

Chapter 18

**Models of Health Behaviors and Compliance:  
Applications to  
Audiological Rehabilitation Research**

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**Abstract**

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The goal of the present chapter is to indicate how theoretical models can improve research and practice in audiological rehabilitation. In this chapter, we provide a comprehensive analysis of theoretical approaches to studying health-seeking behaviors and compliance. Specifically, The Health Belief Model and the Theory of Reasoned Action are reviewed in the context of their applicability to audiological rehabilitation. To date, these theoretical models, as well as the determinants of compliance and health-seeking behaviors, have not been given much consideration in audiological rehabilitation research. Such theoretical models and the major constructs reviewed in this chapter could be instrumental in the development and validation of existing hearing health care models.

### **THEORY, RESEARCH, AND CLINICAL PRACTICE**

The scope of the present monograph attests to the fact that audiological rehabilitation is a broad topic that covers many disciplines and areas of research. Historically, audiological rehabilitation evolved mainly from experimental psychology and physical sciences. Consequently, research in audiological rehabilitation often has a very narrow scope and perspective. Studies are designed to investigate very specific issues. In many instances, however, the research questions being addressed are related to much broader theoretical issues or principles of behavior.

Theory can be important in health-related disciplines, although it has not always played a prominent role in health research. McQueen (1988) stated that "research in health-related behavior has suffered particularly from a lack of theory . . . [resulting] in an enormous data-set which, when exclusively manipulated or massaged, yield many statistically significant correlations, but proves very little" (p. 252). Presently, there are few theories (conceptual frameworks) available to guide clinical practice and research initiatives in many areas of audiological rehabilitation (one remarkable exception to this statement is presented in Chapter 17: Hyde & Riko, 1994). Even such fundamental issues as the meaning and use of terminology such as disability and handicap are still being debated within the field (Giolas, 1990; Stephens & Héту, 1991). There is little doubt that the rate and scope of new developments in audiological rehabilitation could be enhanced through the: (a) incorporation of theories (including those from other disciplines) into the design of clinical and research programs, and (b) development of new theoretical frameworks based on the present state of knowledge in many areas of audiological rehabilitation and related disciplines. The objective of the present chapter is to illustrate the benefits of considering theoretical models when designing research in audiological rehabilitation.

In health sciences, as well as in social and behavioral sciences, theory is a term that is used quite liberally and most theories would be more appropriately classified as either taxonomies or conceptual frameworks. In this chapter, the term theory (and theoretical model) will be used to represent a conceptual framework. Traditionally, clinical research has been atheoretical. The present chapter will focus on a few selected theories of health behavior that we believe are most relevant to research and practice in audiological rehabilitation. These theories

take into account factors such as personal attributes (e.g., beliefs, expectations, motives, values) and overt behavior. The concepts described by health behavior models apply to many clinical and research aspects of audiological rehabilitation. For example, the theories address the roles that psychological, social, and behavioral factors may play in a person's decision to seek (or decline) audiological rehabilitative services. Also, the theories address factors that might determine whether a client will comply with the recommended rehabilitative regimens (e.g., purchasing and wearing a hearing aid; applying newly learnt communication strategies). We believe that a theoretically-based approach to research may have a positive impact on the manner in which future work in rehabilitative audiology is conceived, designed, conducted, reported, and interpreted. Moreover, clinical services and research initiatives based on sound theories and models would contribute to more rapid and systematic developments in audiological rehabilitation.

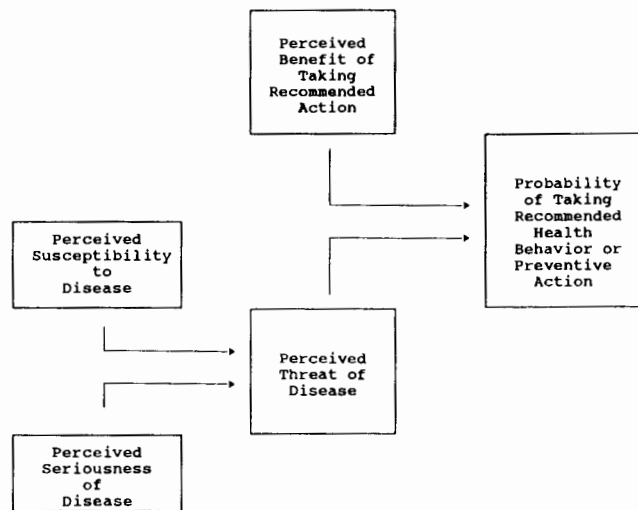
### THE HEALTH BELIEF MODEL

The Health Belief Model was developed to predict participation in health prevention or detection programs (Becker, 1974; Hochbaum, 1958; Kirscht, 1974; Rosenstock, 1960, 1974a, 1974b; Rosenstock & Kirscht, 1979). The Health Belief Model is based on cognitive theories of behavior. Cognitive theorists believe that behavior is contingent upon: (a) the value that an individual places on a desired outcome, and (b) the belief that a behavior, if performed, will result in the desired outcome (Bandura, 1977; Lewin, 1961; Lewin, Dembo, Festinger, & Sears, 1944). Based on these theoretical contingencies, the Health Belief Model consists of a synthesis of psychological theories of "value-expectancy" and "decision-making" (Cleary, 1986; Maiman & Becker, 1974). According to the Health Belief Model (see Figure 1), a range of health behaviors can be predicted based on information from several primary behavioral determinants: *perceived threat* of disease or illness, *perceived benefits/barriers* associated with engaging in a behavior, and *self-efficacy*.

#### *Perceived Threat*

Perceived threat is a function of two perceptual components: perceived susceptibility and severity.

*Perceived susceptibility.* Perceived susceptibility refers to an individual's judgment of their risk of contracting a health problem. If the problem has been diagnosed, then perceived susceptibility is interpreted as the likelihood that a diagnosis is accepted, or perceptions that general health problems could occur, or that a recurrence or worsening of the illness or disability is possible. According to the Health Belief Model, the likelihood of engaging in appropriate health behavior increases as the level of perceived susceptibility increases. For example, people would be more likely to seek out audiological screening services if they believed that they were susceptible of developing a hearing loss. Furthermore, the likelihood that a person will agree to wear a prescribed hearing aid



**Figure 1.** The "Health Belief Model" explaining personal health behavior (modified from Rosenstock, 1974b).

would be expected to increase once the individual accepts the diagnosis and recognizes that they are not immune to the communication problems associated with hearing loss.

*Perceived severity.* Perceived severity refers to the subjective evaluation of the likelihood that an illness or disability, if contracted or left untreated, will have severe consequences such as pain, death, handicap, or reduced quality of life in general. In the context of audiological rehabilitation, willingness to seek hearing health care services would depend not only on perceptions of susceptibility to hearing loss, but also on personal evaluations of the seriousness of the consequences associated with hearing loss.

#### *Perceived Benefits/Barriers*

Although *perceived threat* (a function of perceived susceptibility and severity) is an adequate predictor of engagement in preventive health behaviors (Hochbaum, 1958), assessments of *perceived benefits and barriers* associated with the behavior have been reported to increase the explanatory power of the model (Rosenstock, 1974a, 1974b, 1990). Rosenstock argues that perceived threat may prompt an individual to take action, but that an individual's choice of behavioral options depends on their perceptions of benefits (i.e., effectiveness of the behavior in reducing the threat of illness) and barriers (i.e., obstacles or negative outcomes such as expense, pain, inconvenience, etc.) associated with the available recommendations. Therefore, a "cost-benefit analysis" allows an individual to evaluate the "outcome expectations" and assess whether the ex-

pected benefits or positive outcomes of a behavior outweigh the perceived expenditures incurred by engaging in the behavior (Rosenstock, 1974a, 1974b). Compliance with recommended health behaviors is impeded to the extent that perceived barriers outweigh perceived benefits that would result from engaging in the behavior.

### *Self-Efficacy*

Finally, the concept of self-efficacy (Bandura, 1977, 1982, 1986) has recently been incorporated into the Health Belief Model (Rosenstock, Strecher, & Becker, 1988). Self-efficacy refers to "beliefs in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands" (Bandura, Cioffi, Taylor, & Brouillard, 1988, p. 479). The Health Belief Model was originally designed to assess participation in simple, one-trial, preventive health behaviors like going for screening examinations. As such, self-efficacy was not thought to be an important component of the model. Self-efficacy becomes an issue for such difficult behaviors as altering smoking, drinking, exercising, and eating habits which entail long-term modifications in life-style and require confidence in one's ability to execute such changes. In sum, the Health Belief Model maintains that for successful behavioral change to occur

People must (as the original Health Belief Model theorizes) feel threatened by their current behavioral patterns (perceived susceptibility and severity) and believe that change of a specific kind will be beneficial by resulting in a valued outcome at acceptable cost, but they must also feel themselves competent (self-efficacious) to implement that change. (Rosenstock, 1990, p. 45)

The Health Belief Model has been one of the most useful paradigms for investigating health-related behaviors (Janz & Becker, 1984). There have been, however, several important criticisms levelled against the model that should be noted. First, very little work has gone toward quantification of the relations among the variables comprising the Health Belief Model (Rosenstock, 1990). For example, there has been virtually no attempt to delineate the precise, numerical relations among perceived susceptibility, severity, benefits, barriers, and self-efficacy. Nor has there been any attempt to determine the relative power of these variables in the prediction of actual health behavior. Apart from failing to assign numerical coefficients to the variables comprising the Health Belief Model, researchers have not endeavored to explain the nature of any mathematical relations that might exist among these variables (i.e., multiplicative or additive).

Second, the Health Belief Model focuses on perceptual factors such as beliefs, and fails to account for variance in behavior that might be due to such salient factors as personal habits and social-cultural norms. Hence, the underlying premise "that health behavior is rational and that people usually attempt to maximize a value expectancy function" (Cleary, 1986, p. 344) is problematic. Clearly, such health behaviors as smoking and toothbrushing consist of a

habitual component that cannot be explained by rational processes of decision-making (Rosenstock, 1990). Rosenstock also notes that social norms established within a culture or subculture could exert an important influence on behavior. For example, an individual might decide to follow a diet, exercise, or stop smoking because of a desire to gain social approval or popularity rather than improve their health.

A third criticism of the Health Belief Model is the lack of uniformity of the belief-behavior relation (Rosenstock, 1990). In their research review on the Health Belief Model, Janz and Becker (1984) reported that beliefs predict behavioral outcomes. However, there is little evidence that beliefs are sufficient for predicting behaviors (Ajzen & Fishbein, 1977; Fishbein, 1963; Fishbein & Ajzen, 1975). In the next section, we present a more quantified theory that provides a more precise delineation of the relation between beliefs and behaviors.

### THE THEORY OF REASONED ACTION

The Theory of Reasoned Action (see Figure 2) was developed in an attempt to explain the relations among *personal attitudes*, *social norms*, and *behavioral intentions and behaviors* (Fishbein & Ajzen, 1975). The model maintains that the most immediate and powerful predictor of behavior is behavioral intention to engage, or not engage, in a particular activity (Fishbein, 1979). The Theory of Reasoned Action also specifies that the strength of an individual's intention to carry out a specific behavior is a function of *personal attitudes* as well as *subjective and cultural norms*. The probability that an individual will intend to engage in a specific behavior increases if that behavior is viewed favorably (personal attitude) and if one perceives that significant others approve of the behavior (social norms). Studies have shown that both attitudes and subjective norms are good, unique predictors of behavioral intentions (Ajzen & Fishbein, 1969; Davidson & Jaccard, 1979; DeVries & Ajzen, 1971; Fishbein & Coombs, 1974; Jaccard & Davidson, 1972).

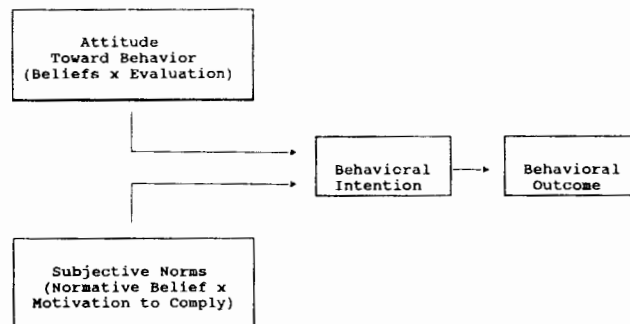


Figure 2. The "Theory of Reasoned Action" (after Fishbein & Ajzen, 1975).

### *Personal Attitudes*

According to the Theory of Reasoned Action, attitude toward a behavior is a function of two components: *belief* and *evaluation*. The former refers to a person's expectations concerning the outcome of performing certain behaviors (an outcome can be either highly probable or unlikely). The latter alludes to the personal evaluation of the desirability of the expected outcomes. Assessing beliefs and evaluations on a bipolar scale allows formation of positive attitudes toward the anticipated behavior when (a) highly probable consequences are evaluated positively or are desirable, or (b) unlikely consequences are evaluated negatively or are undesirable. For example, individuals are more likely to hold a positive attitude toward the behavior of requesting clarifications during a conversation if responses (i.e., outcome) to such a request are both highly probable (i.e., the conversational partner is likely to comply with the request of providing clarifications) and desirable (i.e., enhanced communication through clarification is a desirable outcome). There is evidence that both beliefs and evaluations are better at predicting attitudes than either one alone. For example, in a study of racism, the power of attitude (in predicting behavioral intention) was greatest when it was measured as a cross-product of beliefs and evaluations ( $r = .80$ ), compared to its power when it was obtained by either the belief ( $r = .65$ ) or the evaluation ( $r = .47$ ) component alone (Fishbein, 1963).

### *Subjective Norms*

Subjective norms also predict behavioral intentions. Subjective norms refer to an individual's perception of social norms concerning a specific behavior. A person will rely on subjective norms to evaluate or determine whether or not it is socially acceptable to engage in a particular behavior. The subjective norm is a function of two components: *normative beliefs* and *motivation to comply*. A normative belief is a subjective evaluation of the extent to which performance of a behavior is endorsed and supported by members of reference groups. When assessing subjective norms, levels of normative belief are weighted (multiplied) by levels of expressed willingness or motivation to comply with the perceived norms expressed by members of reference groups or significant others (Bowman & Fishbein, 1978). For example, a person's decision to wear a hearing aid would be dependent on the interaction of two factors: (a) *normative belief*: the subjective evaluation of the importance placed on the behavior by significant others (i.e., "How would my colleagues react to my wearing a hearing aid?") and (b) *motivation to comply*: the importance that the individual places on complying with the norms expressed by significant others (i.e., "How important is it for me to comply with the wishes expressed by my colleagues?"). It is interesting to note that recent investigations have revealed that the perceived reactions of colleagues was an important reason used to explain why many individuals with an occupational hearing loss refused to admit that they had a hearing problem and why they rejected hearing aids (R. Héту & L. Getty, personal communication, 1993).

*Behavioral Intentions and Behaviors*

The Theory of Reasoned Action has generated much research and has been instrumental in elucidating the determinants of behavior. There are, however, some fundamental issues regarding the strength of the association between behavioral intentions and behaviors that need to be resolved. For example, behavioral intentions could possibly change between the time that they are assessed and the time that the actual behaviors are observed (Ajzen & Madden, 1986). The accuracy of behavioral predictions seems to be an inverse function of time such that the longer the interval between measurement of behavioral intentions and observation of the behavior of interest, the more likely it is that intentions may have changed as a result of unanticipated occurrences. A second issue is one of specificity. Measures of behavioral intention must be specific to (or match) the behavior being predicted (for a more elaborate discussion of this issue see: Ajzen, 1982; Ajzen & Fishbein, 1977). Most importantly, an underlying assumption of the Theory of Reasoned Action is that the relevant behavior is under complete volitional control (Fishbein & Ajzen, 1975). A behavior is not under an individual's volitional control if it is impeded by such internal factors as inadequate skills or such external factors as lack of time and financial resources.

*The Issue of Volitional Control*

One of the underlying assumptions of the Theory of Reasoned Action is that individuals are generally rational decision-makers who engage in the systematic processing of information. As such the theory is inadequate for predicting behaviors that are not under one's volitional control. *The Theory of Planned Behavior* (Ajzen, 1985; Schifter & Ajzen, 1985) is an extension of the Theory of Reasoned Action and addresses the issue of volitional control. This consideration is crucial because even apparently simple behaviors, such as wearing a hearing aid, may be subject to the influence of factors that are beyond personal control (e.g., cost, accessibility to audiological services). The importance of control becomes more evident when people try to subdue a habitual behavior such as smoking, drinking, or poor pragmatic communication skills.

The Theory of Planned Behavior emphasizes the importance of volitional control for predicting behavior. However, it is rarely possible to assess actual control over a desired behavior. For example, internal factors such as ability or skill cannot be adequately assessed until the individual actually engages in the behavior in question. Therefore, the variable of interest would be "perceived behavioral control" which is a person's assessment of the likelihood that they can perform the behavior. Perceived control over a behavior should be high when an individual perceives few obstacles (internal and external) to performing the behavior. Perceived behavioral control can be based on observations of the experiences of significant others (e.g., "my grandfather had a hearing aid and he could never get used to it." or "My neighbor has a wireless loop system for



her television and she loves it.”) as much as it can be influenced by personal experiences.

Bandura's work (1977, 1982, 1986) on self-efficacy is relevant to the Theory of Planned Behavior. There is evidence that a person's confidence in their ability to perform a behavior (self-efficacy or perceived behavioral control) influences whether they engage in that behavior (Bandura, Adams, & Beyer, 1977; Bandura, Adams, Hardy, & Howells, 1980). To this extent, Rotter's (1966) construct of internal-external locus of control has prompted much of the interest in perceived behavioral control and the construct has been used successfully to predict health behaviors (Lefcourt, 1982; Strickland, 1978).

Empirical research clearly suggests that the most accurate predictions of behavior are made when *both* volitional control and behavioral intentions are considered (Ajzen & Madden, 1986). If, however, the behavior of interest is under complete control, then perceived behavioral control would not account for variance in behavior prediction and the Theory of Planned Behavior would not have any more predictive power than the Theory of Reasoned Action. An important consideration in the Theory of Planned Behavior is that perceptions of control must be somewhat accurate. Perceived behavioral control will not be a good predictor of behavior if there is a large discrepancy between perceived and actual levels of control.

Ajzen and Madden (1986) tested the Theory of Planned Behavior and found that perceived behavioral control was a good predictor of behavior even when the effects of attitude, subjective norms, and behavioral intentions were controlled. Moreover, as mentioned above, behavioral prediction was accurate only when the behavior of interest was not under complete volitional control, and when there were no important discrepancies between perceived and actual behavioral control. The investigation reported by Ajzen and Madden (1986) provided evidence that the Theory of Planned Behavior resulted in better prediction of behavioral intentions and behavior than did the Theory of Reasoned Action, and that the improvement in prediction may be attributable to the inclusion of “perceived volitional control” to models of behavior prediction.

#### **APPLICATION OF THEORIES TO HEARING HEALTH CARE RESEARCH**

One objective of the present chapter was to discuss factors that might explain why individuals engage in, and adhere to, specified health regimens. In this section, we attempt to identify several factors, including some elements (constructs) of the theories described previously in this chapter, that might be useful to audiologists in predicting health-seeking behaviors, as well as compliance with prescribed rehabilitation regimens, and adherence to relevant health behaviors. These predictors include attitudes, subjective norms, knowledge about a behavior, as well as perceptions of susceptibility, severity, benefits, barriers, and self-efficacy. According to The Theory of Reasoned Action, it is important

to have information about attitudes and social norms in order to predict behavior. The issue of volitional control, addressed in *The Theory of Planned Behavior*, is also an important determinant in predicting health behaviors. Finally, variables such as perceived susceptibility, severity, benefits, barriers, and self-efficacy, which are part of *The Health Belief Model*, should be considered in attempting to predict health-seeking behavior.

#### *Overcoming Barriers to Health Behavior*

**Knowledge.** Lack of knowledge about health-promoting behaviors is a factor that interferes with intentions to engage in health-seeking behavior (Leventhal, Singer, & Jones, 1965; Olson, 1992). Presumably many individuals who could benefit from audiological rehabilitative services do not seek out those services because: (a) they do not know that hearing health care professionals are available to provide such services, and (b) even if they are aware of the availability of such services, they do not know how to go about obtaining them. Also, knowledge will have an effect on whether an individual will comply with a recommended treatment. For example, a person may know that they should wear a hearing aid, but they may be less likely to comply with this recommendation if they do not know how to operate, maintain, and troubleshoot their hearing aid. Hence, the importance of informational counseling and training services in audiological rehabilitation programs. Indeed, Strecher, DeVellis, Becker, and Rosenstock (1986) reported that there are substantial benefits related to providing individuals with information that will reduce the complexity of behavior and thus make the behavior easier (and more likely) to be executed. It would be of interest to systematically quantify the importance of this concept of knowledge to various aspects of rehabilitative audiology. For example, relative to some of the other factors mentioned in this chapter, what is the importance of knowledge of how to operate a hearing aid in a person's decision to wear (or not to wear) their hearing aid?

**Attitudes.** Attitudes also predict behavioral intention. It is, however, very difficult to change attitudes directly because attitudes fulfill certain needs (see: Katz, 1960). Also "it has long been an embarrassment to attitude researchers . . . that millions of Americans can agree that it is very likely . . . that smoking increases the risk of lung cancer . . . but yet continue to smoke" (Petty & Cacioppo, 1981, p. 199). An explanation for this might lie in peoples' belief systems. For example, to the extent that smokers believe that such negative consequences as nervousness and weight gain are likely to occur if they stop smoking, the immediate consequences of smoking relative to not smoking are evaluated more positively and an individual is not likely to stop smoking (Fishbein, 1980). Therefore, in order to change attitudes that hinder health-seeking behavioral intentions, an attempt must be made to change an individual's beliefs about the consequences of a behavior (Olson & Zanna, 1987). There is obviously no need to promote the positive consequences of good health because people supposedly enjoy being healthy. Olson and Zanna (1987) point out,

however, that an individual can have a positive attitude toward something in general (i.e., good health) without necessarily engaging in behaviors that would help them achieve it. Therefore, beliefs about behaviors that are necessary to achieve good health must be promoted: one can promote either the positive consequences of engaging in health behaviors or the negative consequences of not engaging in health behaviors (Olson & Zanna, 1987). This suggests that there is no need to promote the fact that wearing a hearing aid will improve audibility since most people believe that being able to hear and communicate easily is better than not being able to hear and communicate. Rather, it may be more beneficial to emphasize the positive consequences of amplification. For example, it may be wise to emphasize the fact that purchasing a hearing aid will reduce social isolation and optimize communication with frequent communication partners (i.e., “you will be able to understand what your grandchildren are saying much better”). Also, clinicians may want to minimize the negative consequences of wearing a hearing aid (e.g., it may be better to be recognized as someone with a hearing problem than to be perceived by others as being stupid or anti-social).

*Subjective norms.* Altering subjective norms is another method that can be used to change behavioral intentions. Perceptions of social pressure to engage in a behavior could alter behavioral intentions. Studies have shown that attitudes of others is a reason invoked for not purchasing a hearing aid (e.g., Fino, Bess, & Lichtenstein, 1992; Gleitman, Goldstein, & Binnie, 1993). If an individual feels that significant others (e.g., family members, friends, doctor) want them to engage in a behavior, then they are more likely to engage in that behavior (Fishbein & Ajzen, 1975). Also, social support is thought to be related to adherence to clinical recommendations (Black, Glesser, & Kooyers, 1990; Cohen, 1988; Meichenbaum & Turk, 1987; Norman, 1986; Olson & Zanna, 1982, 1987; Taylor, 1990). That is, while personal attitudes may be weighted more heavily in the decision to engage in a behavior initially, it may be that social support determines whether a person maintains the behavior. For example, a client is more likely to complete a group communication therapy program if the spouse also attends and actively participates in the program (Hétu & Getty, 1991; Tye-Murray & Schum, 1994).

*Perceived threat: susceptibility and severity.* A potential barrier to the intention of seeking out health-care is the perception that one is not susceptible to the illness in question (Blalock, DeVellis, Afifi, & Sandler, 1990; Burger & Burns, 1988; Weinstein, 1983, 1987). Lack of symptomatology is often associated with such perceptions and impedes help-seeking behavior. Typically, an acquired hearing loss develops gradually over a period of years. The communication problems associated with the hearing loss also develop gradually. Moreover, an individual may not realize the extent of the problem because occurrences of communication breakdowns are usually intermittent and inconsistent. That is, conversation may be fluent and successful during one-on-one interactions that take place with familiar communication partners and in a relatively

quiet setting. However, several factors can have a negative impact on communication (e.g., variables related to the sender, the message, or the environment). An individual is not likely to seek rehabilitative services unless they are: (a) aware of the occurrence of communication breakdowns related to their hearing loss, (b) knowledgeable that there are logical explanations for the inconsistencies in the communication breakdowns they experience, and (c) aware that communication problems associated with a hearing loss can have deleterious effects on their social and emotional well being (R. Héту & L. Getty, personal communication, 1993).

Given the importance of the perceptions of susceptibility and severity on health-seeking behavior, investigators must acknowledge these issues when trying to understand and predict whether individuals will seek and comply with health behaviors. For example, it may be of interest to assess perceptions of susceptibility and severity among individuals with a hearing impairment who refuse to wear a hearing aid. Also, information and public awareness messages about the signs of hearing loss and hearing loss related communication problems might serve several important functions: (a) inform the public of the causes of hearing loss in an attempt to make salient to individuals that they too can be susceptible to a hearing loss, (b) describe the effects of hearing loss on everyday communication, (c) identify individuals who could benefit from audiological services, and (d) sensitize the general population to the communication problems that may accompany a hearing loss.

*Perceived benefits and barriers.* According to the Health Belief Model, in the process of deciding whether or not to engage in a behavior (e.g., treatment program) clients will complete a form of "cost-benefit analysis." An individual is likely to disregard a proposed treatment program if the perceived costs of taking part in the program exceed the perceived benefits associated with doing so. A benefit of seeking out hearing health care services might be that the threat of illness/disability would be reduced and the quality of life would be enhanced through improved communication. However, there may be costs, other than monetary ones, associated with performing the behavior. Time required to attend rehabilitation classes or therapy, and social or cultural stigma attached to hearing loss are among the important factors that might prevent an individual from seeking audiological rehabilitative services.

*Perceptions of control.* Recall from the discussions on The Health Belief Model and The Theory of Planned Behavior that the perception of control over performing a given behavior plays an important role in determining whether an individual will engage in a behavior. Self-efficacy theorists contend that a person's confidence in their ability to perform a behavior (self-efficacy or perceived behavioral control) will influence whether they engage in that behavior (Bandura et al., 1977; Bandura et al., 1980). If a person lacks the ability, skill, or knowledge to engage in a behavior, then their perceived self-efficacy for performing that behavior would be low which in turn would weaken behavioral intentions to engage in that behavior. For example, elderly individuals with poor manual

dexterity may not want to wear a hearing aid because of their inability to take care of and maintain the hearing aid. Similarly, a person may choose not to use assertive repair strategies because they feel that they do not have sufficient knowledge about how to apply them to everyday conversations.

### CONCLUSION

In this chapter, the main goal was to provide a comprehensive discussion of how behavior prediction theories may apply to research in audiological rehabilitation. To date, these models have not been widely applied to research in audiological rehabilitation. Such theoretical frameworks would be instrumental to the development and the validation of comprehensive clinical and research programs in hearing health care. In many cases, previously published data could be re-interpreted within a framework of the theoretical models presented in this chapter. Theories could also serve a heuristic purpose in that many new research ideas could be generated to assess the efficacy of existing clinical practices.

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