

# Counseling Theories Applied to Fitting Hearing Losses

By Granville Y. Brady, Jr., AuD

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It is estimated that there are 28 million Americans with a hearing loss. More than 22 million have never tried hearing aids as a solution to their hearing loss.<sup>1</sup> Issues such as cost, fear that hearing aids will make the user feel old, and the perception that they don't work effectively have been cited as reasons why people do not get them. However, there is an emotional component about the decision to accept amplification that may not apply to other types of disabilities. Psychologist Michael Harvey's column, "What's on Your Mind?" (*Hearing Loss*, January–February 2004) discusses the stages a person may go through before making the decision to get help. Precontemplation, a lack of awareness of the problem, and contemplation, the ambivalence experienced when one weighs the pros and cons of getting hearing aids, are the first cognitive steps many people take. This is followed by the determination to accept a change and get hearing help.

The emotional components of the process leading up to hearing aid selection may take years to resolve before a person with a hearing loss seeks amplification. The final stage, determination to seek help, may never occur as many people with a treatable hearing loss go to their grave without getting help. How many times has a surviving spouse lamented, "I kept after Bob to get hearing aids but he was too vain to accept help?" This is a shame because it is avoidable. To believe that this behavior is tolerable is like accepting that a treatable disability should be ignored simply because the person with the disability is not aware that it exists. While the concept of denial may be one explanation for not seeking help, the reason for a lack of awareness of a hearing loss might have more to do with the perception of normal than anything else.

Humans are generally not aware of subtle changes in body function. For example, a sudden hearing loss is usually detected and acted upon immediately, whereas a gradual sensorineural hearing loss is insidious. Humans cannot objectively measure their level of hearing. The slow nature of hearing deterioration gives the person little feedback that the loss is getting worse. Because we are social creatures, we depend upon others to tell us when our hearing starts to fail. The problem is what our brain tells us often conflicts with reality. "If the rest of the world would just speak up" is a phrase often heard by hearing specialists. If our brain tells us we are normal, it is very difficult for an outsider to overcome this perception.

The result is that most people with significant hearing loss wait until the problem becomes so noticeable that their brain can no longer be fooled into believing everything is still normal. Family and friends who attempt to compensate for a hearing loss by repeating questions, increasing the volume of the voice, or tolerating a very loud television reinforce the sense of normalcy. As the problem gets worse the person is nagged, coerced, and badgered into "getting a hearing aid." It is understandable why the messenger, the hearing healthcare provider, is blamed for pushing a person into getting hearing aids. In fact, the person has likely been pushed for years and still may believe he or she has normal hearing because the brain has relatively little perception that the distortion of auditory stimuli is internal rather than external.

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Mr. Brady owns a private audiology–hearing aid dispensing practice in New Jersey. Correspondence: [drgranbrady@optonline.net](mailto:drgranbrady@optonline.net)

What, if anything, can be done to inform and motivate a person with a loss to accept help? The first consideration is the level of loss, both for intensity and for word recognition. As the overall pure tone thresholds approach 50–60 dB, the point at which conversational speech is presented, the more likely the person with a loss will become aware of it. It is not uncommon to hear a patient complain that their hearing was not too bad until recently when it became much more difficult to hear conversation. The other issue is how good word recognition is, not only in noise, but also for quiet speech. As speech becomes more difficult to discriminate a person may be more likely to seek help. Of course, the person's age, level of socialization, and physical condition are important variables.

Once a patient seeks help the need for a counseling process to take them from disability to ability is imperative. Counseling may take one or more of the following approaches: changing behavior, dealing with the emotional aspects of hearing loss, and coping with the changes in cognition that occur when hearing is deprived. Two counseling techniques used are *behaviorism*<sup>2</sup> and *phenomenology*.<sup>3</sup> A third approach, developed by Albert Ellis, seeks to combine behaviorism and phenomenology with known physiological principles.<sup>4</sup> This is often referred to as *cognitive counseling*. Although it is beyond the scope of this article to analyze each counseling theory as a psychotherapeutic tool, these approaches have a practical application for evaluating and fitting patients with amplification.

One widely accepted learning technique has been operant conditioning. Good behavior is reinforced and the more positive the behavior the more reinforcement is used until the behavior becomes habituated.<sup>5</sup> An example of operant conditioning applied to fitting a hearing aid occurs when an older patient can be motivated to use hearing aids if she receives a phone call each day from her daughter. The reinforcement is the positive attention from the daughter. The hearing aid, with an automatic telephone coil, enables the person to hear her daughter. Since the daughter does not always call at the same time the patient must use the hearing aids all day. After a few weeks, hearing aid use becomes habituated and the daughter may not need to call every day. In situations where the relatives live with the hearing aid user, positive reinforcement from being included in family activities is a strong motivator to use the instruments regularly.

Counseling based upon a theory developed by psychologist Carl Rogers (*phenomenology*) takes into account the emotional nature of language. A patient with a hearing loss becomes socially isolated. Use of amplification will allow for better social interaction. The patient is encouraged to use hearing aids because he or she feels more accepted by family and friends. Awareness of the hearing loss in this case is not a focus of counseling. The goal is to reduce the feelings of isolation and detachment from family and friends. The objective is to improve communication and encourage the patient to develop positive feelings. Amplification is simply a means to a positive end. The hearing professional counsels the patient to increase his or her involvement socially and emotionally and to keep a diary of experiences in various listening situations. The emphasis is

on developing improved self-worth and feelings of acceptance. Levine and others describe poor self-image and feelings of isolation characteristic of patients with hearing loss.<sup>6</sup> By improving self-image, the patient learns to depend upon hearing aids as a means to fulfill life's expectations. The goal is to counsel the person—not the disability.

Cognitive counseling attempts to modify the person's value systems, in this case related to hearing loss. By enhancing what could be achieved with better hearing as opposed to the negative thoughts about how the hearing loss impairs the ability to communicate, the patient is able to refocus his thinking to accept amplification. In essence the cognitive processes of the hearing impaired person are modified from a *negative-disability* model to a *positive-normal* model. Once the hearing aid wearer begins to modify his outlook on life, the social structures (family and friends) of society reinforce the person's cognition that he has improved. This might be the reason why many patients who use hearing aids become so happily dependent on them.

Combining emotional and cognitive approaches is another method to counsel patients. Hearing loss leads to distortion of the signal, which impairs cognitive function. Neural plasticity of the auditory nervous system is facilitated when the patient is introduced to amplification. By increasing the stimulus in several steps, often referred to as acclimatization, the patient is able to adapt to hearing aids. Cognitive improvement, coupled with a better self-image and more confidence in a listening situation, allows the patient to habituate hearing aid use with a minimum of difficulty. In this case, the hearing healthcare professional supplements counseling with a shaping strategy. The hearing instruments are programmed in such a way as to give minimal change initially. The patient can detect the changes in hearing but is not overloaded to the point where the change is uncomfortable. This is not to be confused with uncomfortable loudness levels, which are unacceptable. The changes that occur when the hearing aids are activated allow the patient to *hear better* without violating the brain's perception that the sounds are unacceptably different. Programming hearing aids to approximate the patient's just noticeable difference (JND) takes into account the human's ability to detect the smallest changes in frequency or intensity that can be recognized. This is not to be confused with recruitment, which sometimes is found in sensorineural hearing loss and results in a disproportionate increase in the sensation of loudness.<sup>7</sup> Most high-end digital hearing aid programs have the capability to make minute changes that assist in the patient's ability to improve hearing without causing any discomfort.

By working with and not against the JND, the patient's perceptions of improvement are shaped slowly enough for the auditory nervous system to change without becoming consciously annoying to the hearing aid user. Since the plasticity of the auditory nervous system is variable and not static, changes in amplitude and signal frequency from one time to the other are barely noticed by the patient.

Evidence of the human's poor visual and auditory memory is evident when witnesses to a crime or accident are

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**1. According to psychologist Michael Harvey, a person who decides to get hearing aids is often at which stage in the decision-making process?**

- a. lack of awareness of the hearing loss
- b. ambivalence
- c. rejection of the thought of hearing aids
- d. determination to accept a change and get hearing help

**2. Which condition is most likely to trigger immediate action?**

- a. mild ear infection with aural fullness and no pain
- b. sudden idiopathic unilateral hearing loss
- c. gradual bilateral sensorineural hearing loss
- d. mixed hearing loss resulting from otosclerosis

**3. At what level in decibels is normal conversational speech usually presented?**

- a. 50–60 dB HL
- b. 15–25 dB HL
- c. above 80 dB HL
- d. at the SRT level

**4. Psychologist B. F. Skinner is remembered for:**

- a. teaching dogs to salivate when a stimulus is presented
- b. using positive reinforcement as a way to change behavior
- c. discovering the concept of the ego
- d. teaching the interpretation of dreams

**5. Reducing the feelings of isolation caused by a hearing loss is associated with the work of:**

- a. Sigmund Freud
- b. Dr. Joyce Brothers
- c. Carl Rogers
- d. Dr. Phil

**6. What is the term for the subtle physiological changes made by the auditory nervous system in accepting amplification?**

- a. neural plasticity
- b. habituation
- c. JND
- d. none of the above

**7. Cognitive counseling seeks to:**

- a. allow the hearing aid wearer to determine the type of instruments best suited for the loss
- b. give visual input through real-ear measures to set the hearing aids to the best level
- c. combine behaviorism and phenomenology with known physiological principles
- d. utilize a multisensory approach in fitting hearing aids

**8. A method which allows a person to adjust to amplification is to:**

- a. utilize the concept of JND
- b. gradually increase the gain/output to allow for the patients to acclimate to amplification
- c. set the instruments at the highest output and reduce the gain/output after the instruments have been worn for several weeks
- d. a and b

**9. One technique for encouraging hearing aid use might be to have a relative call the hearing aid user at different times of the day. This is an example of:**

- a. positive reinforcement
- b. monitoring the hearing aid wearer to be sure the aids are being used
- c. operant conditioning
- d. a, b, and c

**10. By enhancing the benefits of amplification as opposed to the negatives, the patient is:**

- a. refocusing his thinking to accept amplification
- b. overcoming the masking effects of ambient noise
- c. being influenced by advertising meant to be deceptive
- d. trying to put on the best show for the family who insists on the use of amplification

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