

FEAR APPEALS

FOR TOBACCO CONTROL

FEBRUARY, 2000

This info pack discusses the return of fear appeals to health communication, specifically for tobacco control. It focuses on one current theory, *The Extended Parallel Process Model*, which integrates and expands on previous perspectives to explain why some fear appeals work, and why others fail. This info pack includes:

- a description of some of the most recent fear-based tobacco control efforts;
- an overview, with examples, of *The Extended Parallel Process Model*; and
- a list of additional resources.



at THE CENTRE FOR
HEALTH PROMOTION
UNIVERSITY of TORONTO

CTFO council for a tobacco-free ontario
CATO conseil anti-tabagisme de l'ontario

PTCC
CFC Program Training & Consultation Centre
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Understanding and Using Fear Appeals for Tobacco Control was developed by the Council for a Tobacco Free Ontario (CTFO), the Program Training and Consultation Centre (PTCC) and The Health Communication Unit (THCU)—resource centres funded by the Ontario Ministry of Health and Long Term Care. It is the second info pack in a series of five info packs, designed to support community-based media campaigns.

Other titles include

Understanding and Using Audience Analysis and Segmentation for Tobacco Control
Understanding and Using Mass Media for Tobacco Control
Understanding and Using Media Advocacy for Tobacco Control
Understanding and Using Process Evaluation for Tobacco Control

Additional copies of this resource or the complete set is available free of charge to Ontario residents. Phone or fax requests to the PTCC at 1-800-363-7822 (phone) or (613) 724-4116 (fax).

Acknowledgments

WRITTEN BY: Jodi Thesenvitz, The Health Communication Unit
REVIEWED BY: Josie d'Avernas, the Program Training & Consultation Centre
Janet Nevala, the Program Training & Consultation Centre
Larry Hershfield, The Health Communication Unit
DESIGN & LAYOUT: Stephen Kingston, MediaDoc (www.media-doc.com)
CREATED: February 2000

CTFO is a volunteer-directed, not-for profit organization. Its mandate is to support community-based coalitions across Ontario. It supports local action for National Non-Smoking Week (3rd week in January) and World No-Tobacco Day (May 31). It also supports local coalitions by providing information on tobacco issues and assistance with council revitalization. You can find CTFO on the web at <http://www.opc.on.ca/ctfo/>, or reach them by telephone at 1-800-316-CTFO, by fax at (416) 962-6464, or by e-mail at ctfo@web.net.

PTCC is a resource centre that provides training and consultation on tobacco control programs to public health units, local tobacco-free coalitions, community health centres and non-government organizations. PTCC is a partnership of the Ottawa-Carleton Health Department, RBJ Health Management Associates and the Centre for Applied Health Research at the University of Waterloo. You can find PTCC on the web at www.ptcc.on.ca or reach them by telephone at 1-800-363-7822, by fax at (613) 724-4116, or by e-mail at nevalaja@rmoc.on.ca

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Understanding and Using Fear Appeals for Tobacco Control

The Return of Fear Appeals

Fear appeals are persuasive messages designed to scare people by describing the terrible things that will happen to them if they do not do what the message recommends (Witte, 1992). In 50 years of research, many different theories have been developed to explain the inconsistent results with respect to the effects (or lack of effects) of fear appeals, but in general health communicators have assumed for a long time that “you should not try to scare people into healthy practices, including smoking prevention and cessation” (Hill, Chapman, Donovan, 1998).

Recently, however, evidence is emerging to suggest that when used properly, “gory” and “hard-hitting” campaigns do have a place in health communication, particularly tobacco control. Such a campaign was launched in Australia in June 1997 (and later used in the Massachusetts tobacco control program) based on the recommendation of an Australian ministerial tobacco advisory group. The group reviewed existing published and unpublished research on smoking and fear appeals and determined that a fear campaign was the best way to convince adults to quit smoking.

The advisory group reasoned that most smokers “intend” to quit, but for the most part, quitting is “not on today's agenda” (Hill, Chapman, Donovan, 1998). Their evidence also led them to conclude that a fear campaign could elevate quitting on smokers' personal agenda by providing fresh insights regarding the importance, urgency and personal relevance of quitting, as long as the message also increased confidence in their ability to quit (self-efficacy). They also concluded that the images should be “enlightening (‘now I see what the doctors are talking about’) and chilling (‘I can't bear to think of that happening to me’)” such that the images would be evoked when smoking was contemplated or seen (Hill, Chapman, Donovan, 1998).

“Aorta” which features “gruel” (fatty deposits) being squeezed by a surgeon's gloved hand from a human aorta, is one of a set of three television advertisements in the campaign. Each advertisement also carries a Quit Helpline number. The overall results of this campaign have not yet been published, but a weekly tracking survey throughout the six-month campaign showed that it “had high impact, stimulated much family and workplace discussion about smoking, and increased activity towards quitting” (Hill, Chapman, Donovan, 1998).

Tobacco prevention efforts using fear appeals have also been used, with promising results in Norway (Hafstad & Aaro, 1997), the U.S., and Canada. Fear appeal ads such as “Janet Sackman” (produced by the Massachusetts Department of Health) showing how long-term smoking can result in loss of vocal cords, and “Joanne” (produced by the Ontario Ministry of Health)

showing youth how smoking contributes to premature aging and affects appearance, are becoming more common on Canadian airwaves. In addition, the Federal Minister of Health, Alan Rock, has recently followed suit with graphic pictures of diseased mouths and organs on cigarette packages, paired with information on how to quit smoking. The long-term outcomes of these campaigns will hopefully provide more insight into the use of fear appeals for tobacco control.

The Extended Parallel Process Model

Research supporting the (correct) use of fear appeals is being done by Kim Witte at Michigan State University. Her *Extended Parallel Process Model* (EPPM) integrates and expands on previous perspectives (including Leventhal, 1971, Rogers 1975, Maddux and Rogers, 1983¹) to explain why some fear appeals work while others fail (Witte, 1992). Though not yet tested in the area of tobacco, the model has been proven accurate across many populations and topics (Witte, 1998). The EPPM, described briefly here, goes a long way to explain this previously confusing area and is consistent with the reasoning behind, and the findings of the tobacco campaigns described above.

Strength and Nature of Response

Fear: A high level of emotional arousal caused by perceiving a significant and personally relevant threat (Witte, 1998).

According to EPPM, how people respond to fear appeals depends on their *assessment of the threat* and their perceived efficacy. When assessing threat, the audience considers *severity*, or the seriousness of it, as well as their *susceptibility*, or the likelihood that it will happen to them. If people do not believe that they are at risk, or do not see the health threat as serious, they will simply not respond to the message.

<p style="text-align: center;">Total perceived threat = <i>Perceived severity</i> (Is this a serious health risk?) + <i>Perceived susceptibility</i> (Can this happen to me?)</p>
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If people believe that the threat is serious and that they are at risk, they will respond with *fear* which will motivate them to act. The nature of their response depends on how effective they believe the recommended action to

1. Bandura's (1977) work on self-efficacy, and Beck and Frankel's (1981) delineation of personal versus response efficacy prompted Maddux and Rogers (1983) to add self-efficacy to their model.

be (*response efficacy*²) and how confident they feel in their ability to perform the action (*self efficacy*). The total of these beliefs is call *perceived efficacy*.

Total perceived efficacy = Response efficacy (Is the recommended action really going to avert the danger?) + Self efficacy (Am I capable of taking the recommended action?)
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When people feel scared, but able to respond effectively to a threat (i.e., perceived efficacy is stronger than perceived threat) they adopt the recommended action to control the danger. This is called a *danger control* response. On the other hand, if the perception of threat exceeds perception of efficacy (i.e., they do not believe they are able to effectively avert the threat because the recommended action is too hard, too expensive, or it will not work), people begin to focus on how to control their fear. They will avoid the message, deny they are at risk, mock the message or become angry at the source or issue (and ignore it). They may even increase their unhealthy behaviours (boomerang effect). These are called *fear control* responses. In other words, as long as an individual perceives a threat, they will be motivated to respond. In fact, the greater the threat, the greater the motivation. Whether people respond with fear control or danger control depends on their level of perceived efficacy *compared* to the level of threat they perceive. The diagram on the next page, though a simplification of the EPPM, shows how people analyze a fear appeal message, and respond based on their analysis. In reality, these analyses and the reaction they elicit happen quickly.

Perceived threat determines the strength of the response and **perceived efficacy** determines the nature of the response.

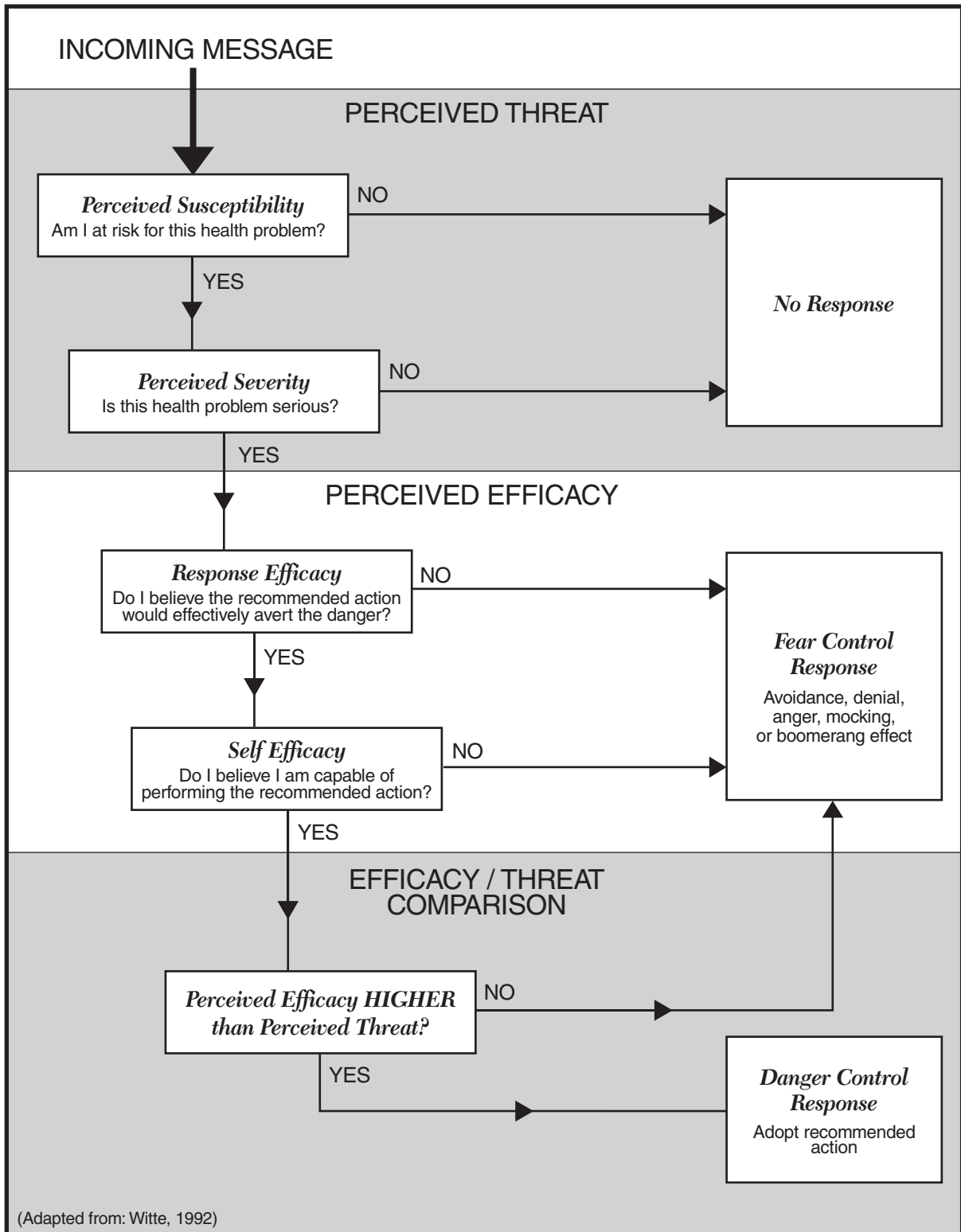
To summarize:

- when perceived threat is low, the audience does not worry about efficacy and so they do not respond;
- when perceived threat is high and perceived efficacy is low(er), the result is avoidance, denial or anger towards the source or issue (fear control); and
- when perceived threat is high and perceived efficacy is higher, the recommended behaviour is adopted (danger control).

The goal then, in using fear appeals, is to create a high threat, high efficacy message. While the concept is simple, its implementation is complex and challenging, since individuals vary greatly. The right balance of threat and efficacy for one person, may elicit no reaction or backfire for somebody else, causing avoidance, denial, anger towards the message, or boomerang effects.

2. Response efficacy as described according to the EPPM, is the same as “outcome expectancy” according to the Social Learning Theory (Bandura, 1977).

Audience Analysis of Message



Understanding and Responding to the Intended Audience

To create a high-threat, high-efficacy message, it is essential to thoroughly understand the intended audience — be it one individual or a large segment of the population. This involves defining the intended audience and topic, then assessing and addressing the audience's perceived threat and perceived efficacy.

Clearly Defining the Intended Audience and the Health Threat

Researching the intended audience helps to develop a fear appeal tailored to specific perceptions of threat and efficacy. Though more work is needed to find out which individual characteristics influence reactions to fear (Witte, 1998), factors such as culture and age can affect perceptions, so it is important that the intended audience be as homogenous as possible. This makes it more likely that each member of the audience will respond to the message in a similar way. Also, it is impossible to establish a clear picture of audience perceptions of threat and efficacy without a clearly defined topic (or health risk). When viewing an ad, or hearing a message there should never be any question as to what is being discussed.

See **Understanding and Using Audience Analysis & Segmentation for Tobacco Control** (first info pack in this series) for more information on defining the intended audience.

Assessing and Addressing Audience Perceived Threat and Perceived Efficacy

Witte and colleagues (1995) developed several evaluation tools for use with intended audiences (individuals or groups) to determine perceived severity of the threat, susceptibility to the threat, response efficacy and self efficacy (with respect to a clearly defined topic). They can be used to assess the audience prior to developing (or providing) a message, or to assess audience reaction to a given message. These tools determine whether the audience perceives the threat as high enough to motivate a response and whether their perceived efficacy is higher than perceived threat. In other words, these tools show whether the audience is engaging in fear control or danger control reactions, and why. The information can be used to tailor the message to the audience, so that they are more likely to adopt the recommended behaviour.

It is important to note that fear appeal messages designed for broad distribution (poster, newspaper, television, etc.) should be tested, not only with the intended audience, but also on other audiences that may be exposed to the message. This ensures that the message is not misinterpreted, or harmful (e.g., ensures that the message does not elicit a fear control response).

Increasing Perceived Threat

People with low perceived threat need to be convinced of the seriousness of the health threat, as well as their susceptibility to it. In general, a high-threat, fear generating message is vivid, personal and contains intense language (Witte, 1998), but as already mentioned, individuals (and groups) can vary in their perceptions of threat. Research should be conducted with members of the intended audience (using focus groups, interviews or

Messages that are not tested can not only be ineffective, they can backfire. For example, supposedly frightening messages intended to deter teens could attract them by seeming “cool”.

surveys) to determine what is scary to them about a given topic. The threat may seem obvious, but often it is not. Middle aged smokers, for example, may be frightened by lung cancer or heart disease. Youth, however, may not feel susceptible to smoking-related diseases. Instead, they may feel that loss of friends and becoming physically unattractive are much more serious, personally relevant threats related to smoking. To increase perceived susceptibility to a health threat, messages need to emphasize or illustrate, in as many ways as possible, how the health threat harms people identical to the intended audience.

Much research still remains to be done to determine what exactly it is about fear appeals that promotes fear or perceptions of threat (Witte, 1998). Consulting with the intended audience, however, can provide some clues, and once a message is developed, fear can be measured (quite accurately) by having participants rate the degree to which they feel frightened, tense, nervous, anxious, uncomfortable and nauseated (Witte, 1998).

Increasing Perceived Efficacy

To increase perceived efficacy (response efficacy + self efficacy), the audience must be clear about what the recommended action is, feel that it is effective (response efficacy) and be confident that they can carry it out (self-efficacy). In order to design a message that does this, audience knowledge, attitudes, behaviours, intentions, barriers and benefits to action must be explored.

To increase response efficacy, messages should emphasize that the recommended response is effective in decreasing one’s chances of experiencing the health threat or in other words, elaborate on the benefits of adopting the suggested behaviour. A smoker, for example, may need to be convinced that their health will improve by quitting.

Self-efficacy can be more difficult to influence. According to Bandura (1977), one way to increase self-efficacy is to have people role play or watch others model a behaviour. Role playing provides participants with ideas for how to act in real situations. A television ad, for example, could depict young teens refusing cigarettes in a variety of creative ways. In addition to showing how to do the recommended response, the message may also need to correct misconceptions, reinforce correct assumptions, introduce any concepts that the audience is not aware of, and provide information about how to overcome barriers identified by the intended audience (such as cost, time, language, cultural differences, etc.).

Messages that increase perceptions of efficacy are most important for people in fear control. They should not be frightened further. People in danger control have sufficiently high perceptions of efficacy to counteract their threat perceptions. Thus, to continue motivating people in danger control, health risk messages should emphasize the severity of the threat and their susceptibility to the threat. Strong efficacy messages should accompany the high threat messages.

Though not a fear appeal message, one well known tobacco ad designed to increase self-efficacy is “Quitting Takes Practice” by the California Department of Health Services. The ad has been used often throughout Ontario. It describes how it isn’t easy to quit, but taking it one step at a time can make it happen.

Summary of the EPPM

To summarize, according to Witte (1998), “Fear appeals work when people have strong efficacy perceptions. However they can fail when people have low-efficacy perceptions. In short, one can arouse fear to gain compliance, but only when individuals see themselves as able to perform an effective recommended response” (Witte, 1998). She also points out, that although this research appears new and exciting, it is in fact not new. She directs us to the a 2,000 year-old summary of the model by Aristotle (cited in Mongeau, 1991, pp. 101–102):

“If there is to be the anguish of uncertainly, there must be some lurking hope of deliverance, and that this is so would appear from the fact that fear sets (people) deliberating — but no one deliberates about things that are hopeless.”

Conclusions

After many years of avoiding fear appeals, evidence is surfacing to support their use, and though results of fear-based tobacco campaigns are pending, they do look promising. It is worth mentioning, however, that fear appeals are not without risks. Throughout this info pack, it has frequently been mentioned that they should only be used with high efficacy messages. This leads to the question, “Could there be unintended psychological effects of fear appeals that have not yet been explored?” “Could certain people, or groups that were not specifically targeted by the messages, be adversely affected by frightening ads?” These and other questions remain unanswered, as we once again attempt to frighten people into good health.

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Additional Resources

Kim Witte's Home Page

<http://www.msu.edu/~witek/index.htm>

National Clearinghouse on Tobacco and Health

The National Clearinghouse on Tobacco and Health is a program of the Canadian Council on Smoking and Health in partnership with the National Strategy to Reduce Tobacco Use in Canada. It has an advisory committee structure with partners and experts as members. The Clearinghouse mandate is to provide information and networking services relevant to tobacco use prevention and reduction programs, projects, resources, and advocacy provides information and referrals relevant to Canadian tobacco and health initiatives to advocates, health educators, policy makers, program planners, resource developers and health professionals working to prevent and reduce tobacco use. The clearinghouse can be found on the Web at <http://www.cctc.ca/ncth> or can be reached by phoning (613) 567-3050.

The Program Training and Consultation Centre (PTCC)

The Program Training and Consultation Centre (PTCC) is a resource centre of the Ontario Tobacco Strategy and is funded by the Health Promotion Branch, Ontario Ministry of Health. It provides training and consultation services to enhance the capacity of Ontario communities to implement effective community-based tobacco use reduction strategies. Training and consultation supports cover a variety of topics, including: program supports for the Ontario Tobacco Control Act, environmental tobacco smoke and bylaw development, strategic planning, smoking cessation and stages of change, implementing community awareness campaigns, reaching the hard to reach tobacco user, teen smoking cessation, women-centered smoking cessation, and environmental tobacco smoke in home environments. For more information call 1-800-363-7822 (Ontario only) or contact:

Janet Nevala, Co-ordinator
c/o Ottawa-Carleton Health Department
495 Richmond Road Ottawa, Ontario, K2A 4A4
Tel. (613) 722-2242 / Fax. (613) 724-4116
E-mail: nevalaja@rmoc.on.ca
<http://www.ptcc.on.ca>

The Health Communication Unit

The Health Communication Unit (THCU) is a resource centre funded by the Health Promotion Branch, Ontario Ministry of Health and Long Term Care. It provides free training and consultation services in health communication planning, evaluation and policy development. Their resources, partially profiled in this infopack, including “Evaluating Health Communication: Participant Workbook” and “Evaluating Health Promotion Programs” are available free of charge by calling (416) 978-0522. They can also be downloaded off the Web at <http://www.utoronto.ca/chp/hcu/>