The Journal of Extension

Volume 40 | Number 6 Article 8

12-1-2002

Beyond Knowledge: Guidelines for Effective Health Promotion Messages

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December 2002 // Volume 40 // Number 6 // Feature Articles // 6FEA7

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Beyond Knowledge: Guidelines for Effective Health Promotion Messages

Abstract
Knowledge does not always result in the adoption of recommended behaviors that can prevent or detect illness. This article synthesizes the research of psychologists, health advocates, and other social scientists to identify the factors other than knowledge that influence decisions regarding healthful behaviors. The article also presents guidelines to help Extension personnel optimize messages and programs designed to encourage preventive health behaviors based on findings concerning (a) perceptions of risks; (b) perceptions of self; (c) environmental conditions, both physical and social; and (d) perceptions of costs and benefits of recommended behavior.

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Introduction

Why are recommended health-promoting behaviors so often rejected? A common response to this question is "lack of education." Conventional wisdom holds that knowledge levels should correlate with adaptive preventive health behaviors. Thus, health advocates spend much time and effort optimizing message design, presentation, and distribution to share knowledge effectively with publics. However, many cases exist in which knowledge does not result in the adoption of healthful behaviors.

Reconciling the paradox presented when knowledge does not translate into logical behavioral outcomes can be difficult--and frustrating. Fortunately, psychologists, health advocates, and behavioral scientists have conducted research that identities factors other than knowledge that are likely to influence preventive health behavior adoption. This article synthesizes that literature, examines the factors influencing adoption of healthful behaviors, and develops guidelines to help Extension personnel optimize messages and programs designed to encourage healthful activities.

Four factors emerged from the current review of literature addressing why people adopt or reject recommended preventive health behaviors. They are:

1. Perceptions of risks;
2. Perceptions of self;
3. Environmental conditions, both physical and social; and
4. Perceptions of costs and benefits of recommendations.

To say that these four factors exhaustively cover all factors contributing to preventive health compliance would be an oversimplification. However, the four factors provide strong foundations for developing guidelines that enrich the design of preventive health campaigns and for increasing the likelihood that individuals adopt healthful behaviors.

It is also important to acknowledge overtly that this synthesis specifically examines factors associated with preventive health behaviors, meaning activities undertaken by people who believe

themselves to be healthy for the purpose of preventing or detecting illness in an asymptomatic stage (Quah, 1986). Preventive health behaviors are distinct from sickrole behaviors, which are actions taken after symptoms are diagnosed. Furthermore, this work assumes that message consumers are active, interpreting, choosing individuals rather than passive absorbers of messages. Rejection of recommended behaviors is conceptualized as an expression of the individual's own health beliefs and values.

Factors Affecting the Adopting of Healthful Behaviors

Perceptions of Risks

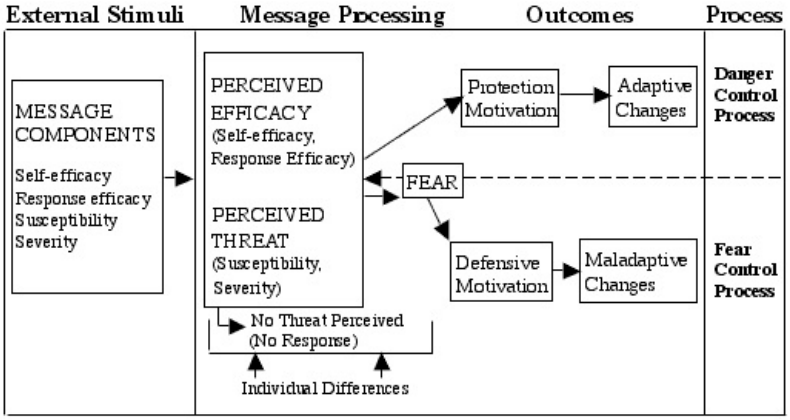
Perceptions of risks are a well-established factor associated with preventive health behaviors. Several health communication models explicitly consider perceptions of risk to be a determinate of preventive health behaviors. Generally speaking, when risk perceptions are low, people are unmotivated to change preexisting behavioral patterns. However, the relationship between perceptions of risks and adaptive responses is not linear. Excessive risk perceptions may lead to fatalistic or avoidance behaviors. Strong fears about cancer, for example, may lead one to delay consulting a physician and, therefore, miss opportunities for early detection.

Hundreds of studies have examined perceptions of risk, and many of those studies support the Extended Parallel Process Model that gained prominence in the early 1990s. The Extended Parallel Process Model provides a strong rationale to explain why intensity of risk perceptions is not a good predictor of adoption of recommendations and teaches us that risk perceptions must be considered in relation to self-efficacy and response efficacy.

The Extended Parallel Process Model (Figure 1) predicts that high levels of perceived risk, especially in combination with low perceptions of self (self-efficacy) and/or low evaluations of the recommended response (response efficacy), often lead to rejection of recommendations and may result in negative, maladaptive responses (Witte, 1992). For example, people who have extreme anxiety about heart disease but doubt their ability to alter eating habits (low self-efficacy) may justify eating high-fats foods by rationalizing that they may die tomorrow in a car accident. In another scenario, people who have extreme anxiety about heart disease but believe heredity, not diet, determines risks (low response efficacy) may continue eating a high-fat diet, rationalizing that poor health is predetermined genetically.

Therefore, messages should be designed to stimulate appropriate levels of concerns while also considering the receivers' beliefs about themselves and the recommended action. The use of comparisons, statistical data, and testimonies are techniques that may be applied to either stimulate feelings of concern where too little exist or to allay risk perceptions when they are excessive. In sum, risk perceptions or feelings of concern are needed to motivate change, but excessive depictions of risk in health messages can lead to avoidance, denial, and other maladaptive responses.

Figure 1.
The Extended Parallel Process Model (Witte, 1992)



Perceptions of Self

A variety of personal characteristics have been identified as factors influencing health behavior. Perhaps most prominent is the concept of self-efficacy. Bandura (1977), who coined the term, defined the concept this way:

> An efficacy expectation is the conviction that one can successfully execute the behavior required to produce outcomes. Outcome and efficacy expectations are differentiated, because individuals can believe that a particular course of action will produce certain outcomes, but if they entertain serious doubts about whether they can perform the necessary activities such information does not influence their behavior. (p. 193)

Like Witte, in the Extended Parallel Process Model, Bandura clearly draws distinctions between perceptions of self and perceptions regarding the recommendation. If a smoker doubts his ability to kick the habit successfully, for example, he likely will not attempt to quit smoking, even if he

believes that quitting smoking would increases personal health status.

Self-efficacy beliefs, Bandura says, affect the extent to which individuals exercise control over the vitality and quality of their health (1997a, p. 278). In general, higher evaluation of one's own efficacy to perform some action correlates with the likelihood of action.

Recent works have examined self-efficacy's association with weight loss (Dennis & Goldberg, 1996), immunizations (Smith, 1997), protective sexual behavior (Cecil & Pinkerton, 1998), nutrition (AbuSabha & Achterberg, 1997), and exercise (Rodgers & Brawley, 1996). Findings from studies support Bandura's claim that when self-efficacy is low, people rarely attempt behavior change. Therefore, messages should bolster people's belief that they can successfully adopt the recommended behavior. Techniques for bolstering self-efficacy include telling the readers that they are capable or demonstrating that recommended behaviors are easily accomplished.

Environmental Conditions

A third factor affecting the likelihood of preventive health behavior adoption is the environment--both physical and social--in which an individual operates. Clearly, the physical environment affects the likelihood of adopting health behaviors. Availability of health services, costs, and transportation needs, for example, have long been recognized as barriers to adoption of healthful behaviors. Such considerations are particularly pivotal in rural locations or low-income areas.

Like physical environmental conditions, one's social environment also affects behavioral decisions. Backer, Rogers, and Sopory (1992) argue that after health messages are distributed via media, interpersonal channels of communication become a crucial link in achieving compliance. The extent and quality of social contacts may not only affect health behaviors by the transmission of health values but also affect how individuals form opinions about the social desirability of recommended behaviors.

In the case of food safety, social norms strongly influence behaviors, including which foods are consumed and how they are prepared. For example, the American traditions of preparing whole turkeys at Thanksgiving and eggnog containing raw eggs at Christmas represent social behaviors that affect likelihood of foodborne illness. Ratzan, Payne, and Massett (1994) state that "[f]amily, friends, and peer groups provide the context to massage the importance of health care messages" (p. 296). For example, a health message promoting sunscreen usage may be rejected if one's social contacts value tanned skin and downplay the importance of skin cancer prevention behaviors.

Both physical and social environments play a critical role in personal health decisions and are a factor contributing to preventive health behavior compliance. Therefore, messages should acknowledge social and physical environmental restraints and provide suggestions and motivations for overcoming such obstacles.

Perceptions of Costs and Benefits

A final factor affecting the likelihood of adopting healthful behaviors is that of perceived costs and benefits. This factor refers to how an individual assesses the advantages versus the disadvantages of a particular recommended course of action. Such emphasis is the crux of a variety of value expectancy models applied to many different human behaviors (Maiman & Becker, 1974). In short, if one expects the benefits to exceed costs, then one is more likely to adopt recommended behaviors.

Such a model of understanding human behavior is intricately tied to the notion of response efficacy, meaning that one believes the recommended response will prevent or mitigate negative outcomes.

If one doubts the efficacy of the recommended behavior, the benefits hardly seem worth the effort. The perceived cost of adopting a high fiber diet, for example, may be loss of pleasure. If people doubt high fiber diets are physically beneficial (low response efficacy), they may calculate the costs as exceeding benefits and continue pre-existing eating behaviors. Therefore, health promotion messages should heighten perceived benefits of the recommendations while also discounting the costs of adoption.

In the high fiber diet example, the message should emphasize the benefits of a high fiber diet and overcome the faulty perception that all high fiber foods are dry and tasteless. In sum, messages should present the recommended behavior as a clear, reasonable, and effective route to health while also anticipating and counteracting the audience's costs of adoption.

Guidelines for Message Development

Beyond developing messages that communicate knowledge, writers need to address perceptions of risks, perceptions of self, one's physical and social environments, and the costs and benefits of recommendations. The identification of the factors likely to influence preventive health outcomes allows for the development of five specific guidelines regarding message design.

1. Messages should contain features that relate appropriate levels of risk.

2. Messages should contain features that bolster consumers' beliefs that they are capable of adopting the recommended behaviors.

3. Messages should contain features that promote efficacy of recommendations.

4. Messages should contain features that encourage consumers to overcome environmental and social impediments.

5. Messages should contain features that promote the benefits and minimize costs.

The degree to which messages should attend to specific factors will depend on the situation at hand and the audience being targeted. The best way to optimize message design is to research the target audience's specific obstacles to adoption of recommended behaviors and then to design messages and programs which attempt to overcome those obstacles.

Application

The following text is from a flyer from the Partnership for Food Safety Education's FightBac campaign, which is designed to reduce incidence of foodborne illness through encouraging individuals to adopt safe food-handling practices in the home.

> But you don't have to be one of the unlucky ones. Most cases of foodborne illness can be prevented through some simple food handling and storage steps. All it takes is a little know-how and such everyday weapons as soap water, a refrigerator and a food thermometer to check the temperature. . . . Common symptoms of foodborne illness include diarrhea, abdominal cramps, fever, headache and vomiting. . . . However, the consequences can be severe and may require hospitalization and even lead to death. . . . Bacteria are invisible enemies. But you have four powerful weapons to Fight Bac!^{TM} So, be a BAC Fighter and make the meals and snacks you serve the safest possible.

In these few sentences, the writer has addressed many factors that influence the likelihood that the audience will adopt recommended food-handling behaviors. By describing symptoms, the writer has addressed perceptions of risks. The audience members' self-efficacy is bolstered through statements that encourage them to not think of themselves as unlucky but to think of themselves as fighting back with "weapons." The audience is told that recommended actions are easy and effective, which may positively affect the evaluation of the costs-benefits ratio by increasing perceived response efficacy.

The writer, of course, provided content elsewhere in the flyer that communicated knowledge and provided specific behavior recommendations. Beyond those knowledge-based components, however, the writer addressed other factors that increase the likelihood that readers will adopt the recommended behaviors. This writing sample demonstrates how careful attention to the psychological considerations of the audience and the factors that affect the likelihood of preventive health behavior adoptions can translate into good message design.

Conclusion

Psychologists, health advocates, and other social scientists have identified several factors other than knowledge that predict the likelihood that individuals will adopt healthful behaviors. While knowledge and education are important parts of effective message and program design, other factors that affect health decisions should also be considered. People's perceptions of risks, perceptions of their ability to adopt recommended behaviors, physical and social environmental factors, and the perceived costs and benefits are four factors that inform personal health decisions. Incorporating the message design guidelines presented here can help Extension more effectively promote behavior changes that result in enhanced health status.

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