used to help audiologists understand what it is like to have a hearing loss and the effects of a hearing loss on your life. You are asked to give your reaction to each of the statements included in the questionnaire. For example, you might be given this statement:

People avoid me because of my hearing loss.

_____	_____	X	_____	_____
Always	Usually	Sometimes	Rarely	Never

You are asked to mark your reaction to the statement with an X on the appropriate space. Please mark every item with only one answer as seen in the example.

In marking your answer, please keep in mind that ALWAYS means at all times or on all occasions. USUALLY refers to generally, commonly or ordinarily. SOMETIMES means occasionally or on various occasions. RARELY refers to seldom or infrequently. NEVER means not ever or at no time.

If you are not presently employed, please respond "N/A" for not applicable.

All answers will be kept strictly confidential and used only to help audiologists to understand what it is like to have a hearing loss and the effects of hearing loss on your life.

1. I get annoyed when people do not speak loud enough for me to hear them.

_____	_____	_____	_____	_____
Always	Usually	Sometimes	Rarely	Never



2. I get upset if I can not hear or understand a conversation.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
3. I feel like I am isolated from things because of my hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
4. I feel negative about life in general because of my hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
5. I admit that I have a hearing loss to most people.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
6. I get upset when I feel that people are "mumbling".
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
7. I feel very frustrated when I can not understand a conversation.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
8. I feel that people in general understand what it is like to have a hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
9. My hearing loss has affected my life in general.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
10. I am afraid that people will not like me if they find out that I have a hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
11. I tend to avoid people because of my hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
12. People act annoyed when I cannot understand what is being said in a group conversation.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
13. My family is patient with me when I can not hear.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
14. Strangers react rudely when I do not understand what they say.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
15. I ask a person to repeat if I do not hear or understand what he said.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|

16.	My hearing loss has affected my relationship with my spouse.	Always	Usually	Sometimes	Rarely	Never
17.	I do not go places with my family because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
18.	Group discussions make me nervous because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
19.	People in general are tolerant of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
20.	I avoid going to movies or plays because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
21.	I avoid going to restaurants because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
22.	I enjoy social situations with considerable conversation.	Always	Usually	Sometimes	Rarely	Never
23.	I am not interested in group activities because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
24.	I enjoy group discussions even though I have a hearing loss.	Always	Usually	Sometimes	Rarely	Never
25.	My hearing loss has interfered with my job performance.	Always	Usually	Sometimes	Rarely	Never
26.	I can not perform my job well because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never
27.	My co-workers know what it is like to have a hearing loss.	Always	Usually	Sometimes	Rarely	Never
28.	I try to hide my hearing loss from my co-workers.	Always	Usually	Sometimes	Rarely	Never
29.	I do not enjoy going to work because of my hearing loss.	Always	Usually	Sometimes	Rarely	Never

30. I am given credit for doing a good job at work even though I have a hearing loss.

Always	Usually	Sometimes	Rarely	Never
--------	---------	-----------	--------	-------

31. I feel more pressure at work because of my hearing loss.

Always	Usually	Sometimes	Rarely	Never
--------	---------	-----------	--------	-------

32. My employer understands what it is like to have a hearing loss.

Always	Usually	Sometimes	Rarely	Never
--------	---------	-----------	--------	-------

33. I try to hide my hearing loss from my employer.

Always	Usually	Sometimes	Rarely	Never
--------	---------	-----------	--------	-------

34. My co-workers speak loudly and clearly.

Always	Usually	Sometimes	Rarely	Never
--------	---------	-----------	--------	-------

## APPENDIX B

### THE McCARTHY-ALPNER SCALE OF HEARING HANDICAP (THE M-A SCALE)

by

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and

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#### FORM B

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Relationship to Hearing Impaired Individual: \_\_\_\_\_

Do You Have a Hearing Loss? \_\_\_\_\_ Yes \_\_\_\_\_ No

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#### DIRECTIONS

The following questionnaire will be used to help audiologists understand what it is like to have a hearing loss. A member of your family has a hearing loss. We are interested in finding out what effects the hearing loss has had on his job, his family and the social aspects of his life.

Your task is to give your reaction to each of the statements included in the questionnaire. The items all concern the effects of the hearing loss on your hearing impaired family member. You are to answer how the hearing loss has affected him in these aspects of his life. For example, you might be given the statement:

People tend to avoid him because of his hearing loss.

	X			
Always	Usually	Sometimes	Rarely	Never

You are asked to mark your reaction to each of the statements as it applies to your hearing impaired family member. Please put an X on the appropriate space. Please mark every item with only one answer as seen in the example.

In marking your answer, please keep in mind that ALWAYS means at all times or on all occasions. USUALLY refers to generally, commonly or ordinarily. SOMETIMES means occasionally or on various occasions. RARELY refers to seldom or infrequently. NEVER means not ever or at no time.

If your family member is not presently employed, please respond "N/A" for not applicable.

All answers will be kept strictly confidential and used only to help audiologists to understand what it is like to have a hearing loss and the effects the hearing loss has on one's life.

1. He gets annoyed when people do not speak loud enough for him to hear them.

Always	Usually	Sometimes	Rarely	Never

2. He gets upset if he can not hear or understand a conversation.

Always	Usually	Sometimes	Rarely	Never

3. He feels like he is isolated from things because of his hearing loss.

Always	Usually	Sometimes	Rarely	Never

4. He feels negative about life in general because of his hearing loss.

Always	Usually	Sometimes	Rarely	Never

5. He admits that he has a hearing loss to most people.

Always	Usually	Sometimes	Rarely	Never

6. He gets upset when he feels people are "mumbling".

Always	Usually	Sometimes	Rarely	Never

7. He feels very frustrated when he can not understand a conversation.

Always	Usually	Sometimes	Rarely	Never

8. He feels that people in general understand what it is like to have a hearing loss.

Always	Usually	Sometimes	Rarely	Never

9. His hearing loss has affected his life in general.

Always	Usually	Sometimes	Rarely	Never

10. He is afraid that people will not like him if they find out that he has a hearing loss.

Always	Usually	Sometimes	Rarely	Never

11.	He tends to avoid people because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
12.	People act annoyed when he cannot understand what is being said in a group conversation.				
	Always	Usually	Sometimes	Rarely	Never
13.	The family is patient with him when he can not hear.				
	Always	Usually	Sometimes	Rarely	Never
14.	Strangers react rudely when he does not understand what they say.				
	Always	Usually	Sometimes	Rarely	Never
15.	He asks a person to repeat if he does not hear or understand what is said.				
	Always	Usually	Sometimes	Rarely	Never
16.	His hearing loss has affected his relationship with his spouse.				
	Always	Usually	Sometimes	Rarely	Never
17.	He does not go places with the family because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
18.	Group discussions make him nervous because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
19.	People in general are tolerant of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
20.	He avoids going to movies or plays because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
21.	He avoids going to restaurants because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
22.	He enjoys social situations with considerable conversation.				
	Always	Usually	Sometimes	Rarely	Never
23.	He is not interested in group activities because of his hearing loss.				
	Always	Usually	Sometimes	Rarely	Never
24.	He enjoys group discussions even though he has a hearing loss.				
	Always	Usually	Sometimes	Rarely	Never

25. His hearing loss has interfered with his job performance.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
26. He can not perform his job well because of his hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
27. His co-workers know what it is like to have a hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
28. He tries to hide his hearing loss from his co-workers.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
29. He does not enjoy going to work because of his hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
30. He is given credit for doing a good job at work even though he has a hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
31. He feels more pressure at work because of his hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
32. His employer understands what it is like to have a hearing loss.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
33. He tries to hide his hearing loss from his employer.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|
34. His co-workers speak loudly and clearly.
- |        |         |           |        |       |
|--------|---------|-----------|--------|-------|
| Always | Usually | Sometimes | Rarely | Never |
|--------|---------|-----------|--------|-------|

APPENDIX C

THE MCCARTHY-ALPNER SCALE OF HEARING HANDICAP  
(THE M-A SCALE)

by  
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Name: \_\_\_\_\_ SS #: \_\_\_\_\_ Age: \_\_\_\_\_  
Date: \_\_\_\_\_ Sex: \_\_\_\_\_ Audiologist: \_\_\_\_\_

PROFILE FORM

	PSYCHOLOGICAL										SOCIAL										VOCATIONAL																
	N	N	N	P	N	N	N	P	N	N	N	P	N	N	N	P	N	N	N	P	N	P	N	N	N	P	N	N	N	P	N	N	N	P	N	N	N
1																																					
2																																					
3																																					
4																																					
5																																					

DIRECTIONS: Items are worded negatively & positively & scored from 1 point to 5 points indicating maximum handicap. Negative items are coded as "N" and positive items are coded "P". For "N" items, calculate always = 5 pts., usually = 4 pts., sometimes = 3 pts., rarely = 2 pts., and never = 1 pt. For "P" items, calculate always = 1 pt., usually = 2 pts., sometimes = 3 pts., rarely = 4 pts., and never = 5 pts.

LEGEND: Responses of hearing impaired individual = X  
Responses of family member = O