



Effective Public Health Practice Project

Summary Statement

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A Meta-Analysis of Fear Appeals: Implications for Effective Public Health Campaigns

- Public Health Mandate** Through the Mandatory Health Programs and Service Guidelines (1997) a goal of public health programming is to implement intervention strategies that are efficient and evidence-based. One such strategy used by public health practitioners is fear appeals.
- Background** Fear appeals are persuasive messages that arouse fear and motivate behaviour change with regards to a variety of behaviours. The outcomes studied in fear appeals are outcomes related to acceptance of the message's recommendations. The three key independent variables thought to influence acceptance of the message are fear, perceived threat, and perceived efficacy. Typical fear messages address topics such as: condom use to prevent sexually transmitted diseases; smoking cessation; reduction of alcohol use; flossing teeth for dental hygiene; tractor safety; sunscreen to prevent skin cancer; and breast self-examination.
- Issue** The objective of the meta-analysis was to examine how people react to fear appeal messages.
- Finding the Answers** A meta-analysis of the literature was conducted. Computer databases such as Psychlit, Social Science Index and Dissertation Abstracts were searched for potentially relevant articles. Reference lists of all manuscripts were searched and letters were sent to researchers across the USA asking for recent works on fear appeals. To be included in the meta-analysis studies were required to evaluate a fear appeal at a minimum of two levels (e.g. strong fear appeals vs. weak fear appeals). Relevance testing was completed for each article by a minimum of two independent reviewers.

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- What is the Evidence?**
- 98 studies were included in this meta-analysis.
 - "The stronger the fear appeal, the greater the attitude, intention, and behaviour changes."
 - "The stronger the severity and susceptibility in the message, the more attitude, intention, and behaviour change."
 - "The stronger the response efficacy and self-efficacy in a message, the stronger the attitudes, intentions, and behaviours toward the recommended response."
 - Higher levels of both threat and efficacy, in their various combinations, lead to more persuasion.
 - Response to fear appeals is not affected by personality or demographic traits.
 - As fear appeals increase in strength so do defensive responses.
 - Fear appeals produce one of two competing responses: self-protective actions or defensive responses.

- Implications for Practice**
- Practitioners can develop effective fear appeal messages by increasing references to the severity of the threat and references to the target population's susceptibility to the threat.
 - Messages that make a health issue seem serious and likely to happen will be the most motivating.
 - Strong fear appeals work only when accompanied by equally strong efficacy messages, i.e. that people can work to decrease their susceptibility.

- Implications for Research**
- Both danger control responses such as attitude, intention, and behaviour change and fear control responses such as denial, defensive avoidance, and reactance require further assessment by research.

- Implications for Policy**
- Fear appeals are effective across a variety of personality traits and demographics.

Source of Information Witte K, Allen M. (2000). A meta-analysis of fear appeals: implications for effective public health campaigns. *Health Educ Behav*, 27(5):591-615.

Ontario Minister of Health. (Dec. 1997) *The Mandatory Health Programs and Services Guidelines*. Minister of Health. [On line].
http://www.gov.on.ca/MOH/english/pub/pubhealth/manprog/mhp_toc.html

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