
CONTENTS

<i>Foreword by Mark Ross</i>	<i>vii</i>
<i>Preface: Goals and Topics by Joseph Montano and Jaclyn Spitzer</i>	<i>xi</i>
<i>Acknowledgments</i>	<i>xiv</i>
<i>Contributors</i>	<i>xv</i>
<i>Dedication</i>	<i>xix</i>
PART I. DEVELOPING A KNOWLEDGE BASE: INTRODUCTION AND BACKGROUND	1
1 History of Adult Audiologic Rehabilitation: The Past as Prologue <i>Jerome G. Alpiner and Patricia A. McCarthy</i>	3
2 Defining Audiologic Rehabilitation <i>Joseph J. Montano</i>	25
3 The International Classification of Functioning: Implications and Applications to Audiologic Rehabilitation <i>Jean-Pierre Gagné, Mary Beth Jennings, and Kenneth Southall</i>	37
4 The Psychological Effects of Social Stigma: Applications to People with an Acquired Hearing Loss <i>Jean-Pierre Gagné, Kenneth Southall, and Mary Beth Jennings</i>	63
PART II. BUILDING THE AR PLAN: ASSESSMENT AND VERIFICATION	93
5 Self-Assessment in Adult Audiologic Rehabilitation <i>William Noble</i>	95
6 Measuring Health-Related Quality of Life in Audiologic Rehabilitation <i>Harvey B. Abrams and Theresa Hnath Chisolm</i>	111
7 Assessment for Implantable Technologies <i>Jaclyn B. Spitzer and Dean M. Mancuso</i>	127
8 Developments in Hearing Aid Technology and Verification Techniques <i>Ruth Bentler and Yu-Hsiang Wu</i>	145
PART III. THE REHABILITATIVE TOOLBOX: THERAPEUTIC MANAGEMENT	169
9 Audiologic Counseling: A Biopsychosocial Approach <i>Sue Ann Erdman</i>	171

10	Conversation Repair Strategies in Audiologic Rehabilitation	217
	<i>Christopher Lind</i>	
11	Visual Speech Perception in Spoken Language Understanding	243
	<i>Charissa R. Lansing</i>	
12	Auditory Training	267
	<i>Robert W. Sweetow and Jennifer Henderson Sabes</i>	
13	Group Therapy and Group Dynamics in Audiologic Rehabilitation	283
	<i>Scott J. Bally</i>	
14	Hearing Assistance Technology Systems as Part of a Comprehensive Audiologic Rehabilitation Program	305
	<i>Linda M. Thibodeau</i>	
15	Accessibility for People with Hearing Impairments: Legislation and Implementation in Israel	329
	<i>Orna Eran and Zvia Admon</i>	
16	Peer Support Groups: Promoting Treatment Effectiveness in Partnership with Consumers	339
	<i>Anne T. Pope and Carren J. Stika</i>	
	PART IV. EXPANDING THE SCOPE OF AR: SPECIAL ISSUES	351
17	Music and Cochlear Implants in Audiologic Rehabilitation	353
	<i>Geoff Plant</i>	
18	Evidence-Based Practice in Adult Audiologic Rehabilitation	367
	<i>Louise Hickson</i>	
19	Audiologic Rehabilitation for Older Adults	381
	<i>Patricia B. Kricos</i>	
20	Tinnitus Management	399
	<i>Craig W. Newman and Sharon A. Sandridge</i>	
21	Central Auditory Influences in Audiologic Rehabilitation	445
	<i>Jack Katz</i>	
22	Audiologic Rehabilitation with the Elderly Revisited: Research Needs	457
	<i>Barbara E. Weinstein</i>	
	<i>Index</i>	471

FOREWORD

I had my first experience with the concept and practice of Audiologic Rehabilitation (AR) when I was admitted as a patient to the AR program at Walter Reed Army Hospital in January 1952. Essentially, this was the type of program from which the profession of Audiology would later emerge (see Alpiner & McCarthy, Chapter 1, this volume). For the two months I was there, I was exposed to the best clinical practices that existed at the time. Classes were conducted by former teachers of the deaf, speech correctionists, and lipreading teachers (the term “speechreading” had not yet been coined). For the most part, the lessons consisted of various speechreading and visual training exercises, supplemented by some “auditory training” sessions (following a classic “Carhart” approach). These two activities basically defined AR at the time. Also included in the program were occasional didactic lectures on various topics (e.g., the audiogram, anatomy and physiology of the auditory system, etc.). Appointments for hearing aid fittings and follow-ups were spaced throughout the two-month period. The hearing aids provided us were monaural body-worn vacuum tube aids, and we were told that we were lucky to have them. Patients just a few years earlier were issued a duo-pack hearing aid, which required separate packs for the battery and the amplifier, with a rather large wire connecting the two.

In retrospect, although we couldn’t really appreciate it at the time, those of us who were able to participate in that program indeed were very lucky to be where we were, receiving the kind of care we did. I don’t think the full reality of what a hearing loss would mean in our lives was fully understood by any of us. It was very easy to underestimate the full and eventual impact of a hearing loss. At any rate, in that setting and at that time, the issues facing someone with an “invisible” hearing loss paled in comparison to what we saw

of the men with combat injuries at the main hospital. Complaints and self-pity were simply not acceptable reactions. Although we didn’t choose to attend the program, being there turned out to be a turning point, at least in my life.

In the company of others, I learned to accept myself and the reality of my hearing loss, perhaps the most significant goal in any AR program. Although this was not an explicit objective of the program, it arose naturally as a consequence of being somewhat sequestered for two months with a group of young men with similar problems. Later, as a professional audiologist, I thought of that program as a kind of AR Camelot—the ultimate model to which we could aspire but never really attain. Still the question does arise: Were there any lessons we could take from our early romance in “Camelot” and apply them in this day and age? I think there are.

The first is that the hearing aid selection procedures (primitive as they were) were viewed as an ongoing process (as I recall, one appointment a week was scheduled over an 8-week period) and completely integrated with the rest of the AR program. Questions about hearing aids, difficult listening situations, speechreading issues, and so forth, could arise—formally or informally—throughout the day. From a conceptual point of view, hearing aids were not separated from the rest of the AR activities that took place. This is somewhat at variance with how AR is now generally practiced. Currently, hearing aids are selected and several follow-up appointments are scheduled. But the need for, and provision of, any other type of AR service is completely happenstance—sometimes yes, sometimes no, sometimes this, and sometimes that. Not so in Camelot; all was integrated into a single curriculum.

The second important lesson I think we can apply is that the group experience was perhaps

the most valuable benefit of the program. I doubt that this was an explicit goal of the program. It was, rather, a fallout benefit which proved to be profoundly effective despite being inadvertent. Just the fact of being part of a group, of sharing our experiences and concerns with other young men in the same situation, helped us to accept the reality of our condition. We would joke with one another about “being on the air,” to the point where the daily use of a hearing aid was common—and expected. As a profession, we are now keenly aware of the advantages of group management; the fact that I can still feel its impact some 57 years later is a testament to the power, and effectiveness, of a group program.

A third observation regarding the Walter Reed program is that it wasn’t voluntary. We were simply transferred there, with no option to refuse. But I think it worked. Many men who in other settings would have to be dragged kicking and screaming into a therapy room, or more realistically simply would not go, were enrolled and then benefited from the inclusion in spite of themselves. Clearly, this is not exactly a formula that can be applied in any other kind of situation! We don’t draft people into an AR program. It does suggest, however, that even people who are reluctant to engage in a therapy program can be helped, as long as they can somehow be convinced or cajoled to participate.

I do believe that this can be somewhat achieved if a short-term group AR program were considered to be a routine component of the hearing-aid selection process. In other words, just as a client’s hearing status is expected to be evaluated by an audiologist prior to the hearing aid fitting, so too should such a program be instituted subsequent to a hearing aid selection. People would be free to ignore the recommendation, of course—we are not a totalitarian society—but, for example, how many people ignore their orthopedist’s suggestion for a course of physical therapy after a surgical procedure? I think we can agree, not very many. Clearly, the perception of need is completely different in these two situations, which I believe is due to a society that trivializes the possible consequences of a hearing loss and underestimates what can be achieved with an AR program. Even

a short-term posthearing aid selection AR program can pay big dividends for many people with hearing loss.

What was provided in the Walter Reed AR program has not been, and could not be, replicated in its entirety anywhere else. At the time it was developed, during WW II, nothing and no expense was too much for “the boys.” In retrospect, however, it now does seem like overkill; it is likely that the same results could have been achieved with a somewhat truncated program, or one constituted a bit differently. But we have no way of knowing now. We have no objective evidence of the program’s efficacy (though I would gladly provide my personal testimonial regarding its effectiveness). We didn’t have the scholarly insights and information on AR that exist currently. During that era, AR meant being fit monaurally with a body-worn, vacuum tube hearing aid and attending speechreading and occasional auditory training classes—period. Now, on the other hand, we have a comprehensive body of information applicable and relevant to the entire AR process. And, it seems, that just about all of it is included in this book.

When Dr. Montano and Dr. Spitzer forwarded the detailed outline to me, my initial response was, “Wow!” I jumped at the opportunity to write the Foreword. I have spent my entire professional life dealing one way or another with AR, but until I saw the outline of topics contained in this book, I never really appreciated how much we have changed and developed since the early days. The authors selected to write the chapters are a compilation of the “best and the brightest” that the profession has to offer. The book is divided into four logical sections, each one of which deals comprehensively with a different aspect of AR.

The first section of the book lays the groundwork. In this introductory portion, AR itself is precisely defined (we will see that it involves more than is at first apparent) and placed in a historical framework. Perhaps because of my own history, I find this a very appealing topic; we really don’t know where we are or where we’re going unless we can appreciate where we’ve been. This section does that for us. It provides a frame of reference we can use when we examine any efforts in

this area, our own as well as those of others. In addition, the importance of the contributions of the World Health Organization and the impact of hearing-loss on self-perception are highlighted and provide a critical foundation for the provision of AR services.

The broad area of assessment is covered in the second section. One convincing indicator of how far the profession has progressed is that three of the topics in this section—self-assessment, quality of life, and implantable technologies—did not even exist 50 years ago. The fact that people with hearing impairment could, and should, personally rate the communicative and social effects of their own hearing loss seems obvious to us now, but not so years ago. Now, on the other hand, self-assessment scales are a component in every “best practice” recommendation.

Insofar as quality of life is concerned, of course, people years ago were aware that a hearing loss could affect it, but the idea that quality of life considerations could and should be formally assessed never seemed to arise. Now, as the profession finds it necessary to justify the expense of hearing aids and therapeutic procedures to third party payers, the positive impact of our management efforts do have to be quantitatively demonstrated. The administrators who manage the purse strings will not be satisfied with only our personal assurance that some procedure or device is helpful. They want to see the evidence before any financial outlay is approved.

Also included in this second section is a chapter on hearing aids, an area that is clearly a central component of any AR effort. We’ve come a long way since the original Carhart procedure for the comparative evaluation of hearing aids, abetted by the ubiquitous question “How does that sound?” As this chapter indicates, the vast improvements in technology that have occurred have been accompanied by concurrent developments in assessment techniques. In other words, it’s not enough to point to some new and impressive technology as an indicator of progress; it is also necessary to corroborate its merits in behavioral terms. Not every technical advance is accompanied by listening improvements.

The third section constitutes the bulk of the book. In it, we see not only the traditional concepts

of speechreading and auditory training upgraded and cloaked in modern dress, but also full coverage of the relevant psychosocial issues (counseling, the group process, consumer advocacy) and specific therapeutic techniques (music therapy, repair strategies). The inclusion of these areas is another reminder of how our approach to AR has changed since the early days. The chapter on Assistive Listening Technology reminds us how much communication can be enhanced by the direct transmission of a talker’s voice to a hard-of-hearing listener. I know that whenever I use an assistive listening device, I am reminded anew of the great help that these systems can provide someone with a hearing loss—and how much they are underemployed by people with hearing loss.

A review of special issues in AR is provided for us in the last section. New information and insights have given rise to additional areas of professional responsibility. One of these is the manifestation, evaluation, and management of people with central auditory processing (CAP) problems. The case is made that this is a rehabilitation issue that the profession of Audiology must address. The evidence presented in this section will help lay the necessary evidential and conceptual groundwork for the involvement of audiologists in this area. Finally, lest we forget that human beings are our core concern, the rehabilitation of older adults is discussed in this section. We are an increasingly aging society, and older people present issues that may, and probably will, differ in some respect from those observed in younger people with hearing loss.

In brief, this book presents an impressive display of the concepts and content areas that now constitute AR. The authors selected to write the various chapters are well known in their own countries and internationally. What they have presented is the current state of the art—a compilation of information, insights, practices, and concepts that were unheard of when I was a patient, and even later when I myself started practicing as an Audiologist. As a body of knowledge, Audiologic Rehabilitation has been a growing reality. Still, in spite of all that has changed, we should remind ourselves what has not changed, and that is the impact of a hearing loss upon the life and well-being of

the afflicted person. We are still going to see the same reactions from people that we saw years ago, from denial to isolation. And it is still going to take conscientious, caring, and competent clinicians to provide the services, so well documented in these pages, that these people need.

The challenge that now confronts the profession is to employ this vast body of knowledge for the benefit of adults with hearing loss. Knowing more does not mean that we are doing more. Certainly knowledge is a prerequisite to action, which this book amply provides us, but somehow this knowledge has to find its way to people. There is still an inadequate public appreciation of the consequences of this “invisible” handicap. Impaired hearing is still more often a subject for so-called “humor” than for empathy and assistance. A public understanding of the potential consequences of a hearing loss—realizing that it is not a joke—is *the* prerequisite for hearing loss to receive the same kind of public support that other disabilities now receive via third-party payments. The kind of public support I envision goes beyond support for various kinds of devices and would include individual, group, and self-administered (possibly home-based) AR therapies. Support groups, too, like the Hearing Loss Association of America (HLAA), can play a significant role in the broader goal of helping people live with a hearing loss.

Ironically, it seems that the latest major development in hearing rehabilitation—cochlear implants—seems to be stimulating a modern resurgence of the traditional AR therapies. There

is a recognition that new implant users require more than the device itself. Although most of this recent interest seems focused on helping these people to adjust to the new and strange auditory sensations produced by a cochlear implant (i.e., auditory training), there also appears to be an increased appreciation of AR as a concept that potentially applies to all people with hearing loss. In my judgment, the fact that the medical profession is now involved with implants, to an extent they never were with hearing aids, has provided additional impetus for follow-up AR therapy. A surgeon “prescribing” a course of therapy (probably conducted by the audiologist or speech-language pathologist) imbues the process with an authority that currently is lacking when a nonphysician makes the same recommendation. Like it or not, it is the reality.

There is one final comment I’d like to make about AR: It can be fun. Plus, it is an area for which audiologists and speech-language pathologists bear the uncontested, primary professional responsibility. It affords these professionals an opportunity to interact with their clients on a more personal, human level. Now they can switch their focus from the hearing loss to the hearing problem, away from the audiogram and to the human being with the hearing loss. It can be a very rewarding, and sometimes surprisingly enjoyable experience. I do believe that professionals so involved will find that they now enjoy their work even more than they did before. So jump in, the water’s fine.

Mark Ross, Ph.D.

PREFACE: GOALS AND TOPICS

The seeds for this book were planted in 2003 when it was learned that Jerry Alpiner and Patti McCarthy were not intending to prepare a revised edition of their classic Audiologic Rehabilitation (AR) textbook, *Rehabilitative Audiology: Children and Adults*. The Alpiner, then subsequent Alpiner/McCarthy, textbook had been a staple of AR graduate education in Audiology and Speech-Language Pathology since the 1970s. Its absence would indeed create a void in the education of audiologists.

During the same period of time, the profession of Audiology was undergoing a metamorphosis. Based on our self-directed initiative, we had become a doctoral entry-level profession and programs had begun developing a doctoral-level curriculum. Therefore, a growing need for intermediate and advanced textbooks was developing and additional textbooks would have to be created.

The third observation that influenced our decision to pursue the creation of this book was the limited availability of AR literature in American professional journals, although international publications appeared to be more inclusive of this area of practice and research. This impression became reinforced by a series of AR workshops developed through the Hearing Rehabilitation Foundation (HRF). The HRF sponsored four biennial International conferences (2003, 2005, 2007, and 2009) on Adult AR. The conferences brought together researchers and practitioners from four continents to provide global insight into the manifestations of hearing loss. The contributions of our colleagues across the world have been prominent and influential to the state of practice in AR.

With these three issues in mind, we decided to tackle the creation of an advanced AR textbook with an international perspective. Although Alpiner and McCarthy addressed both children and adults in their book, we felt that, given the changing

milieu with technologic developments and demographic shifts in society, it was appropriate to focus the scope of this book to adults.

Our concept of a fully functional doctoral-level audiologist required a sophisticated, in-depth background of information not sufficiently addressed in any existing textbook. What information does a doctoral-level audiologist need to develop the perspective to care for an individual with hearing loss? What knowledge will subserve the necessary skills development for advanced practice of AR? Although there might not be universal agreement to the answers to these questions, we believe that the audiology doctoral student must be cognizant of a wide range of information to provide an advanced level of rehabilitative management to their clients/patients. It is in this endeavor that we distinguish ourselves from other specialties that also work with persons with hearing loss, and where we combine the unique skills that make us essential in the long-term planning for living with this sensory deficit.

Therefore, we chose to include topic areas that are not only clinical but delve into the underlying issues surrounding hearing loss in adults. To develop the doctoral-level audiologist, we need a long-term perspective to define the subject matter and have insight into its history. We gathered together expert opinions and research-based formulations in chapters on such significant aspects of living with hearing loss as stigma, the viewpoint of the consumer, classification of function, self-perception, and impact on quality of life. Crucial elements of service provision in AR are covered in chapters dedicated to counseling, visual speech perception, auditory training, special needs of older adults, and central auditory processing. We chose to include information on dimensions of service that are not as widespread in their distribution in the field, such as utilization of music,

tinnitus management, conversation repair strategies, and group processes. The influence of technology is seen in chapters relating to amplification and hearing aid verification, hearing assistive technology systems, and assessment for implantable devices. We believe that our field is in critical need of research and literature support of AR practices and efficacy, and thus we have included expert guidance on evidence-based practice and future research needs.

An underlying concept of this text is that AR is an expanding aspect of our discipline. Changes are taking place, not only in our credentials and in our knowledge base, but in our scope of practice as we define it. The scope of rehabilitative services is inclusive rather than exclusive. The role of technology in the current practice of AR is apparent, but, as seen in our text, it should be only the means, rather than the end, to the larger picture of rehabilitative planning for individual patients. Learning about and applying technology is intriguing and seductive, and we must always be aware of the potential for mistaking recommendations for devices as an endpoint in formulating plans. As we remain sensitive to this sometime temptation, the reader will note the powerful emphasis throughout this text on the information necessary to develop excellence in counseling.

As you read through this book, you will be struck by the frequent references to the World Health Organization International Classification of Function. This is an example of a change in professional mindset from the medically based categorization of hearing loss as disease to a more eclectic classification that embodies functional consequences of impairment on the individual within the context of lifestyle and environment. This classification system is quickly becoming accepted and applied as can be seen through the numerous literature references within this text.

We have also made some “nontraditional” choices for inclusion in this textbook. Including a substantial chapter on tinnitus management reflects our certainty that audiologists will be progressively more and more involved in providing care to tinnitus sufferers. In the past, there has been little emphasis in coursework on tinnitus treatment options, as well as little guidance for the practi-

tioner in the counseling process. By including a chapter on this topic, we hope that the nature of the discussion of AR will be extended to include tinnitus treatment as a standard part of AR courses.

In the chapter on music therapy with cochlear implantees, Geoff Plant makes the point that musical enjoyment is crucial to the quality of life. The inclusion of this “nontraditional” chapter is intended to stimulate students and clinicians to view music as an integral aspect of therapeutic planning. Furthermore, we suggest that music as a stimulus for assessment and rehabilitation should not be restricted to use with persons with implanted sensory devices; rather, it should be considered as an element in AR for many persons as a positive force from which they can derive auditorially based learning and pleasure.

Another “nontraditional” chapter is the section on AR and central auditory processing. When combined with the chapter on rehabilitative needs of the elderly, we are preparing the reader for the upcoming explosion of aging Baby Boomers and the extended longevity being seen in many westernized nations. The fully functional audiologist will need to recognize the influences of normal aging and differentiate those from central auditory processing deficits, and be prepared to modify therapeutic approaches to accommodate such differences.

The topics we chose to include in this text are ones we believed would represent the current state of AR, and, perhaps, shape its future. Limits in a book’s length, time constraints, and author availability precluded the inclusion of some topics that we nonetheless recognize as important. In particular, balance and vestibular rehabilitation was not addressed, and we believe it is a topic of importance for the future. In addition, this is one of those areas where our scope of practice currently is not clear, with other professionals involved in the day-to-day management of the dizzy patient. We also chose not to include material on specific devices, such as hearing aids and cochlear implants, as we believed that entire texts have been devoted to these topics, and that the concepts and methodologies we explore are the true focus of AR.

We also highlight strongly the importance of research on evidence-based practice in this text.

Several authors comment that they await further validation of techniques or think that such demonstrations are forthcoming in their selected content focus. It is incumbent on a doctoral profession to produce evidence of the efficacy of their techniques and to further the scope of knowledge

of their field. Thus, we hope that by stimulating the present generation of audiology students, we will also be contributing to the impetus for them to carry out this type of research, so necessary for the future growth of the field.

Joseph J. Montano and Jaclyn B. Spitzer

ACKNOWLEDGMENTS

This project would never have seen the light of day were it not for Mickey Stewart and Sam Selesnick, my colleagues at Cornell, who persuaded me to join their faculty in 2006 and have shown limitless support and encouragement; the members of the Department of Hearing and Speech; and my dear friend Jaci Spitzer who said to me, when I casually mentioned this idea for a textbook on AR, "Let's do it." Without her, there would be no book. Thanks.

Joseph J. Montano

This project was supported by the faculty at Columbia University, most especially Lanny Garth Close, and the members of the Department of Speech and Hearing of New York Presbyterian Hospital, ever watching my back. Thank you for every day.

Jaclyn B. Spitzer

4

The Psychological Effects of Social Stigma: Applications to People with an Acquired Hearing Loss

Jean-Pierre Gagné
Kenneth Southall
Mary Beth Jennings

In many societies, negative stereotypes and prejudices are attributed to people who have hearing loss. The general population perceives individuals with hearing loss as being “old,” “cognitively diminished,” “poor communication partners,” and generally “uninteresting” (Blood, 1997; Doggett, Stein, & Gans, 1998; Erler & Garstecki, 2002; Franks & Beckmann, 1985; Hallberg & Jansson, 1996; Kochkin, 1993, 2007). Partly because of society’s view of deafness,¹ many individuals who acquire hearing loss in adulthood are stigmatized. Often, individuals with hearing loss hold the same stereotypical and prejudicial views of deafness as

does the general population. Hence, their social identity (how they perceive themselves) is altered due to society’s perceptions and due to their own conscious (or unconscious) prejudicial views of hearing loss. This phenomenon, known as stigmatization, is very prominent in many western societies (and perhaps in others as well). The negative stereotypes and prejudices held by society and self-stigmatization that often develops within people who are the target of social stigmatization may have a negative effect on one’s physical and psychological well-being as well as participation in activities of daily living.

¹The general population does not readily recognize degrees of hearing impairment; mostly, people are thought to have normal hearing or no residual hearing. Hence, to members of the general population, people have “normal hearing” or they are “deaf.”

Often, people who feel discriminated against by others, and who have a poor self-image are ashamed of themselves due to their discreditable attribute (e.g., hearing loss). Because the presence of hearing loss is not visible, some individuals may choose to conceal, deny, or minimize their hearing impairment. A variety of strategies are used to hide hearing impairment from others. One (maladaptive) coping strategy employed by some people who perceive themselves as being stigmatized due to hearing impairment is to isolate (and insulate) themselves from the world around them. As a result, individuals with hearing loss withdraw from family life and other social activities. By doing so, they can avoid responding inappropriately when someone interacts with them, and as a result they benefit by not disclosing to others that they have a personal attribute (hearing loss), that is discredited by themselves and by society (Vignette 4-1). In fact, concealing one's hearing loss prevents individuals from

using communication strategies, as these strategies would inform and disclose the presence of their hearing loss. Moreover, significant cognitive and emotional resources are expended in attempts to conceal hearing loss and the effects of hearing loss on communication. The stress induced by this process may have a deleterious effect on psychological well-being as well as physical health. This may lead to a decrease in overall quality of life and may be the underlying cause of a number of health related problems (Leary, Tamlor, Terdaly, & Downs, 1995).

The stigma related to hearing loss constitutes a major obstacle to audiologic rehabilitation (AR). A person who denies having a hearing loss and conceals his or her hearing difficulties (and its effects) from others is not likely to seek services from an audiologist. Hence, the individual is deprived of rehabilitation services that are potentially helpful, such as obtaining hearing aids and other hearing assistive technologies (HATs), and

Vignette 4-1
Avoiding Social Interactions

Mr. A is a 55-year-old man who has worked in noisy industrial plants for more than 25 years. He and his wife have three daughters and six grandchildren. Mr. A's family, including the three sons-in-law and the grandchildren, has dinner together to celebrate special occasions. Over the past couple of years, Mr. A has noticed that he has more difficulty following the conversation when everyone is having dinner in the dining room. He suspects that his problems are due to hearing loss because his last hearing test at work indicated a significant hearing loss in the high frequencies. Mr. A wants to keep his hearing loss secret because he fears his sons-in-law will make fun of him. Recently, in order to avoid misunderstanding the others during the special family dinners, Mr. A finds an excuse to leave the table early after the meal. He goes to the living room to read his newspaper or he naps. By doing so, his chances of experiencing a communication breakdown are decreased and also he doesn't have to disclose his hearing loss to the members of his family. The avoidance strategy used by Mr. A has been very successful in concealing his hearing loss. However, he feels badly about not being honest with his family, and his concealment behavior induces some stress every time there is a family gathering. Lately, due to his unexplained "awkward behavior" and the tension that it brings about in the house, some family members have found excuses not to attend family dinners. As a result of these developments, some tension has been created between Mrs. and Mr. A. Mr. A feels terrible about the outcome of the situation. He has been moody, tends to isolate himself more and more from family interactions and activities.

learning to request and apply communication strategies that are known to be effective. These individuals deny themselves the opportunity to improve their communication skills and increase their level of participation in activities that are essential or considered important to them (Vignette 4-2).

Crocker, Major, and Steele (1998) have defined stigma as: the possession of, or the belief that one possesses, some attribute or characteristic that conveys a social identity that is devalued in a particular social context. Stigma is a social phenomenon that can be investigated from many different perspectives. For example, investigations may be conducted to explain why some people develop stereotypical (prejudicial) perceptions of subgroups of individuals who display certain characteristics. Or, investigations may attempt to understand how some discriminatory behaviors are formed and how they develop over time. Some examples of investigations from this area have focused on groups such as persons with mental illness, epilepsy, who are HIV positive, members of the gay and lesbian communities, and persons with visible stigmas such as women and African Americans. It is generally recognized that stigmatization involves a power relationship between a dominant group (the *outsiders*) and a minority group (the *insiders*; people who share some deval-

ued characteristic that distinguishes them from the *outsiders*) (Link & Phelan, 2001, 2006; Oyserman & Swim, 2001). Many studies have focused on investigating the relationship that exists between *outsiders* and *insiders* relative to certain social phenomenon (e.g., American of European descendants vs. Americans of African descendants). Some investigations are designed to gain insights on the attitudes, beliefs, or behaviors of members of a specific *outsider* group towards members of a specific *insider* group (Hetu, Getty, & Waridel, 1994). For example, studies have described the perceptions of people with normal hearing toward people who wear hearing aids (the hearing aid effect: Blood, 1997; Doggett et al., 1998; Kochkin, 1993, 2007). Investigations involving *outsider* groups are useful to gain an understanding of the social determinants of stigma.

Studies of the perceptions, attitudes, beliefs, and behaviors of members of *insider* groups have revealed that there are similarities and differences in perceptions, behaviors, and attitudes across groups of individuals who are the target of stigmatization based on a specific set of attributes (e.g., the differences and similarities in the perceptions of educational opportunities by female college students who are American of African descent versus the employment opportunities of gay men

Vignette 4-2

Stigma as a Major Obstacle to Audiologic Rehabilitation

Ms. B who is in her mid-fifties suspects that she has a progressive hearing loss because of recently misheard information in conversations, and because of her family's history of progressive hearing loss. Mrs. B's impression of people who have hearing loss is not positive (she holds a stigmatizing view of people with hearing loss). She thought that her grandmother and her aunt who had hearing loss were social misfits because people always had to repeat things to them, and because they often replied inappropriately during conversations.

Because of her past experiences with people who have hearing loss, Ms. B decides that she will conceal her hearing loss from others. She will not consult a hearing health care professional because she does not want to use a hearing aid. She is unaware that rehabilitation services extend beyond the recommendation to use hearing aids. She also is unaware that, by not seeking services, she deprives herself from learning the communication strategies that can be effective to optimize speech understanding during conversations.

diagnosed as being HIV positive). A major finding of these studies was that large individual differences exist among members of the same *insider* group. Moreover, the results of investigations indicated that the perceptions and behaviors of individuals from the same group can change as a function of different variables. These findings led to studies that investigated the role of individual differences among people who were members of the same *insider* group (Brown & Pinel, 2003; Pinel, 1999). Investigators observed that several factors served to modulate the perceptions of people who were the target of stigmatization (Lightsey & Barnes, 2007; Vauth, Kleim, Wirtz, & Corrigan, 2007). The results of these investigations led to the development of conceptual models that describe the phenomenon of stigmatization from the perspective of people who are the target of prejudicial attitudes (Corrigan & Watson, 2002; Corrigan, Watson, & Barr, 2006).

The present chapter addresses issues relevant to describing and understanding the effects of social stigma on individual members of a specific *insider* group. Throughout the chapter an attempt is made to relate the information presented to adults who have an acquired hearing loss.² It is our view that a better knowledge of the factors that influence the social identity of people who have an acquired hearing loss, as well as a better understanding of the effects and consequences of being stigmatized, will be helpful to audiologists. Moreover, this knowledge should make it possible to develop intervention programs that will cater to the specific rehabilitation needs of people with hearing loss who are vulnerable to the negative effects social stigma. In the next section a definition and a description of social stigma is presented. Then, in the following section, the work of Héту (1996) related to the stigmatization and normalization processes experienced by people with hearing loss is summarized. Later, we

describe a generic model of stigma-induced identity threat and the possible effects of this threat on the persons who are stigmatized. Finally, based on the conceptual framework described, in the last section we discuss the types of intervention services that could be offered to individuals who show signs that their personal identity is diminished due to the fact that they have a hearing loss.

Definition of Stigma

Originally, individuals who were stigmatized were people who had a physical trait or characteristic that was considered “deviant” or “abnormal” relative to a reference group (i.e., the *outsider* group) in a given society (Goffman, 1963). The people who displayed these traits or characteristics were devalued as individuals and discredited as a member of their society. Any deviant trait or personal attribute (physical, behavioral, personality, psychological, etc.) that brings discredit to a person may be the source of stigma. Goffman (1963) suggested that stigma signified marks that designate the bearer of a spoiled identity and that this person was less valued in society. A wide variety of personal attributes may be the source of a social stigma. For example, in many western societies stigmatized individuals include people who have a history of psychiatric disorders as well as ex-convicts, pedophiles, and homosexuals. Stigmatized individuals may also include people who are obese, short, HIV positive, diagnosed with a genetic syndrome such as trisomy 21, who smoke tobacco, belong to a given ethnic or a specific religious group or sect, or who speak with a foreign accent. Stigmatized individuals are the target of prejudicial and discriminatory threats (Miller & Major, 2000). In most western societies (and perhaps in others as well), people who have

²In preparing the chapter it became apparent that, even among the population of people with hearing impairment, the specific factors that create an identity threat and the effects of perceiving oneself as being stigmatized would differ according to several factors, including: the degree of hearing loss (e.g., individuals with a moderate to moderately severe hearing loss vs. those with a profound hearing impairment), whether the hearing impairment was present at birth (or before the normal period for acquiring oral language) or whether it developed in adulthood; and, the age range of the population of interest (children vs. young adults vs. older adults). Consequently, a decision was made to focus the content of the present chapter to issues related to stigmatization among adults who acquire a hearing loss in adulthood.

hearing loss are stigmatized. It is interesting that Goffman (1963), a sociologist who authored a major treatise on social stigma, used hearing loss (he used the term deafness) to illustrate how an individual's distinguishing attribute could be generalized to other personal characteristics that carry a negative connotation. He noted that hearing loss is often misunderstood as an intellectual challenge or a deficiency in personality and character. The origins of stigmatizing persons who have congenital hearing loss can be traced back to Babylonian laws, pre-Christian laws, religious texts, and to the writings of Aristotle and Saint Augustine: persons who could not hear or speak were likened to animals that were not capable of having intelligence or faith in God (Roots, 1999).

Based on the above description, two characteristics of social stigma are worthy of discussion in relation to hearing loss. First, stigma is a social construction (a label attached by society; a phenomenon defined by society, Major & O'Brien, 2005). Within this context, the term "society" is defined from a sociological perspective, meaning: "a group of persons regarded as forming a single community" or "any organized group of people joined together because of some interest in common" (McKechnie, 1976). Personal attributes that are stigmatizing in one society may not be stigmatizing in another society. For example, being overweight may have a negative connotation in some societies but it may be a valued personal trait in another society. In a recent interview, Rihanna (a well known pop star) stated that in the United States of America being skinny was very much valued. She remarked, however, that in her country of origin (Barbados) it is women who have "curves" that are considered beautiful (*Allure Magazine*, 2008). A given personal attribute may be viewed as positive (or neutral) in one "micro" society (e.g., adults with hearing loss who are members of groups such as the Hearing Loss Association of America) whereas the same attribute may be viewed negatively in another "micro" society (an adult with a significant hearing loss who is a member of a highly competitive bridge club). Moreover, within a given society (e.g., North America) a given trait may be viewed as positive or neutral at one given point in time, and the source of stigmatization at another time. For

example, only a few decades ago, smoking tobacco did not carry much of a negative connotation among most middle-class Americans of European descent. People smoked in a variety of social settings. Nowadays, in many respects, smokers are generally viewed negatively. To various extents, people who smoke are devalued as individuals and discredited as a member of society; they are stigmatized. The issue raised here is that stigmatizing attributes are defined by the collective perceptions and values that members of a society (*outsider* group members) hold at a given point in time. Related to hearing loss this is reassuring. It is possible (one would hope!) that the negative and prejudicial attitudes currently associated with hearing loss may change over time. Perhaps as baby-boomers get older and society's views become less conservative, the negative connotations associated with hearing loss will subside.

A second issue related to social stigma is especially noteworthy because it applies to hearing loss. In the social sciences, it is readily acknowledged that aspects of social stigma may differ depending on whether or not it is possible for the individual to conceal the personal characteristic that defines their stigma. Quinn (2006, p. 84) defined a concealed stigma as, "a stigmatized identity that is not immediately knowable in a social interaction." For example, a person with a history of mental illness or a person who is HIV positive may decide to conceal his or her stigmatizing attribute from some people with whom they interact. This option is not possible to someone who has a conspicuous stigma (e.g., skin color, visible physical deformity). Hearing loss is an invisible impairment that an individual can conceal from others. Social stigma research has shown that, relative to conspicuous stigmatizing attributes, having an invisible stigma has some advantages and some disadvantages.

People who have a concealable stigma may decide not to disclose their stigma and thus avoid being stigmatized. Alternatively, they may be able to decide if, when, and to whom they disclose their stigma. For example, an individual can decide if or when to reveal to another person that they have a hearing loss.

One drawback related to concealing a stigmatizing attribute is that there is always discomfort

associated with the possibility of having the trait disclosed during a social interaction. Studies have shown that concealing one's stigmatizing trait increases the cognitive load required to take part in social interactions (Lane & Wegner, 1995; Smart & Wegner, 1999, 2000). For example, in addition to exerting the cognitive effort normally required to participate in a conversation, a person who is attempting to pass as normal will have to expend extra cognitive resources in order not to divulge any information, signal, or cues that would betray his or her attempt to conceal (Vignette 4-3). This may be particularly stressful for a person who has a hearing loss, given that due to the nature of the impairment, any normal conversation (even those where disclosing hearing loss is not an issue) invariably will require expending more cognitive resources than those typically required by persons with normal hearing who perform the same task.

It has been shown that the amount of stress associated with participating in a social interaction

will vary according to the importance given to unwillingly disclosing the stigmatizing trait and the likelihood of that happening. For example, for someone who has an eating disorder that is not physically apparent to others, the stress associated with a conversation will be less when the topic of discussion does not center around food and eating whereas it will be more stressful when the discussion centers around food and eating. Hearing loss may represent a unique dimension of this situation. For people with hearing loss, in most social situations, they risk causing communication breakdowns due to their hearing impairment. Every time they converse, they risk revealing their stigmatizing attribute to others. This may explain why people with hearing loss often avoid social interactions altogether, as this is a safe strategy to ensure that they will not unwillingly disclose their stigma.

Results of investigations have also shown that the manner in which a stigma is disclosed and the timing of this disclosure will influence how well

Vignette 4-3

Additional Resources Required to Conceal Hearing Loss

Mr. C was recently diagnosed as having an acquired high-frequency, moderately severe hearing loss. Only immediate family members know about the hearing loss. He has chosen not to disclose this information to others. Since the hearing loss was diagnosed, Mr. C noticed that effective communication at work is much more effortful than it is at home. He finds that due to his hearing loss, taking part in work-related conversations requires a lot of concentration to limit the number of communication breakdowns that occur. In addition, unknowingly, Mr. C expends considerable resources making sure that he doesn't disclose his hearing loss to his work colleagues. Mr. C cannot understand why communicating in the workplace is more effortful than communicating at home and why more communication breakdowns occur in his work setting than at home.

Eventually, Mr. C consults an audiologist about the communication difficulties associated with many of his daily activities. He was surprised to learn that his communication difficulties at work may be associated to the additional cognitive resources he must expend to conceal his hearing loss in that setting. Specifically, he learned that, due to the nature of communication, persons with hearing loss must expend more effort to communicate effectively. He also learned that, due to the nature of communication, the risk of inadvertently disclosing his hearing loss is increased every time he interacts with colleagues at work. This makes him realize that the combination of work responsibilities, the stress associated with taking part in social interactions, and the effort expended to conceal his hearing loss left him depleted of resources to communicate effectively.

this information is received by others. For example, if someone's stigma is unwillingly disclosed by a third party, or if it is divulged only after a trusting relationship is formed, the stigmatized person may be seen as being dishonest or untrusting (Herek, 1996). If it is disclosed too soon after meeting someone, there is a danger that others will perceive that this disclosure was used as an excuse to explain some incompetence or social inaptitude (Bairan, Taylor, Blake, Akers, Sowell, & Mendolia, 2007; Corrigan & Matthews, 2003; Joachim & Acorn, 2000; Pachankis, 2007).

Studies also have shown that there is a direct relationship between the desire to conceal a stigma and the importance given to the stigmatizing trait. For example, Major and Gramzow (1999) showed that the more women felt that abortion was a stigmatizing attribute, the more they attempted to keep their own abortion secret from others. Extending this to hearing loss, one would presume that the greater the amount of negative stereotypes that someone attributes to having a hearing loss, the more effort that person will expend to try to conceal the hearing impairment from others.

Finally, a unique aspect of concealable stigmas is that the stigmatized person is more likely to know what family members, friends, and workmates think about that stigmatized trait. That is, because they are not aware that someone in their midst has a stigmatizing trait, close others are more likely to express their attitudes about that specific stigmatized attribute. This is different from a conspicuous stigma (e.g. obesity) because in the presence of a person with a visible stigma, others are likely to be more diplomatic (politically correct) about how they express their attitudes about the specific stigmatizing trait. This information may be of value for rehabilitation. Knowing the attitudes of significant others toward hearing loss should provide insights on how to proceed in disclosing the hearing loss to others. For example, the person with hearing loss may choose to first disclose the impairment to someone who is less prejudicial toward people with hearing loss. In addition, they may solicit their help in using repair strategies during conversations. This strategy will enable the person with hearing loss to improve his or her self-esteem and to gain confidence as a communication partner. When this

occurs, it will become less stressful to employ the same strategies (disclosure and seeking help from communication partners) with people who have stronger stigmatizing views of hearing loss.

Self-Stigmatization and Persons with Hearing Loss

To our knowledge, Héту (1996) was the first scholar to address the issue of stigma associated with hearing loss from the perspective of individuals with an acquired hearing loss. In his seminal article, "The stigma attached to hearing impairment" (Héту, 1996), based on the generic literature available on stigma from the social sciences and on the results of interviews with adult males with an acquired hearing loss (and their spouses) he proposed two models: one that described the *stigmatization process* and another one that described the *normalization process*. According to Héту (1996), people who are discredited (stigmatized) because of their hearing impairment experience shame. In this context, shame is the emotion that accompanies threats to one's sense of social belonging. It is a social control mechanism that serves to instill acceptable behavior and inhibit unacceptable behavior. According to Héту (1996), the *stigmatization process* is the result of the communication breakdowns and other "deviant" behaviors that may occur when people with hearing loss interact with people who have normal hearing (Figure 4-1). The demeaning and discriminatory reactions of the communication partners to the "deviant behaviors" of the person who has a hearing loss leads the latter person to feel shame and guilt about themselves due to their hearing loss. As a consequence of the stress induced and the feelings of incompetency that develop, the person's self-esteem and social identity are diminished. The strategies often used to avoid the stress and the feelings of incompetency associated with unsatisfying social interactions (and the effect on their self-esteem), lead people with hearing impairment to conceal their hearing loss from their communication partners. In addition, many people decide to withdraw from social activities and isolate themselves (Vignette 4-4).

Héту (1996) also described a two-step *normalization process* designed to help the person with

Stigmatization process

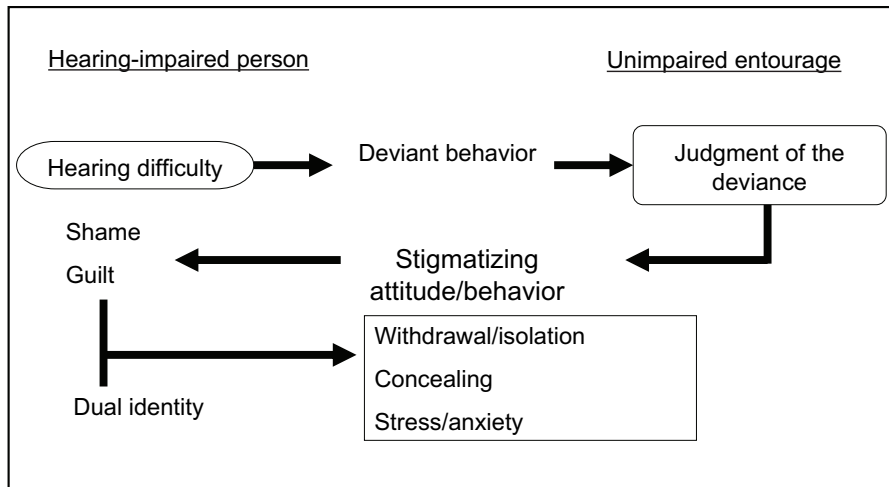


Figure 4-1. Stigma: Héту's (1996) model of the stigmatization process (taken from Héту, 1996).

Vignette 4-4

The Consequences of Hearing Loss on Self-Esteem and Social Identity

Mr. D is a retired person, and a devoted family person who held an important position as a corporate executive for many years. He has always prided himself for being a keen golfer and for being well informed about the professional golfing tour (PGA). For many years, Mr. D played several rounds of golf with his grandchildren every summer. However, he has found that the last few outings to be less satisfying. Often, because of his hearing loss, Mr. D is unable to follow the conversation when he plays golf with his grandchildren. When he makes inappropriate comments his grandchildren make fun of him and tease him for becoming a "deaf and senile old man." When he asks his grandchildren to repeat a comment they typically respond "Never mind. It wasn't important." More and more, the grandchildren tend to exclude Mr. D from their golf conversations. Although playing golf with his grandchildren used to be a very important activity for Mr. D, recently the golf outings have not been satisfying. These golf outings make Mr. D feel old, inadequate, and an uninteresting grandparent. His self-esteem is affected to the point where he decides to stop playing golf. Gradually, he even stops taking part in other activities with his grandchildren. He would rather stay at home and feel sorry for himself than to be devalued by his grandchildren.

hearing loss overcome feelings of shame and guilt associated with hearing impairment and regain a more favorable social identity (Figure 4-2, step 1). The first stage of the *normalization process* involves

meeting and interacting with other people who have a hearing loss (members of the *insiders*), so that together they can share their experiences of hearing difficulties and the resulting unsatisfac-

tory social interactions. This therapeutic activity helps the participants realize that unsatisfactory social interactions are the result of the hearing loss, rather than to other factors that may be unjustifiably attributed to them (e.g., being unwilling to communicate, or otherwise responsible for the communication breakdowns). Furthermore, the stigmatized person realizes that it is not unusual for people with hearing loss to feel denigrated, diminished or ashamed of themselves. They come to realize that other people with hearing loss have the same feelings of inaptitude and self-denigration. These realizations serve to trigger the *normalization process*. The individual realizes they are not alone in their feelings about their hearing loss and how they behave because of the hearing problems. They realize that other people experience the same feelings and that these feelings are “normal.” As a result of this process, people with hearing loss start to feel better about themselves. The process of restoring a more positive social identity is initiated and they are more willing to engage in social activities and interactions. They may learn appropriate coping strategies and experience success in using these strategies when they interact in this favorable social environment (i.e., in the presence of others who have hearing loss).

In the second stage of the *normalization process* (Figure 4–2, step 2), people with hearing loss are encouraged to interact with people in their entourage who do not have a hearing loss. Moreover, they are taught and encouraged to inform their communication partners that they have a hearing loss, and to solicit the use of communication strategies that will optimize the exchange of information. Under these circumstances, communication partners are more likely to acquiesce to the requests of the persons with hearing loss. It is likely that communication will become more efficacious and more satisfying for both communication partners. The result of participating in more satisfying verbal conversations (social interactions) serves to further restore a more favorable social identity for the person with hearing loss. As the process of restoration continues, the person with hearing loss will gain more and more confidence in the ability to be a satisfying communica-

tion partner. As a consequence, they are more likely to participate in valued activities that include people who do not have a hearing impairment (members of the *outsiders*) and likely will regain a more positive image of themselves. Héту’s contribution of providing a conceptual model of stigmatization and guidelines for rehabilitative services that serve to restore a favorable social identity constituted an enormous contribution to audiological rehabilitation as well as to the social integration of adults with an acquired hearing loss.

In recent years, there have been significant breakthroughs in the conceptualization of social stigma from the perspective of the persons being stigmatized (i.e., self-stigma). In the next section, we describe one contemporary model of stigma. In our view, most of the concepts described in the model are applicable to the social stigma associated with hearing loss, and to the way that people with hearing loss feel and behave when their self-image is diminished because of the social stigma associated with their impairment. Moreover, we believe that audiologists will benefit from having a better understanding of the self-stigmatizing process and its effects on people who have a hearing loss. Integrating aspects of this model into the domain of AR will serve to complement and extend the current level of knowledge that is available to us, largely due to Héту’s work. Undoubtedly, a more comprehensive understanding of the self-stigmatizing process will lead to the development of more appropriate rehabilitation services for people who are stigmatized due to their hearing loss.

Model of Stigma-Induced Identity Threat

Major and her colleagues have proposed a model of stigma that is based on two premises. The first premise is that stigma puts a person at risk of experiencing threats to his or her social identity (Crocker et al., 1998; Major & O’Brien, 2005; Steele, Spencer, & Aronson, 2002). The second premise is that having one’s social identity devalued leads to a potentially stressful situation. Furthermore,

directly responsible for unacceptable limitations in the scope of our clinical practice.

Although researchers from other professions have addressed important issues in relation to hearing impairment, a recurrent problem frequently limits the utility of their findings; specifically, degree of hearing impairment is often not taken into consideration. Hence, there are studies in which the findings are based on a nondifferentiated population of individuals who are categorized simply as "hard-of-hearing." The failure to distinguish between individuals with profound impairments versus those with usable residual hearing, or those with congenital versus acquired impairments essentially precludes meaningful findings. A surprising number of articles in which this problem occurs can be found in the nursing, vocational rehabilitation, and mental health literatures. The topics of these research endeavors, more often than not, are of relevance to audiology. The effects of hearing impairment on older couples, problems experienced by individuals with hearing impairment in nursing homes and assisted living facilities, and difficulties with job placements for those with hearing problems are among the issues being addressed by other professions. Every one of these issues touches on audiologists' scope of practice. Nevertheless, ongoing research in these areas is not benefiting from our expertise nor are we adequately addressing such issues ourselves. Recent statements in the nursing literature include, "Hearing impairment is a significant, often debilitating, problem for many older adults, but assessment and intervention by nurses can help," (Wallhagen, Pettengill, & Whiteside, 2006, p. 40) and "... Given the extensive nature of hearing impairment in elders, its impact on psychosocial well-being, and the potential for significant improvements in quality of life through the use of advanced hearing technology and assistive devices, nurses have the potential to play important roles in this unexplored area" (Wallhagen, 2002). A longitudinal investigation of the effects of hearing impairment on spouses was conducted in which hearing measures consisted of three questions pertaining to communication (1) in quiet, (2) on the telephone, and (3) in a noisy setting. Each had a response set ranging from 0 to 3. No audiometric

data were obtained and no standardized self-report measures of hearing difficulty were employed (Wallhagen, Strawbridge, Shema, & Kaplan, 2004). Audiology's entrenchment in the biomedical model has narrowed our focus to the point that others are encroaching on our scope of practice by investigating issues we are not investigating and providing services we are not providing. Moreover, other professionals are obtaining funding to conduct research in areas in which audiologists are more qualified.

A traditional basic science model has dominated Ph.D. programs in audiology, a factor that is certainly implicated in audiology's move to the professional doctorate. The health care crisis and the unsettling lack of progress in addressing chronic illness and disease, however, are beginning to shift research priorities. Although the biomedical model is still pervasive, the health care crisis is resulting in critically needed change. The mandate to modify medical school curriculum is a bottom-up approach that will produce gradual but steady change. Health psychology and behavioral medicine are introducing innovative approaches to health care. The results of these approaches are mounting evidence of the invalid tenets underlying the biomedical model. At the same time, they are yielding evidence that the biopsychosocial model's underpinnings provide a sound and more realistic and productive means of understanding disease and illness, as well as impairment and disability. A similar infusion of social and behavioral sciences into audiology's curriculum is needed to enhance our understanding of the relationships and interactions among biopsychosocial variables that determine the individual's experience of hearing impairment.

A Biopsychosocial Approach to Audiologic Counseling

The times, they are a-changin. ♪

Robert Dylan (1963)

Our hard look at the world around us has forced us to acknowledge the inadequacies of the biomedical model and the limitations necessarily

imposed on audiology by our adherence to it. We have also had the opportunity to recognize that the rest of health care has similarly been limited and that a logical and valid, albeit more complex approach, the biopsychosocial model, is increasingly being viewed as a viable and necessary alternative. In the face of a health care system in crisis and growing demands for change, it is evident that the old way of doing things does not suffice and will not survive. The biomedical model in audiology forces a band-aid solution, in the form of a hearing aid, on a problem that, more often than not, requires motivation, self-efficacy, complex psychosocial and behavioral adaptations, and a reintegration of self, not to mention the development of compensatory communication skills.

Audiologists provide services for one of the most common chronic conditions in our society. Audiology is a health care profession, but it is not a medical profession. It is a rehabilitative profession. To optimize our success as a profession, rehabilitation is an identity we must embrace fully. Diagnostic audiology is an essential component of audiologic rehabilitation, but it is just one component. It represents the "bio" portion of the biopsychosocial model. Adhering to a biopsychosocial model in audiology brings counseling to the forefront as the therapeutic context in which all services are provided, as the process guiding services, and as essential ingredients of the therapeutic process. The effectiveness of counseling throughout this three-tiered conceptualization ultimately determines the extent to which treatment outcome is successful.

The context of audiologic counseling is biopsychosocial, patient-centered, empathic, interactive, and facilitative. The therapeutic context guides the counseling process and the audiologist's role and responsibilities in it for each patient. As the ongoing process, counseling includes several key phases: establishing the practitioner/patient relationship, engaging the patient in the therapeutic process, creating opportunities and mechanisms to enhance and nurture patients' engagement and self-efficacy, and ensuring that counseling goals are met and maintained. Counseling activities can include ongoing exchanges between the clinician

and the patient; dedicated sessions such as hearing aid orientations; cognitive, affective, and/or behavioral interventions targeted at relevant communication and adjustment issues; and family and group sessions. The characteristics of counseling as the therapeutic context of rehabilitative audiology extend to and infuse all aspects of the counseling process and counseling activities. This is easily achieved by ensuring that all aspects of intervention are patient-centered. Examining the biopsychosocial, patient-centered, empathic, interactive, and facilitative elements of audiologic counseling reveals a promising framework for rehabilitation planning, evaluation, and research as well as professional education.

Framework for a Biopsychosocial Approach to Audiologic Counseling

The IOM (2001) identified a continuous healing relationship as the most critical ingredient in improving the quality of patient care. It is in exactly this vein that patient-centered care is enhanced by relationship-centered care; the quality of the relationship ultimately determines treatment success (Gelso & Carter, 1994; Gelso & Hayes, 1998; Norcross, 2002; Norcross & Lambert, 2006; Rogers, 1957, 1958; Safran & Muran, 1998; Truax et al., 1966; Truax & Mitchell, 1971). Squire's (1990) model of an empathic practitioner-patient relationship illustrates how affective and cognitive components of empathy facilitate engagement of the patient in the management of his or her health condition resulting in adherence to a treatment regimen to achieve the desired health benefit. In Figure 9-3, Squire's model is shown adapted to illustrate such a process in audiologic care.

Briefly, in the model, the audiologist strives to understand, both cognitively and affectively, the patient's experience of hearing impairment as revealed in the patient's story. The practitioner must then articulate an empathic understanding of this experience to the patient. This understanding is based on (1) an accurate perspective of the patient's experience and (2) appropriate emotional reactivity. In doing so, the accuracy of the empathy conveys important information to the patient;

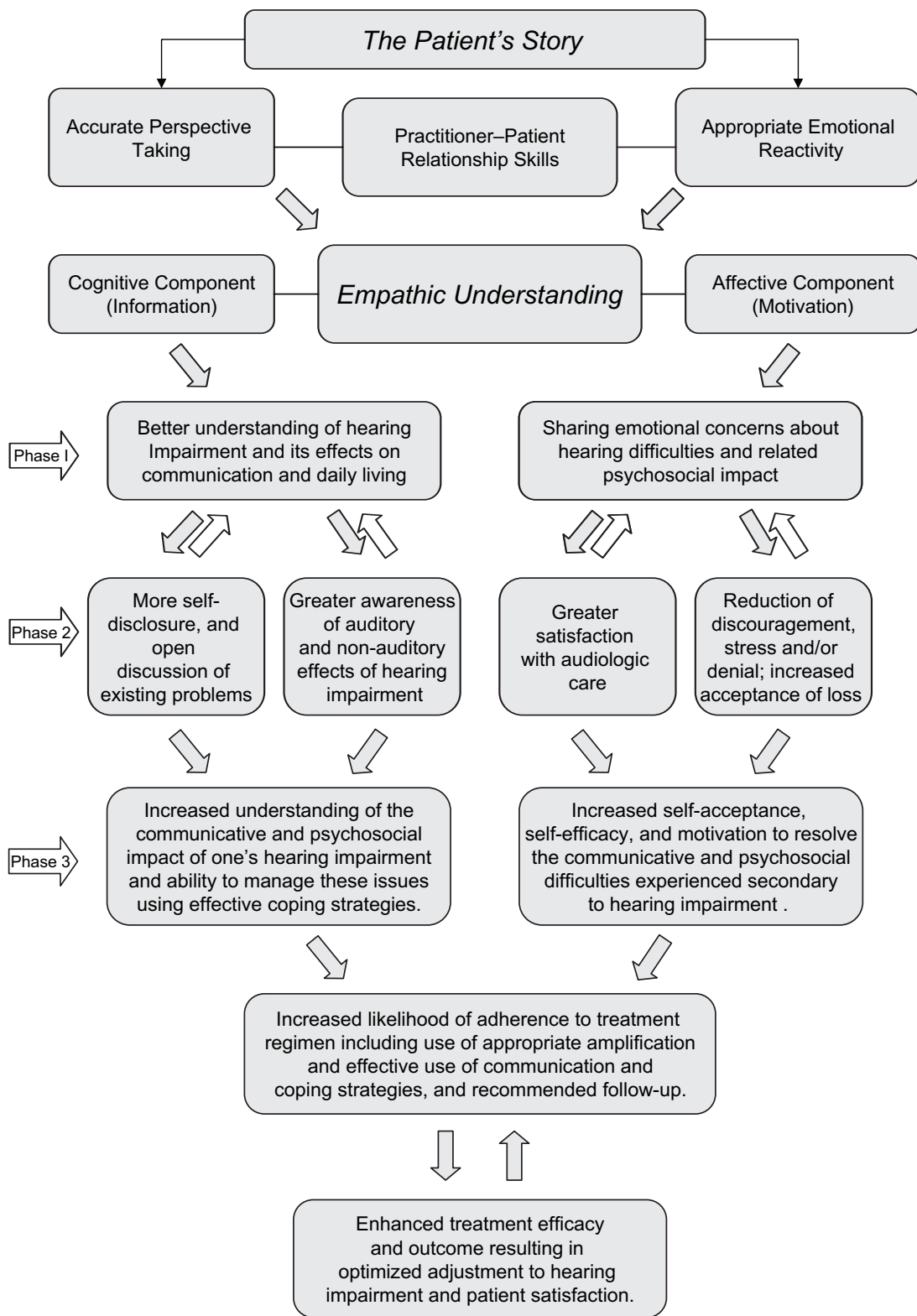


Figure 9-3. The role of empathic understanding in AR counseling based on Squier (1990) and Erdman (1993a).

it provides the patient with a better understanding of hearing impairment and the effects it has on communication. The affective component of empathy allows the burden of the experience to be shared instilling a sense of confidence that the problem is one with which it will be possible to cope. The audiologist's cognitive and affective communications (indicated by the solid arrows leading to the Phase 1 level) allow the person to know he/she is understood. The affective component of empathic understanding, which is supportive and reassuring, combined with the cognitive exchange, facilitates the development of a trusting relationship between the audiologist and the patient. Phase 1 of the empathic understanding model represents development of this trust and rapport, the critical foundation for engaging the patient in the treatment process.

The bidirectional arrows between Phase 1 and Phase 2 are indicative of a working, therapeutic alliance. Increased understanding of hearing impairment permits the patient to volunteer additional information, to describe problems more accurately, thereby further informing the audiologist's understanding of the patient's experience. The parallel affective-motivational process reduces the level of overall distress and enhances satisfaction with treatment thus far.

Successful cognitive and affective interactions during Phase 2 ultimately facilitate psychosocial and behavioral adjustment including the requisite knowledge and skills to manage the condition and the self-acceptance, self-efficacy and motivation to do so as indicated at the Phase 3 level. A successful Phase 3 in the cognitive and affective areas results in an increased likelihood of adherence to the agreed upon treatment regime. Adherence enhances treatment outcome in terms of overall adjustment, benefits derived, and patient satisfaction. These, in turn, solidify adherence (as indicated by the bidirectional arrows between adherence and outcome). Hence, the model includes the patient's story, development of the practitioner-patient relationship; engagement of the patient in the rehabilitative process; interaction of the working/therapeutic alliance; facilitation of the patient's management of hearing impairment through

increased motivation, hope, and self-efficacy; and adherence to the agreed upon treatment regimen.

The empathic understanding model is a reasonable approach to providing audiologic counseling that is biopsychosocial, interactive, facilitative, and conducive to adherence to one's treatment regimen. Hence, familiarity with key elements of the empathic understanding model and their relation to elements of the biopsychosocial model is recommended. The following are areas with which audiologists should be familiar.

The Patient's Story

When George Engel (2005) responded to concerns that the biopsychosocial model was difficult to implement his primary response was, "... the key is the interview ... it is the basic scientific tool of the clinician—the door that opens to everything else. Successful application of the biopsychosocial model is 100% dependent upon the clinician's facility with interviewing" (p. 378). When hearing impairment and the audiogram are the focus of an audiologic encounter, the patient's experience of hearing loss receives little to no attention. Unfortunately, this makes it virtually impossible to initiate a practitioner-patient relationship that is based on an understanding of the patient's concerns. Without this relationship, without a shared understanding of why the patient is presenting, the basis for engaging the patient in the rehabilitation process does not exist. Hence, our first responsibility is to hear each patient's story. Each story is the spark that activates biopsychosocial intervention. Eliciting that story is the clinician's first responsibility in each new encounter; ultimately, it may be the determining factor in the patient's outcome. Engel was fascinated by Margaret Mead's (1975) use of video-recordings to study human behavior as this supported his contention that behavior, feelings, transactions, and relationships can be scientifically studied through observation, introspection, and dialogue (Engel, 1977a, 1977b, 1987, 1997). He advocated allowing patients to talk about themselves, their families, and symptoms and observing their verbal and

nonverbal communication. All of this he considered scientific data.

In contrast, what usually occurs during the audiology patient's first visit is an interview focused on the etiology and progression of the hearing impairment. Obviously, information regarding the onset of hearing impairment is vital in establishing a diagnosis. Additionally, the nature and cause of a patient's hearing impairment undoubtedly can play a part in how the loss is experienced. Nonetheless, questions that focus on auditory disorder and impairment are specific in nature and elicit responses that are similarly limited in scope. In fact, many answers are simply two or three word phrases or yes-no answers. They do not reveal the essence of the patient's experience.

The quotes included in Table 9-6 are "sound bites" from actual patient stories. Even these brief snippets are compelling, poignant, warm, funny,

sad, and, at times, joyful. They are distinctly human elements that provide the critical, initial link between the audiologist and the patient. Listening to patients' stories, clinicians come to share their patients' experience of hearing loss in ways simply not possible through an audiogram, case history, or even self-report measures. The clinician who listens intently to the father as he laughingly describes his little girl grabbing his face to make sure he hears everything she has to say, cannot help but connect with him on a human level. In that connection, a patient recognizes that he is understood. The groundwork for empathy and rapport has been established.

Beginning clinicians often wonder how to elicit stories from patients that reveal such distinctively human elements. The fact is, every patient we see has a story. Moreover, the reason that patient is seeing you is to tell you that story. It is why an

Table 9-6. Excerpts From Patients' Stories

"My wife's small talk sometimes goes unanswered. I regret the difficulties she must endure. I know I must be a burden to her at times. It is more for her benefit than mine that I'm thinking about getting hearing aids."

"When someone has to repeat for me, I feel embarrassed and inadequate. I scold myself—you should be listening more closely, concentrating more! I get angry at myself. When I hear something incorrectly and respond inaccurately, then I am *really* embarrassed. I feel like my credibility is slipping away. In class, I try to cover up by saying, 'Speak up and talk clearly so the whole class can hear your question.' Inside though I don't think I'm really fooling anybody. Everyone must see through my sham. I feel so unsure of myself as a professional."

"I get annoyed when I don't hear someone and they yell loud enough for God and everyone to hear, 'What are you, deaf?' I tell them what they can do!"

"At parties, I have a terrible time. I move closer to the speaker and they back away. I ask them to speak up, but after a few words, their voices drop again. Not only am I a social loser, I'm a bore! When I'm in the backseat of our carpool, I have a terrible time understanding the conversation up front. So, I lean forward and ask them to speak louder. When they don't, which is most of the time, I sit back and drop out of the conversation. There I am again, the social outcast."

"My 5-year-old son has it figured out. He says, 'Daddy, come in here away from the TV so you can hear me. I got something to tell you!'"

"I work on a psychiatry ward and listen to patients 8 hrs. a day. Asking patients to repeat is not only frustrating for them and for me, it also alienates me from them. This is disastrous in a practitioner/patient relationship and causes extreme anxiety on my part."

continues

Table 9-6. *continued*

"My family has stopped trying to communicate with me anymore when we're watching TV in the evening. I feel like I am losing touch with my family."

"My husband's hearing loss has affected us all. We love him and want him back."

"At a crowded cocktail party, when I'm talking to women with high-pitched, or soft voices (small talk in which I may or may not be interested) I can't understand a thing they say. I get tired of faking it, kill my drink, and excuse myself to get a refill. It gets to the point where it's not worth the effort."

"A woman and I were talking soft and low like lovers do. I asked her to repeat something but she said, 'Never mind,' and the mood abruptly changed. It made me wonder how many 'yes's' I've missed."

"At a party where the music is already 3 times louder than I care for, three people are all trying to talk to me at once. I pick out the one who is talking the loudest and listen to him. Usually, I still can't understand what he's saying. So, if he smiles, I smile. If he frowns, I frown. When he is done talking I end up walking away wondering what the devil he was trying to tell me."

"I never purposely try to ignore anyone, but often it probably seems that way. Some may see me as unapproachable or think I'm rude."

"I don't think I will ever accept my hearing loss. I'll always believe this is just temporary."

"I cannot tell you what a difference my husband's hearing aids have made in our life. He wasn't listening to me. I was sure he didn't care enough to listen anymore. He just ignored me. I was so afraid there was someone else."

"I get very unhappy with myself when I don't hear something someone in my family tries to tell me. It's important to them. It must give them the impression I don't care which isn't true. If I ask someone to repeat what they said, they're put off. I know I've hurt my children's feelings. I have some fence-mending to do."

"My four-year-old daughter makes sure I hear her. She stands right in front of me or climbs on my lap. Sometimes she even grabs my face and looks straight at me! How can I miss what she has to say?"

"At work I attend and/or conduct meetings, participate in several counseling sessions, and communicate on the phone or in person all day. At the end of the day, I'm drained from the mental strain of concentrating and trying to compensate. After wearing a hearing aid for only 2 days, I can already see a marked difference in how I feel by 5 o'clock. I regret that I didn't pursue correcting my hearing loss earlier in my career." A month later she added, "I can stay up an hour to an hour and a half later than I did before. It's great getting to watch the late news with my husband."

"My teenage daughter gets away with murder. She'll tell my wife that she asked me if she could do something or have something and I said ok. When I say, 'You never asked me that!' She responds with, 'I did so! You said it was ok! It's not my fault if you didn't really hear what I said!'"

"I've been accused of being off in my own little world."

"I tried to go to college but the ambient noise in a classroom (papers rustling, background chatter, etc.) made listening to the professor difficult to impossible and not only made me anxious but also made him angry because he had to keep repeating. I stopped taking classes to remedy this particular situation."

"Telephone use at work is critical for task accomplishment. If I can't get this part down I may as well fold up my tent and say sayonara."

appointment was made. Open-ended statements such as “What brings you here today?” or “Tell me about the hearing problems you have been having,” are appropriate ways to encourage patients to tell you about their experiences. Non-verbal factors are also important. As Perls (1969, 1973) succinctly and repeatedly pointed out, “the body does not lie.” Ideally, you are in a private area, seated face-to-face, maintaining eye contact, and listening while your demeanor communicates your genuine interest in what a patient is telling you. You are not walking toward the test booth with the patient following you, or thumbing through a chart without looking at the patient. The challenge is not so much how to get them to reveal, as it is how to stay out of their way so they can. After asking that initial question, simply allow them to answer. They may not respond immediately. Giving someone room to answer, is actually giving them time to answer. It is always tempting to ask another question if the patient does not respond immediately. Allow patients time to gather their thoughts and to formulate an answer. To refrain from interrupting the patient’s thoughts, mentally count to 10, slowly. Literally, do so. If necessary, count to 10 again. It is exceedingly rare for a patient not to respond within that amount of time. On the rare occasion that occurs, rephrase your question and again, wait. Allow the patient to see that you are genuinely interested in what he or she has been experiencing and that your question is a sincere and important one.

The goal is to understand the patient’s story—to appreciate that story and come to a shared understanding of what the experience of hearing loss means to the individual. The intent of audiologic counseling is to bring about change in aspects of the patient’s story that pertain to the difficulties and distress experienced in relation to hearing impairment. Our role is a facilitative one; we engage patients in the treatment process and we enable patients to make decisions that are both meaningful and acceptable to them. The narrative story is an increasingly common way of facilitating understanding. It is focal in personal construct theory (DasGupta & Charon, 2004; Kelly, 1963; Mahoney, 1991, 2003; Neimeyer & Raskin, 2000; Shapiro & Ross, 2002) which mirrors many facets

of the biopsychosocial approach. In personal construct theory, patients are viewed as idiosyncratic; each person experiences his or her own world in a unique way. The clinician recognizes and appreciates the patient’s uniqueness and establishes a shared understanding of his or her experience. In constructivist psychology, the clinician acknowledges patients’ capacity for change and facilitates their efforts to change. This is a valuable area for audiologists to explore.

Counselor Characteristics

Listening is the application of the mind to sounds which the ear . . . may or may not hear.

Percy C. Buck (1944)

Effective counseling involves broad-based professional knowledge and skills combined with a set of personal aptitudes and characteristics. Typically, the knowledge and skills are acquired through academic programs and clinical training, whereas the personal aptitudes and characteristics often appear to be extensions of one’s personality. Although many of the behaviors associated with these aptitudes and personality characteristics can be learned and honed, audiologists’ counseling skills are rarely the focus of academic or clinical training or evaluation. Work by English and colleagues (2007) is a notable exception.

Counselor characteristics are an essential part of the therapeutic alliance, part of which is an interpersonal relationship and another part the task or work related component. The latter involves the critical functions of engagement in goal and treatment planning. Carl Rogers posited that empathy, congruence, positive regard and “unconditional-ity” are the necessary and sufficient conditions to effect therapeutic change. Moreover, he claimed that non-trained persons who demonstrate an interest in others and a desire to help, and who present with these necessary and sufficient conditions, can be as effective as trained counselors in the helping process. Since that time, others (Brammer & MacDonald, 2002; Corey & Corey, 2006; Egan, 2006) have stressed the veracity of Rogers’