

Ineffectiveness of Fear Appeals in Youth Alcohol, Tobacco and Other Drug (ATOD) Prevention

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This document was developed to provide a summary of the research regarding the ineffectiveness of the use of fear appeals in the substance abuse prevention field. Suggested citation:
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Executive Summary

Prevention research has increased substantially in recent history. While many current prevention efforts have a solid theoretical basis and evidence of effectiveness, historic prevention strategies were often based on intuition and guesswork. Among the earliest strategies to reduce drug use among youth, scare tactics emphasized and dramatized the negative aspects of alcohol, tobacco and other drug (ATOD) use. Scare tactics, or fear appeals, include the grim and dramatic reenactments of alcohol-related automobile crashes, horror stories told by recovering addicts, ominous threats intended to create anxiety, and warnings of the dire results and tragic consequences of substance use.

Though scare tactics have been widely used in our field for decades, research has shown that they are not effective in preventing or producing sustained reductions of ATOD use among youth:

- “Information or education programs using scare tactics are used less often because research and experience have demonstrated that they are either counterproductive or ineffective, and that students learn better with a low fear appeal message and with a credible communicator.” (*National Institute on Drug Abuse, 1997*)
- “By itself, information about the dangers of drugs and alcohol ... has little or no effect on use.” (*Hawkins & Catalano, 1992*)
- “School-based tobacco, alcohol and drug education programs as well as public information programs have sought to deter substance use by increasing adolescents’ awareness of the adverse consequences of using these substances. Although this kind of strategy has proliferated for more than two decades, results indicate quite clearly that these approaches are not effective.” (*Botvin, 1990*)
- Overly mild threats won’t arouse fearful reactions enough, but overly strong threats may be counterproductive as the receiver defensively avoids attention, denies personal vulnerability or distorts the message. (*Ray & Wilkie, 1970*)
- “CSAP cautions that messages that may do more harm than good – e.g., ‘scare tactics’ – should be avoided.” “‘Scare tactics’ are not as effective as appeals to more positive emotions.” (*Center for Substance Abuse Prevention*)

While prevention workers have shifted their efforts to include other approaches with stronger evidence of effectiveness, it sometimes remains difficult to explain to coworkers and community partners why the field of substance abuse prevention no longer supports fear appeals or scare tactics and discourages the use of approaches that include these tactics. In responding to this need, this publication defines fear appeals, presents a summary of research explaining why they are ineffective and provides a resource to share with community partners to aid in the promotion of prevention best practices.

History

As the drug culture took hold in the 1960s, many concerned people concluded that the negative consequences of alcohol, tobacco and other drug abuse (ATOD) must be presented, especially to youth. The response usually took the form of presentations that emphasized and dramatized the negative aspects of ATOD use. Termed 'scare tactics,' these presentations focused on emotions, were very moralistic and relied on shock appeal, frequently exaggerating the harmful effects and normally addressing only the most harmful consequences.

Definition and Characteristics

While fear appeals and scare tactics are not specifically defined in substance abuse prevention literature, many researchers and authors have described their characteristics or provided examples with the words, phrases and descriptions listed below.

- Mock DUI crashes; gruesome photos; horror stories told by recovering addicts; graphic ads; hard-hitting sequences. (*Asper, 2006*)
- Dramatic reenactments of bad decisions; grim aesthetic; high-noxiousness. (*Matwychuk, 2003*)
- Emotionally charged portrayal of a behavior's negative consequences; some experts extend their concerns about fear appeals to any message that focuses on negative consequences of certain behaviors. (*DeJong, 2002*)
- Warning of the dire results and tragic consequences, while making them appear to be inevitable. (*Gordon & MacAlister, 1982*)
- Fear arousal emotional and physiological responses include distressed, nauseous, fearful, repulsed, disbelieving, vulnerable, depressed, shamed, angry, tense, uncomfortable and helpless. (*Steele & Southwick, 1981*)
- Communications describing the unfavorable consequences that might result from failure to adopt the communicator's recommendations; a film depicting the case history of a man with lung cancer including his preparation for surgery and footage including the surgical operation for removing one of his lungs; fear arousal consisting of six mood adjectives: fright, tension, nervousness, anxiety, discomfort and nausea. (*Rogers & Mewborn, 1976*)
- Arouse emotion-laden drives arising from guilt and anxiety by depicting potential dangers to which the audience might be exposed; ominous threats; alarming contingencies; signs of impending danger; personalized threat references explicitly directed to audience ("this can happen to you"); highly realistic photographs; vividly portrayed. (*Janis & Feshbach, 1953*)

Research Highlights

Fear appeals may cause an audience to tune out a message or not believe it, or worse, be encouraged to do the opposite of the intended behavior because they like taking risks. Audiences may feel that negative consequences will happen to them regardless of any action they take, leading them to disregard a message. Low-fear messages from credible sources that are based on facts, tied to the present and appeal to more positive emotions should be used instead. While both fear-based messages and fact-based drug education can increase knowledge and negative attitudes toward substance use, these approaches have not been shown to reduce or prevent substance use behavior.

Effect of Fear Appeals

The body of evidence listed below includes research findings that are specific to fear appeals, as well as research that evaluates information dissemination including fear appeals in general.

- "... *Pechmann and Shih (1999)* created a typology based on 196 youth-oriented antismoking television advertisements. They identified three main types – fear appeals, peer norms and tobacco marketing – and further subdivided these into seven main messages ..." one of which included that "smokers may face serious health problems." Results showed that fear appeals or personal health risk messages were ineffective in reducing teenagers' intent to smoke. (*U.S. Dept. of Health and Human Services, 2000*)
- "Research has indicated that campaigns based on fear are difficult to carry out and may actually be counterproductive by appealing to risk-taking in some members of the target audience. If the threat is too remote in time or too mild, people will not be motivated by it. If the threat is too strong, people may tune out the message, refuse to believe it or adopt a fatalistic attitude." "Messages based on long-term consequences of use of alcohol, tobacco or other drugs are known to have a limited effect on the behavior of young people, even when presented in a credible way." (*Zimmerman, 1997*)
- "The evolution of the present-day programs began with the failure of the didactic "scare tactics" used in Knowledge Only programs of the early 1970s and with the realization that increased drug knowledge cannot be a measure of program effectiveness" (*Tobler, 1986*)
- "Thus, while fear may constructively influence drinking-related attitudes, it appears to have either no effect or a detrimental effect on actual drinking." "To the extent that the correlation between self-rated intentions to reduce drinking and actual drinking reduction is indicative of subjects' self-control over their drinking, these data suggest that fear-arousing messages may weaken this form of control." (*Steele & Southwick, 1981*)

Mistrust

Fear appeals and scare tactics are often unbelievable because they do not match people's personal experiences. This leads to a lack of trust in other prevention messages for both youth and parents.

- "This one-sided, negative kind of teaching, which runs contrary to the experience of a majority of older social drinkers, substantially reduces the believability of all our teaching." (*Gordon & MacAlister, 1982*)
- "As the *Report of the White House Conference on Youth* (1971) states: "It is impossible for drug education to be completely effective without radical alteration of attitudes, values, outlooks..." "Much of the existing drug education is ineffective and may be counterproductive, because it tends to alienate the young and cause undue alarm and overreaction in adults." (*Swisher & Hoffman, 1975*)

Fear-Arousing Communications

Beyond research that is specific to substance abuse prevention, a related body of research focuses on the topic known as 'fear-arousing communications' (*Sutton, 1982*). This area of research includes topics such as drunk driving, smoking, steroid use, risky driving and dental hygiene, and evaluates health promotion advertising and mass media campaigns. It is mainly limited to young adults of secondary or post-secondary school age. Fear appeals in advertising and health promotion campaigns are also shown to be ineffective, mainly because audiences will ignore or minimize the importance of the negative, sensational information presented to them. Fear appeals have weaker effects than other types of communication and sometimes have unintended negative effects.

When audiences receive a fear appeal message that causes emotional tension, it is difficult for any positive part of the message to overcome the tension. Instead, the audience will become motivated to ignore or to minimize the importance of the threat.

- "The simplest explanation is that when fear is most intense, immediately after the communication, it paralyzes coping skills." "The data strongly imply that the unpleasant feelings and ideas stimulated by the communication led to withdrawal behavior." (*Leventhal, 1970*)
- "The main conclusion which emerges from the entire set of findings is that the over all effectiveness of a persuasive communication will tend to be reduced by the use of a strong fear appeal, if it evokes a high degree of emotional tension without adequately satisfying the need for assurance" (*Janis & Feshbach, 1953*)

Unintended negative consequences ('backfire') can be found with the use of fear appeals. Reminding someone that smoking will give them lung cancer might make them nervous to the point that they will reach for a cigarette to calm their nerves.

Defensiveness happens when the message is tuned out, someone thinks "it won't happen to me" or their thinking brings up points convincing them the danger is not true.

- "Although, unfortunately, field research evaluations of fear appeals are few, they usually reveal that fear has both weaker effects and unintended deleterious effects in real-world social marketing campaigns." "... fear appeals can evoke maladaptive responses – responses designed not to control or remove danger addressed in the ad but to cope with the unpleasant feelings evoked by the fear message." "Maladaptive responses include avoiding or tuning out the message, blunting (failing to process the salient threat of the message), suppression (failing to relate the threat to oneself) and counter argumentation (summoning arguments against the message's veracity)." (*Hasting & Stead, 2004*)
- Prevention backfire could happen. For instance, "... if smokers were told that it was highly likely they could contract lung cancer and that stopping smoking would not improve their lot, they planned to increase their cigarette consumption." Another boomerang effect was reviewed by *Leventhal (1970)*, indicating that if an individual feels vulnerable to a threat, then resistances are aroused; findings in this study suggest that this may occur only when an individual feels incapable of coping with the threat (low efficacy). (*Rogers & Mewborn, 1976*)

Conclusions

While current research regarding the effectiveness of fear appeals/scare tactics is rather limited, there is enough evidence from research conducted during the past 60 years to indicate that the strategy does not produce long-term, sustained reductions in drug use. Additionally, there is a clear lack of evidence that the strategy is effective. That is not to say that the dissemination of factual information does not play a role in our efforts.

While there is little evidence that information dissemination, when used alone, has any impact on alcohol, tobacco or other drug use, information coming from credible, respected sources – that is not intended to scare young people – can and should be used as part of a larger prevention strategy.

Additionally, given the increased amount of recent applicable theory and research in our field and limited resources, as preventionists we have a responsibility to primarily use those prevention strategies that are proven to prevent and reduce youth substance use. In order to create positive change within our communities, we must apply best practices and promote evidence-based prevention.

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