Chapter 9

Communication Strategies Training

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The goal of communication strategies training is to encourage persons with hearing impairment to use facilitation strategies and repair strategies. Clients use facilitation strategies to influence speech recognition skills, the communication environment, the manner by which communication partners speak the message, as well as the message proper. Clients use repair strategies to instruct the communication partner following a communication breakdown. Future research can aim toward developing assessment and training procedures. The counseling, psychological, and sociolinguistic literature can provide guidance.

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In the last few years, audiologists have become increasingly aware that even after clients receive communication aids, they may still experience difficulty in participating in conversations. As a result, there has been a growing interest in assertiveness training, wherein audiologists help clients to assume responsibility for their hearing losses and to manage communication problems effectively. Key features of assertive behavior include expressing one's needs and emotions in a direct, firm, and honest manner and respecting the needs and rights of others. Assertiveness training for individuals who have a hearing impairment may include stress management techniques, cognitive therapy, personal adjustment counseling, and communication strategies training (e.g., Abrahamson, 1991; Kaplan, Bally, & Garretson, 1985; Trychin, 1987a, 1987b, 1987c).

This chapter primarily considers research issues for one component of assertiveness training, communication strategies training for clients. Chapter 10 considers similar training for frequent communication partners. Communication difficulties affect both clients and their family members, and the resolution of problems requires effort from all of them.

CURRENT PRACTICES AND RECENT TRENDS

Current practices for providing communication strategies training are diverse. They range from making available printed materials and audiovisual tapes in the clinic waiting room (De Filippo, 1991) to presenting a program that lasts for several weeks or months (Abrahamson, 1991). Training activities may include completing workbook exercises (Kaplan et al., 1985); role-playing with a clinician, family member, or another person with a hearing impairment (e.g., Erber, 1988); and engaging in interactive computerized laser videodisc training exercises (Tye-Murray, 1991). Perhaps the most effective means for providing training is the use of group settings, wherein clients have an opportunity to interact with one another and with family members.

Before considering research issues, I will first clarify what is meant by the term Communication Strategies. Communication strategies can be categorized as one of two general types, facilitation and repair.

Facilitation Strategies

Four factors influence clients' abilities to recognize utterances: (a) clients' speech recognition skills, (b) the communication environment, (c) communication partners' speaking of the messages, and (d) the messages themselves. Clients may use facilitation strategies to influence any one of these four factors.

Speech recognition skills. To maximize their ability to recognize the speech signal, clients may use attending strategies and anticipatory strategies. Clients use attending strategies when they consciously attend to environmental and linguistic cues for the purpose of inferring a partially recognized spoken message. In order for an attending strategy to be helpful, the client must be observant, mentally agile, and willing to guess. Anticipatory strategies are used to prepare for a conversational interaction. These strategies range from identifying potential vocabulary and sentences that might occur to gathering information about possible conversational content. For example, before a job interview, a teenager might learn about how an interview is structured and what kinds of questions are typically asked (Palmer, Bement, & Kelly, 1990).

The communication environment. To influence the communication environment, clients can implement constructive strategies wherein they structure the environment so it is more favorable for effective communication. For instance, they can turn off noise sources or select seating so the primary talker is clearly visible.

The communication partner. Instructional strategies can be used to influence communication partners' speaking behaviors. Clients can provide communication partners with explicit instructions about how to present messages. For example, a client might ask a partner to articulate clearly, with a moderately slow speaking rate, or to attract the client's attention before speaking (e.g., De Filippo, 1991; Erber, 1988; Picheny, Durlach, & Braida, 1986). The client might establish a hand signal that will be used to remind the communication partner to speak clearly when the partner forgets.

The message: Message-tailoring strategies influence the message. Clients can encourage communication partners to use simple, short sentences and/or to indicate when the topics of conversation change (by pausing or using a hand signal). Clients can also ask questions in such a way that communication partners' responses are limited to a closed set, such as yes or no or the days of the week.

Repair Strategies

The second general type of strategy often included in communication strategies training is repair. Clients use repair strategies when they provide explicit instructions to the communication partner about what to do following a breakdown in communication. Clients might ask partners to repeat part of a sentence, rephrase it (e.g., "Can you say it with different words?"), elaborate the message ("Tell me more, I didn't catch that."), simplify it ("I'd like you to say that again, without so many words."), or indicate the topic of conversation ("I'd like to know the topic of what you are talking about."). They might ask partners to write, use gestures and hand signals, and spell out difficult words. Repair strategies also include informing the communication partners about what part of the message was understood ("You said, Tom and Betty are going to the store and [pause] . . .").

GENERAL RESEARCH NEEDS FOR ALL COMMUNICATION STRATEGIES

In this section, general research issues applicable to all components of communication strategies training are considered. The issues pertain to three topics: assessing training needs, developing training procedures, and evaluating the effects of intervention.

Assessing Training Needs

Two research directions fall under the topic of assessing training needs. The first direction is to determine whether hearing-impaired adults require training. That is, do some groups of individuals instinctively use communication strategies effectively and hence, do not have the potential to benefit from training? And, how do client characteristics relate to training needs? In an attempt to address this issue, Tye-Murray, Knutson, and Lemke (in press) surveyed 65 cochlear implant users about their use of communication strategies. They then correlated the responses with biographical and audiological data. The analyses indicated the following clients may be good candidates for training: persons who have completed relatively little education, persons who have incurred sudden hearing losses, persons who do not receive good benefit from a sensory aid, and persons who elect not to wear a sensory aid throughout the day. Future research can extend findings such as these to different groups of hearing-impaired persons (e.g., hearing-aid users) and include additional biographical, social, and psychological measures.

The second research direction under the topic of assessing training needs is to identify procedures that can be used to evaluate how a particular individual implements communication strategies, and that individual's particular training needs. During assessment, an audiologist must address the following issues: (a) what are the communication demands placed upon the client in his or her everyday life; (b) how does hearing loss impact the person's daily activities; (c) in what settings do communication problems arise; (d) does the client interact with familiar persons, unfamiliar persons, or both; (e) what kind of social activities does the client engage in or would like to engage in; (f) how well does the client use communication strategies in a variety of settings; and (g) what are the client's employment responsibilities.

The assessment instruments for obtaining information about the clients' communication needs currently include interviews, questionnaires such as the Communication Profile for the Hearing Impaired (CPHI, Demorest & Erdman, 1987), informal conversations (Erber, 1988), and case histories. The assessment of how well clients use communication strategies is more problematic, and often entails continuous discourse tracking (De Filippo & Scott, 1978), simulated conversations such as Topicon (Erber, 1988), and the Repair Strategies Index (Tye-Murray, 1991). One drawback in assessments based upon staged interactions is that clients' use of communication strategies may vary as a function of conversational partners and settings (Tye-Murray, Purdy, & Woodworth, 1992). Thus, what occurs in the clinic may not be reflecting what occurs in typical communication interactions. Another drawback is that the coding of communication behaviors may be time-consuming. Future research can be directed toward developing valid assessment procedures that index real-world performance, and that are feasible to perform in clinical settings (see also Chapter 10).

Audiologists might take the lead from researchers who have assessed speech

perception performance. They often administer several different instruments in order to obtain a multidimensional profile of clients' speech perception skills (e.g., nonsense syllable tests, monosyllabic word tests, and sentence tests). When assessing clients' needs for communication strategies training, audiologists can also employ a test battery that might include structured interactions, simulated conversations, continuous discourse tracking, questionnaires, and home diaries. One pitfall in using a test battery approach is that the initial assessment of the client becomes time-consuming. Our experience suggests clients must perceive a program as providing benefit from its onset or they often withdraw.

Developing Training Procedures

There are at least three directions for future research with respect to training procedures. The first direction is to determine which procedures are likely to meet with client compliance. To this end, we must determine what is an appropriate program length, and what kinds of demands can be placed upon clients.

The second direction is to develop systematic procedures that will help clients generalize what they learn during training to real-world settings. Figure 1 presents one possible model that can be evaluated. This instructional model contains three components: formal instruction, guided learning, and real-world practice. During formal instruction, the audiologist defines communication strategies and presents examples, and clients complete workbook activities (e.g., they look at a room diagram and identify noise sources, Kaplan et al., 1985). During guided learning clients practice communication strategies in the clinic; for example, in conversations, skits, and role-playing. The audiologist models clients' behaviors and provides feedback and reinforcement. During real-world practice, clients interact with spouses or close friends at home, then with less familiar persons and in a variety of settings. They provide feedback to the audiologist through daily logs and checklists.

Once an instructional model such as that presented in Figure 1 has been shown to be feasible, systematic training procedures and materials must be developed. The procedures should be well-defined and amenable for use by audiologists

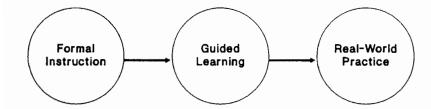


Figure 1. A model for teaching communication strategies. From Children with Cochlear Implants: A Handbook for Parents, Teachers, and Speech and Hearing Professionals (p. 138) by N. Tye-Murray, 1992. Washington, DC: Alexander Graham Bell Association for the Deaf. Copyright 1992 by N. Tye-Murray. Reprinted by permission.

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with varying talents and in a variety of clinical settings.

The final research direction with respect to training procedures is to develop programs that are economically viable, and realistic to offer in typical clinical settings. The typical audiologist has operating expenses; in all probability, communication strategies training will only be offered as a clinical service if audiologists do not lose money by providing it. Some audiologists face a dilemma in that communication strategies training can be labor-intensive, yet their clients feel they cannot justify tuition after purchasing a listening aid or an assistive device.

In achieving programs that are feasible, it may be helpful to consider how small business costs and break-even analyses procedures can guide program development. Business-oriented marketing and advertising strategies can help audiologists develop methods for informing clients about the availability and benefits of training. It may be that many persons with hearing impairment may be unaware that communication strategies are a powerful means to reduce communication difficulties. Future research can address the need for audiologists to educate their clients about benefits; and then, how to best create a desire in clients to receive communication strategies training. Other groups can also be targeted in an educational plan, including physicians, other health care workers, employers of persons with hearing-impaired workers, family counselors, vocational rehabilitation counselors, members of the American Association for Retired People (AARP), members of Self Help for the Hard of Hearing (SHHH), and professionals affiliated with local and state agencies for the aging or disabled.

Evaluating Benefits of Intervention

Audiologists might explore how single-subject experimental designs can be employed for comparing pre- and post-training measures. Some of the same indices that are used for assessing need for communication strategies training can be repeated following training. The difference between the two test sessions can indicate benefit. For example, in a continuous discourse tracking session prior to training, a client might only use the repeat repair strategy. Following training, the client might use a variety of repair strategies or a strategy that he or she has found particularly helpful during training.

Future research can determine whether psychological measures might also indicate benefit. Individuals with hearing impairments, particularly those who seek communication strategies training, often experience feelings of loneliness, depression, stress, and chronic fatigue. Knutson and Lansing (1990) conducted a study with adult subjects who had acquired profound hearing losses. Using the CPHI and standard self-report tests of psychological functioning, such as the UCLA Loneliness Scale (Russell, 1982), they related subjects' use of communication strategies to levels of depression, social anxiety, and social introversion. Clients who experienced psychological difficulties also evidenced poor personal accommodation and adjustment to hearing loss. The authors suggested "efforts to improve communication strategies in social and interpersonal

context as well as the adjustment to deafness, may be particularly important in addressing the psychological concomitants of an acquired profound hearing loss" (Knutson & Lansing, 1990, p. 661). If this is the case, then measures of psychological functioning might improve following communication strategies training (although see Abrahamson, 1991, described shortly).

In a similar vein, clients might provide information about efficacy by documenting their conversations in home, work, and social settings before and after communication strategies training. They can indicate their willingness to converse with familiar and unfamiliar persons. For example, clients might complete a daily log for seven consecutive days before and seven days following a communication strategies training program (see also Chapter 10). The daily log should document the number of activities the client engaged in, the kinds of activities, and the perceived quality of conversational interactions. On the basis of findings reported by Tye-Murray et al. (1992), clients who successfully complete a communication strategies training program should become more willing to participate in social functions and speak more often with unfamiliar persons. In a survey of members of SHHH, subjects who reported they were more likely to say nothing after misperceiving an utterance were also more likely to avoid social interactions. Those who were unlikely to use instructional and corrective strategies were less likely to interact with unfamiliar persons.

In assessing benefits, obtaining information from the client's family may be worthwhile. Family members can describe the client's use of facilitation and repair strategies before and after training. However, whether or not family members can reliably observe and report clients' communication behaviors must first be determined.

Finally, whereas it is desirable that objective means of assessing the success of conversational interactions be developed, the importance of other types of indices should not be overlooked. Clients' willingness to complete a program and their responses to a course evaluation form can provide important information about efficacy. For example, Abrahamson (1991) noted that 89% of the persons who began a communication training program completed it, and attendance rate was 85%. A total of seven groups have attended the program ranging in size from 6 to 22 individuals. This high participation rate suggests clients found the program beneficial. However, their scores for the Hearing Performance Inventory (Giolas, Owens, & Schubert, 1979), the Hearing Handicap Inventory for the Elderly (Ventry & Weinstein, 1982), and the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979) did not change as a result. Abrahamson (1991) concluded some traditional scales might not reflect training benefits. In future research, subjective measures of efficacy might be related to a greater variety of objective measures.

RESEARCH NEEDS FOR SPECIFIC COMMUNICATION STRATEGIES

In this section, research needs in relation to three facilitation strategies (attending, instructional, and anticipatory) and repair strategies are considered.

Attending Strategies

Assessment procedures are needed to identify those clients who tend to be unable or unwilling to surmise the meaning of a partially recognized utterance. Montgomery (1991) describes the Repeated Sentence Task (RST), which is one of the few attempts to address this issue. In the RST, the subject is presented with the same sentence up to 12 times. After each presentation, the subject must write down what he or she believes the talker said. The audiologist then examines the sequence of responses to determine whether the subject demonstrates any of the following characteristics: a tendency to fixate on the wrong choice, reluctance to identify words later in the sentence before identifying initial words, and a lack of confidence about words that were perceived correctly initially, as demonstrated by a tendency to change correct responses with repeated sentence presentations. Although the RST represents an important first step toward evaluating the need for training, procedures should be developed that would better reflect a typical communication task; one rarely hears the same sentence repeated 12 times consecutively.

Audiologists can develop training procedures that aim toward developing the client's ability to utilize linguistic and situational context cues, and encourage clients to relax when speechreading and to increase their willingness to guess (and perhaps to guess incorrectly). Presently, only a few training materials are available for this purpose (e.g., Kaplan et al., 1985; Trychin, 1987b, 1987c).

We might also attempt to quantify clients' willingness to guess, and relate the measures to their speech recognition skills. If we can demonstrate a significant relationship exists between guessing and speech recognition performance, we can better justify guessing training to clients, medical institutions, and third party health care providers.

Instructional Strategies

Almost by definition, instructional strategies hinge upon interpersonal relationships: in implementing instructional strategies, clients must interact with communication partners. Professional counselors have long assisted individuals in developing their interactive communication skills. In the future, audiologists can determine how to incorporate counseling theories and techniques into communication training programs that teach clients how to use instructional strategies.

An example will illustrate how counseling principles might be incorporated into a communication strategies training program. Family counselors often encourage family members to express their needs in a neutral and nonaccusatory way, without being apologetic. Needs may be expressed with "I-language" wherein the client expresses the request in the first person. Extrapolating these principles to teaching instructional strategy usage, the audiologist might encourage the client to say, "I can't understand you when you turn away (and if the communication partner is unfamiliar) because I have a hearing loss," as opposed to, "Please look at me when you are talking." With the first instruction, the

client seems to be saying, "This is my problem and the difficulty we are having with communication is not your fault. This is how you can help me." This first instruction also provides the unfamiliar communication partner with an explanation for why the client is using the instructional strategy. In contrast, the second instruction might be construed as a command by the communication partner, and even an accusation (as if the client were saying, "You're not looking at me and you should be"). Moreover, the communication partner may not realize why the instructional strategy is being used.

Counseling techniques can help transform instructional strategies from drawing board abstractions into workable communication tools. By identifying effective interactive communication skills and by learning how counselors develop their clients' skills, audiologists can refine their clients' ability to use instructional strategies (see also Trychin, 1987a).

Anticipatory Strategies

Anticipating vocabulary and utterances may not help the client speechread vocabulary or statements nor may they help him or her be less anxious during the actual conversational interaction (Tye-Murray, 1992c; Tye-Murray et al., 1992). One reason that some traditional anticipatory strategies may not be very useful lies in the nature of conversation: except for occasional ritual and phatic interactions, conversation is dynamic – unexpected twists and remarks occur, and these cannot be anticipated or predicted.

Future research might explore two new types of anticipatory strategies. In one new type of anticipatory strategy, the client views and hears an audiovisual enactment of the interaction (Tye-Murray, 1992b) or rehearses the interaction, say, by role-playing. For example, activities whereby the client speechreads in noise might facilitate communication during noisy social interactions. Speechreading one or many talkers seated at a conference table might help the client prepare for a business meeting or a family dinner gathering.

The effectiveness of this kind of strategy might be evaluated with questionnaires, interviews, or daily logs. For instance, items on questionnaires and daily logs could request clients to consider their apprehensions before an event, whether they thought about the simulations during the event, and whether they considered the practice beneficial.

Although the morphology of conversations is variable, participants often use similar procedures in initiating conversations, turn-taking, changing topics, and terminating. A second type of anticipatory strategy that can be developed and assessed is a strategy wherein clients anticipate events in the conversation, such as when the topic of discussion will change. By anticipating conversational events, clients might better follow the discussion. For instance, to initiate a topical transition, conversational participants may pause longer in between utterances, one or more of the participants may make several noncommittal contributions (e.g., "uh-huh" or "hmmmm"), the primary talker may increase the amount of eye contact with those who have been listening (Kendon, 1967), or one of

the participants may ask, "Okay?" or say "By the way, this reminds me of . . ." (West & Garcia, 1988).

Research can determine whether clients can become attuned to these signals of topical transitions. For instance, one research issue is whether it is possible for them to prepare to change mind set ("I have to think about something different now") and become alert for information signaling what the new topic will concern.

To develop this new type of anticipatory strategy, we must identify those rules of conversation that are fairly ubiquitous within a society, identify ways to direct clients' attention toward conversational regularities (perhaps with the use of audiovideo taped examples), and develop means by which clients' awareness of these rules and regularities can be used to facilitate their conversational interactions.

Repair Strategies

Even when clients use facilitation strategies, occasions still arise wherein they do not recognize a spoken message. In these instances, they can use repair strategies.

In order to consider research needs for repair strategies training, it is useful to consider first what happens when a client attempts to use a repair strategy. To begin with, the client must appreciate he or she misunderstood a message, either by recognizing this explicitly or by realizing one of his or her responses was inappropriate. (Occasionally, the client may not realize that a remark was misunderstood until much later in the conversation.) The client must then alert the talker and provide instructions about what to do next. Ideally, the client does this in a way that is not interpreted by the other conversational partners as being disruptive or uncooperative. In some cases, the use of a repair strategy might cause the conversation to stagnate or cause it to veer off in a different direction. The conversation may even meet an untimely ending, if the "shared perspective" amongst the conversational partners is lost (Myllyniemi, 1986, p. 155). The conversational partner then attempts to respond to the client's repair strategy. In some instances, many attempts must be made before the communication breakdown is resolved.

This description summarizes the typical course of communication breakdown and the process involved in repairing it. Let us now consider research issues.

The need to alert the communication partner usually requires the client to acknowledge a hearing loss. To do this, the client may have to overcome personal vanity and perceived social stigmas. Most clients are aware of the many stereotypes of persons with hearing impairments (e.g., Blood, Blood, & Danhauer, 1978; Danhauer, Johnson, Kasten, & Brimacombe, 1985; Hétu, Riverin, Getty, Lalande, & St-Cyr, 1990). These stereotypes include the following: persons with hearing impairments are difficult to communicate with, they are senile, they deserve pity, and/or they are elderly persons living in a youth-oriented society. As a result, most persons are reluctant to tell others of their hearing loss, and some overtly attempt to conceal it (Thomas & Herbst, 1980). One of

the greatest challenges for audiologists is to eradicate social stigmas. A grass roots public relations campaign may be effective, wherein audiologists make a concerted effort to educate the public and address clients' self-perceptions, perhaps through use of printed and electronic media.

Not only are perceptions about hearing loss influential, clients may be reluctant to alert the communication partner because they feel guilty and perhaps embarrassed about introducing difficulties into a conversation. With some exceptions, most conversational partners make an effort to ensure that a conversation is a pleasant and rewarding experience for all participants (Wardhaugh, 1985). When the client frequently halts the conversation to request clarifications, it may become less pleasant and rewarding for the communication partner(s). Many clients fear they will be perceived as uncooperative and troublesome. Empirical data provide some basis for this concern. Robinson and Reis (1989) found conversants who interrupted their communication partners were perceived as being less sociable than those who did not, and less feminine (which might have implications for encouraging women to use repair strategies). Gagné, Stelmacovich, and Yovetich (1991) found persons with hearing impairment were perceived more favorably when few communication breakdowns occurred. Research is needed about how the client might indicate gracefully a communication breakdown has occurred, when it is important for the client to alert the communication partner (which may not be always), and how long the client should attempt to repair a breakdown. Here again, audiologists might look toward the counseling literature for suggestions about how clients might develop their interpersonal communication skills to signal misunderstandings.

After alerting the communication partner, the client should request information. The client's selection of a particular repair strategy may hinge on several factors, including how useful a strategy has been in the past, how easily the client can use the strategy, how much of the message was understood, and the client's assessment of how well the communication partner might follow the instruction. Clients may differ as to which repair strategies they find helpful. Tye-Murray (1991) describes two subjects, one of who preferred elaborated messages and another who preferred rephrased messages. Future research can address whether there are signals available in a conversation that might help the client choose repair strategies, whether audiologists can determine which repair strategies are likely to be successful for a particular client, and whether clients can be taught to implement repair strategies more effectively.

The effectiveness of a repair strategy depends upon the communication partner's ability to follow the client's directive. For example, when asked to rephrase or elaborate a statement, some persons become verbose and lose their train of thought. In this case, the repair strategy is not helpful, and might even magnify the client's communication difficulties. Asking the communication partner to repeat an utterance may not provide the most useful information for the client (Gagné & Wyllie, 1989; Schum, Tye-Murray, Sobaski, Schum, & Kelsay, 1992), but it certainly requires the least amount of effort and skill on

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the part of the communication partner. Perhaps future research can assess how well typical communication partners can respond to clients' requests for specific types of repair strategies. Audiologists can also devise ways to teach frequent communication partners how to respond appropriately (see Chapter 10).

RESEARCH NEEDS FOR SPECIAL POPULATIONS

This final section considers special populations of persons with hearing impairment.

Children

There has been some interest in teaching children how to use receptive communication strategies. For example, Brinton (1990) presented a program that encourages children to use good listening behaviors (such as watching the talker, paying attention, attempting to identify the important points of a message). Tye-Murray (1992a) described communication strategies training for children with a cochlear implant. Prelingually deafened children who wear cochlear implants often do not appreciate the effects of poor environmental conditions or talker behaviors on their speechreading performance. This population may especially benefit from training in the use of instructional and corrective strategies.

Children with severe or profound hearing losses may benefit from expressive as well as receptive communication strategies training. Because of poor articulation and/or limited language skills, their conversational partners may often misunderstand them. Instruction can help make children aware of a variety of choices for repairing a communication breakdown when they are the talker, such as gesturing, writing, or rephrasing their messages (Elfenbein, 1992).

There are three hurdles to overcome in developing communication strategies training programs for children. First, methods are needed for explaining communication strategies in a comprehensible way. Elfenbein (1992) has demonstrated that role-playing and acting in skits may be effective training techniques.

The second hurdle is to identify communication strategies that are relevant to children's conversational activities. For example, children often talk with other children. When a child uses a communication strategy, such as asking a friend to speak clearly, will the friend (or the typical child) be able to understand and follow the directive? Research is needed to identify which communication strategies are needed by children, which strategies children with a hearing impairment can implement, and which strategies other children can comprehend.

The final hurdle in developing communication strategies training programs is to identify motivating and interesting materials and procedures. Children often have short attention spans, and some do not have the same enthusiasm as adults to participate in training.

Persons Who Use the Telephone

A communication strategies program may include instruction about using the telephone. Several training programs have been developed in the past decade

(e.g., Castle, 1988; Erber, 1985). Future research efforts can be directed toward assessing their efficacy. The needs of cochlear implant users might also be examined. We have noted that some adult clients who receive cochlear implants are timid about using the telephone, even though they may receive benefit from their devices. After many years of not using the telephone, some individuals need assistance in overcoming apprehensions and fears.

Persons Who Use Maladaptive Strategies

Some persons have developed maladaptive strategies for coping with communicative difficulties. Maladaptive strategies include the following: dominating the conversation to be ever aware of what is happening, ignoring the communication partner so the partner will repeat a message, bluffing and pretending to understand, and withdrawing from social interactions (Demorest & Erdman, 1986; Hallberg & Carlsson, 1991). Some individuals demonstrate maladaptive cognitive and physical responses to communication problems, such as anxiety and tension. Some individuals use negative anticipatory responses preceding an anxiety-provoking communication interaction; such as speaking to an employer (Trychin, 1987b, 1987c).

It is well within the purview of a communication strategies training program to aim toward altering these maladaptive strategies. However, how to determine whether a client uses maladaptive strategies and how to alter the client's behavior is problematic. For example, a strategy may be maladaptive in some circumstances but not others. Further research is needed to address these issues.

FINAL REMARKS

In the near future, audiologists can become more involved with their clients and better able to alleviate communication difficulties that may occur even after clients receive appropriate amplification. The efforts audiologists now devote toward developing communication strategies and assertiveness training will be rewarded in terms of the quality of their services and their career satisfaction.

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