

The Psychology of Fear Appeals Re-Visited

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Abstract

This paper re-visits the author's earlier review "Issues in the Use of Threat Appeals: An up-to-date Review of Research in the Last Decade" presented at the 3rd International Injury Prevention Conference, 1996, Melbourne.

The issue as to whether or not to use threat or fear campaigns is ever present and most recently has extended to young people and anti smoking campaigns (April issue of the Journal of Marketing).

The paper reviews the literature since 1996 by re-examining the five key conclusions of the first review. Fear arousal may have both inhibiting and facilitating effects and can lead to avoidant coping (eg ignoring) mechanisms. As at 2003 it can be concluded that campaigns should use fear with caution. Personal relevance and efficacy are more important than severity of outcomes in encouraging action.

The issue of gender differences appears to be in need of further investigation and a warning is sounded regarding researching alternative message appeals.

1. INTRODUCTION

The earlier review (Elliott 1996) began by suggesting that any would-be communicator consulting the persuasion literature is likely to come away with one of three possible conclusions:

- (i) The use of fear is to be avoided.
- (ii) Conflicting findings exist in relation to the level of fear arousal.
- (iii) Fear is fine sometimes.

All three conclusions were justified by the literature but the prevailing viewpoint in 1996 was to avoid threat appeals or use them with great caution.

2. CONCLUSIONS FROM THE 1996 REVIEW

The 1996 review drew five key conclusions:

1. *Messages intending to arouse a high level of fear or anxiety are unlikely to actually do so. In other words, audiences somehow inoculate themselves against attempts to arouse fear in them.*

It is not easy to manipulate the level of fear experienced by an audience no matter how careful one is in designing the message. Focusing on horrific messages doesn't necessarily mean one will arouse a fear response in the audience.

2. *Where a fear response does emerge in the audience it is necessary to distinguish two types of anxiety reaction in the audience.*
 - (a) "Inhibitory" fear which refers to fear aroused by scenes which evoke horror or revulsion and the audience reaction is to respond immediately making efforts to

reduce the anxiety (by denial, not watching, ie to use defences). The audience becomes motivated to ignore or minimise the importance of the threat.

(b) The other type of reaction is “anticipatory” fear that is aroused by concern about the perceived likelihood of experiencing a threat. Here, the likely audience response, unlike inhibitory fear, is realistic, resulting in efforts to deal with the threat itself rather than trying to avoid the anxiety.

3. *Messages that successfully evoke greater fear or anxiety in the audience are more likely to be persuasive. In other words, audiences who report greater fear/anxiety following exposure to persuasive messages are also more persuaded by the message.*

This finding might suggest that the behavioural sciences should perhaps reconsider their position on fear messages. But it should not be assumed that explanations of these findings give much central causal role to fear (that is, to the emotional reaction evoked by the message). Instead, an explanation might emphasise cognitive reactions to the message. For instance, a given message might induce more fear and anxiety in receivers – but it may also lead receivers to believe that the fearful consequences are more severe than they had previously believed. And it might be that the real force at work behind the message’s effectiveness is the change in those beliefs, not the arousal of fear.

Fear might also arise as a by-product of the persuasion process (“I now believe the consequences of speeding are much more severe than I did before, and this makes me more anxious about this than I was before”). However the cognitive changes – not the emotional ones – might actually explain the message’s effectiveness. From this point of view, greater aroused fear will be associated with greater effectiveness – not because greater fear causes greater effectiveness, but because both fear and effectiveness are caused by the same underlying factor (namely, the cognitive reaction to the message).

4. *Strong fear appeals impact least on those most in need of changing their ways.*

A “boomerang effect” can occur if the relevance of the message is also strong. In other words, quite contrary to common sense, the individuals for whom the topic is most potent are least likely to show opinion change. Strong fear message can go over the threshold and arouse excessive anxiety.

5. *In advertising and marketing contexts, threat or negative appeals are “more complicated” and have a greater likelihood of ineffectiveness than positive appeals. Nevertheless, if appropriately executed, threat appeals can be very persuasive.*

The notion of “more complicated” means so many intervening variables have been demonstrated to moderate the effects of threat appeals. Thus, making simple generalisations is difficult and unscientific. Threat appeals can be very effective, but their effectiveness is impacted by more variables than are positive appeals. Thus, threat appeals are very sensitive to the situation and can easily backfire. They are risky.

3. THE CURRENT REVIEW 1996-2003

This review analyses the literature since 1996 (ie includes 1996 to date) to ascertain what changes, if any, are needed to the above five conclusions.

It is interesting to note that whatever published paper is examined very few relevant papers are cited post 1995. However, there have been some very useful papers that provide additional insights to would-be communicators.

4. THEORETICAL DEVELOPMENTS

A detailed theoretical exposition of fear-arousal models is available for those interested in identifying and understanding the psychology of fear appeals (Ruiter, Abraham & Kok 2001).

Ruiter et al (2001) starts out by questioning whether health-related fear appeals are evidence-based in the sense that they reflect research findings. They cite a lack of review of intervention effectiveness and not being able to identify fear arousal as a feature that distinguishes between effective and ineffective interventions.

After an extensive review of alternative theoretical models and evidence to support the models Ruiter et al (2001) conclude:

“... the contribution of fear appeals to the adoption of self-protective behaviour is in doubt ... it is the precautionary information or reassurance included in the message, not the capacity to arouse fear, that is likely to have the greatest impact on behaviour, especially since fear may inhibit the establishment of precautionary motivation through the instigation of fear control processes.” (Ruiter et al, 2001, emphasis added, p.626).

In support of the earlier Elliott (1996) conclusions, Ruiter et al (2001) argue:

“It seems likely that fear arousal may have inhibiting as well as facilitating effects on assimilation of protection motivation and can lead to avoidant coping. Consequently, cautious use of fear arousal techniques seem advisable. A greater focus on precautionary information and the promotion of action at the expense of prompting fear arousal is likely to be more consistently effective than attempts to frighten people about health risks with images of death and injury. Campaigns should continue to highlight the personal relevance of health threats but the severity of outcomes following health-risk behaviour may be much less important to establish than the feasibility of preventive action. (Ruiter et al 2001, emphasis added, p.626).

5. FURTHER EVIDENCE ON THE CAPACITY TO AROUSE FEAR

Richard Tay and Barry Watson (2002) from CARRSQ investigated reactions to fear TV advertisements for fatigue. Respondents were randomly assigned to either high threat messages or high threat messages plus coping strategies. Tay & Watson (2002) found:

- (a) Explicitly including coping strategies in the message significantly increases the perceived efficacy, and as result significantly increases the likelihood of message acceptance.
- (b) The level of fear aroused was not significantly correlated with message acceptance but is significantly correlated with message rejection.

The authors suggest that the average level of fear could be reduced moderately without reducing message acceptance but could reduce message rejection, resulting in a positive change. Thus, in keeping with Ruiter et al (2001) and Elliott (1996), they suggest that

behavioural change is best not to simply rely on fear as a source of motivation and to at least provide good coping strategies.

Stephenson & Witte (1998; 2001) point out that enhanced perceptions of threat alone may not adequately motivate behaviour. Beyond severity, fear appeal messages should appreciate one's susceptibility to the threat, with particular attention being paid to the relationship between the risky behaviour and susceptibility to risks associated with that behaviour. Most importantly highly threatening fear appeals will backfire without an equally strong efficacy component (see also Kline & Mattson 2000).

Similar findings emerge from Witte & Allen's (2000) meta-analysis of fear appeals that updated three previous meta-analyses (Sutton 1982; Boster & Mongeau 1984; Mongeau 1998):

"Fear appeals motivate attitude, intention, and behavior changes—especially fear appeals accompanied by high-efficacy messages... However, fear appeals should be used cautiously, since they may backfire if target audiences do not believe they are able to effectively avert a threat...

... practitioners should always ensure that a high-threat fear appeal is accompanied by an equally high-efficacy (or greater) message (given the findings that low-efficacy messages produce greater fear control responses). Messages should always be carefully pre-tested to ensure they are producing high-threat and, more important, high-efficacy perceptions. If fear appeals are disseminated without efficacy messages, or with a one-line recommendation, they run the risk of backfiring, since they may produce defensive responses in people with low-efficacy perceptions. (Witte & Allen 2000, p.622-3 underline added)

In recent years Kim Witte has been most influential in promoting the use of fear appeals based upon her Revised Parallel Processing Model (Witte 1992; 2000).

Witte (2000) summarises her model:

- *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 effect." (Witte 2000, p.3)

Hill, Chapman & Duncan (1998) defend the use of "gory" "hard hitting" anti-smoking campaigns in Australia so as to move those who "intend" to quit to consider it "today" so as to move it up the time agenda.

Ian Phau (Curtin University of Technology (2000) challenged Hill et al's(1998) claims arguing that whilst the lung advertisement may have won the 1999 "Advertiser of the Year"

award there was no evidence of its efficacy. Conversely, Phau's study of 216 householders' reactions to three "gory" anti-smoking advertisements found:

"...smokers in general adopted a nonchalant attitude towards the fear appeal advertisement. This implies that they were more likely to associate in maladaptive behaviour, that is, ignoring the advertisement. They were less motivated by the fear appeal aroused message to practice protective measures to reduce the possible risks. In contrast, non-smokers and past smokers have correspondingly lower percentage scores.

.... The findings show that in general, all the respondents felt that the advertisements were harsh and frightening. However, smokers tend to dissociate with the message and perceived the risk information as not worth looking at, not meaningful and unimportant. This implies that in general, smokers tend to dissociate from the relevance of the message content." (Phau 2000, p.3)

6. THE THIRD-PERSON EFFECT AND GENDER DIFFERENCES

The CARRSQ team (Iona Lewis, Richard Tay and Barry Watson 2003) have examined one defensive strategy which the audience is likely to use to cope with threatening messages, namely, the "Third-person effect" (Davison 1983) which was included in the early Guidelines for Effective Campaigns (Elliott & Shanahan Research 1988).

The "Third-person effect", in essence, says that mass media messages do influence people, but other people, "not me"! Psychologists and advertising researchers have for years been cognisant of the "Third-person effect" when attempting to diagnose the likely impact of messages or executions. The normal response to "vivid" portrayals is *"that will be effective"* and amongst whom, *"other drivers not drivers like me"*.

This reviewer was very surprised (disbelieving) when Lewis, Tay & Watson (2003) found a "Reverse Third-person effect" in relation to reactions to two TAC TV commercials (Joey-drink driving: Tracey-speeding): ie, most participants perceived themselves as more vulnerable to being persuaded by fear-based road safety advertisements than other drivers in general. This is a reverse of the Third-person effect, ie the study revealed a general tendency for individuals to perceive greater influence on self than others.

This result came as a shock until this reviewer re-looked at the paper. Almost two out of every three participants were females. Having conducted many hundreds of diagnostic assessments of road safety TV advertisements this reviewer would argue that females are much more likely than males to be threatened by negative appeals.

This hypothesis was confirmed in a subsequent analysis of the data as presented at this conference (Lewis, Watson & Tay 2003). The re-analysis indicates a significant sex difference with females reporting reverse Third-person perceptions and males reporting the classic Third-person perceptions (ie messages are more relevant to others than to themselves).

It is interesting that gender has largely been ignored in the literature. Witte & Allen's (2000) meta-analysis treat gender lightly:

"Generally studies have found no effect on acceptance of fear appeal recommendations due to gender, age, ethnicity or group membership".
(Witte & Allen 2000, page 619).

They cite four studies of which one refers exclusively to a study of mothers! Two studies did find sex differences (Levanthal, Jones & Tremby (1996) and Rhodes & Wolitski (1990). Frankenberger & Sukdial (1994) found differences in age, gender and ethnicity. Other studies have also found age differences (Boster & Mongeau 1984; King 2002). Age has been used to segment audiences. In particular, there is considerable evidence that fear appeals are least effective with teens and young people (Boster & Mongeau 1984; Frankenberger & Sukdial 1994; Pechmann, Zhao, Goldberg & Reibling 2003; Meyrick 2001, Pee & Hammond 1997).

7. TYPE OF APPEAL VERSUS LEVEL OF THREAT

Elliott's (1996) review concluded that there may be a considerable gap between the intended threat (stimulus) and the actual level of aroused threat (response). Fear is an emotional response to a threat and no single threat evokes the same response from all people. LaTour & Rotfeld (1997) examine these issues in some detail and concluded:

"...the main flaw in traditional fear appeal research is not ill-conceived theory, but dogmatic retention of assumptions and errors in the research process. The purpose of assessing communications effectiveness is not to find an optimal level of fear, but to determine the optimal type of threat that a given target audience segment will act upon." (LaTour & Rotfeld, 1997, p.57)

One recent study (Peckmann et al 2003) conducted an experiment with 1667 adolescents using seven message themes aimed at anti-smoking:

- *Disease and death*
- *Endangering others*
- *Cosmetics (bad breath)*
- *Smoker's negative life circumstances*
- *Refusal skills role model*
- *Marketing tactics (by Tobacco Companies)*
- *Selling disease and death (manipulation and deception)*
- *Substantive variation (heterogenous message approach-multiple messages).*

Of the seven message themes only three (*Endangering others; Refusal skills role model* and *Smoker's negative life circumstances*) bolstered adolescents' intentions not to smoke, **and all did so by conveying that smoking cigarettes poses severe social disapproval risks.**

Two message themes (*Disease and Death* and *Selling Disease and Death*) increased health rather than social risk severity perceptions. However, few adolescents felt vulnerable to the health risks, which undercut the efficiency of health severity messages.

It should be noted that among youths who felt immune to health risks, higher perceived health risk severity was associated with stronger intentions to smoke. Thus, in the context of low perceived vulnerability, stressing health risks could increase smoking's symbolic value as a risk-seeking rebellious, and thus attractive behaviour.

Pechmann et al (2003) suggest that it is better to stress vulnerability rather than severity whether it be health risk or social risk. Henley & Donovan (2003) in a study of 995 smokers also found that death threats were no more effective than non-death threats and in some cases non-death threat appeals were more effective. Young people appeared most affected by threats to their mobility or freedom and to threats of pain.

In keeping with what experienced communication researchers have learned over the years, but all too often ignored by naive researchers or clients, Pechmann et al (2003) conclude:

“Finally, we do not recommend that advertisements be evaluated on the basis of viewers’ ratings of perceived ad effectiveness. In our research, all sets of advertisements were virtually equivalent on perceived ad effectiveness, yet they were found to differ in their effects on both beliefs and intentions.” (Pechman, et al 2003, p.15).

8. IN CONCLUSION

Little changes are required to the Elliott (1996) recommendations. It is clear that in some circumstances with some people using some messages fear appeals can influence intentions. However, the converse is as equally or even more likely to apply.

The findings in relation to gender warrant further investigation given that only one recent study has even bothered to consider this variable.

Finally, fear approaches should be researched cautiously because of the predisposition of the audience to act as “judges” when asked to evaluate effectiveness. Such judgements reflect where they stand in relation to behaviour in focus (eg smoke or don’t, drink and drive or don’t, speed often versus hardly ever/never) and, as well it would seem, gender. It is important to find ways of assessing the potential communication’s effectiveness of alternative message strategies independently of the audience’s “expert” judgement.

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NB An extensive list of articles/papers published since 1995 relating to threat appeals is available from the author.

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