

The use of fear appeals to communicate public health messages

Abstract

This paper provides an insight into the use of fear appeals to communicate a public health message. A fear appeal is a means of persuasion that threatens the audience with a negative, physical, psychological, and/or social consequence that is likely to occur if they engage in a particular behaviour. Specifically, this paper explores: the effectiveness of fear appeals; the impact gender and age have on the effectiveness of a fear appeals; and ethical concerns relating to fear appeal advertising. This study comprises a two stage data collection process: focus groups and depth interviews. Firstly, two focus groups were conducted. The participants were higher education students. The focus groups explored attitudes and opinions regarding the effectiveness of different styles of fear appeal. Secondly, four in-depth interviews were conducted with road safety experts to assess the effectiveness of fear appeal advertisements and to assess the feedback from the focus groups. The findings from this research indicate that appeal advertising is effective at creating awareness about road safety. However, fear appeals alone do not change the driving behaviours and attitudes of viewers. Fear appeal campaigns must be supported by enforcement if attitudes and behaviours are to change. Gender does not have a major impact on the impact of fear appeal messages. Both genders recognise that all individuals are subject to the consequences displayed in fear appeal advertisements. However, participants in this study report that they and their peers continue to drive whilst tired, distracted and using a mobile phone.

Keywords: Marketing, Fear appeals, Road safety, Ethical advertising

Introduction

Fear appeals are frequently used to communicate important health messages and encourage people to change their behaviour. A fear appeal is a means of persuasion that threatens the audience with a negative physical, psychological, or social consequence that is likely to occur if they engage in a particular behaviour (Algie, 2010 pp. 264). Fear appeals are also referred to as *threat* appeals. Fear appeals rely on aspects of an individual's well-being that motivates them towards action to prevent an unwanted outcome (Thornton, 2005). Arousal of fear is believed by many practitioners to be necessary to motivate and persuade people to undertake a certain activity that is beneficial to themselves or others. A typical fear appeal advertisement consists of a negative consequence being presented such as graphic imagery of a driver's dead body in a crumpled car, with viewers either being told or assuming for themselves that they too are susceptible to such consequences. Evidence suggests that fear appeals are effective in gaining the audience's attention and communicating messages (Hastings *et al.* 2004; Brennan and Binney 2010). However, conflicting evidence suggests that fear appeals are ineffective, young males are subject to psychological biases; they believe the advertisement to be irrelevant and aimed at someone else (Lewis *et al.*, 2007a). This paper explores the effectiveness of fear appeals in road safety campaigns from the viewpoint of the target audience and road safety experts. Specifically, this paper explores: the effectiveness of fear appeals; the impact gender and age have on the effectiveness of a fear appeals; and the ethical concerns relating to fear appeal advertising.

Fear appeals: a method for communicating a public health message

Fear appeals emerged primarily from the clothing industry, in particular Benetton, Calvin Klein and Richard James in the early 1980s. Benetton and Calvin Klein used shocking content in their advertisements and won awards for heightening public awareness about social issues. This inspired public health campaigns including road safety, AIDS prevention and anti-smoking to use this approach (Dahl *et al.*, 2003; Thompson *et al.* 2009). Fear appeals confront people in a hard and shocking way by highlighting the negative consequences of risky behaviour with the expectation of changing undesirable behaviour. Thornton, (2005) explains that a fear appeal is a means of persuasion that threatens the audience with a negative physical, psychological or social consequence that is likely to occur if they engage in a particular behaviour. The persuasive message which evokes fear or concern is meant to motivate people to pay attention to the message and to adopt the recommendations in the message. A fear appeal frequently uses personal words combined with tough or painful pictures. In Ireland the Road Safety Authority (RSA) uses graphic imagery such as a dead or injured driver in a crumpled car, the desired outcome for such advertisements is that the audience recognise the danger and avoid this danger by changing their driving habits. Fear appeals motivate adaptive danger control actions such as message acceptance and maladaptive fear control actions such as defensive avoidance or reactance (White and Allen, 2000). A fear-based message captures and holds peoples' attention and thus meets one of the requirements of successful information dissemination. Williams (2012) suggests that individuals better remember and more frequently recall advertisements that portray fear than they do to warm or upbeat advertisements with no emotional content.

Threat evokes fear. Threat relates to communicating messages such as: *if you drive like this you will die*. The RSA is renowned for its use of physical threats, primarily, by showing drivers and passengers who are injured or dead at a car crash scene in an explicit manner. There are various scientific opinions about how fear appeals work. Ruiters *et al.* (2001) proposes that a fear-based message starts two opposing mechanisms. First, there is the mechanism to reduce evoked fear by means of psychological defence mechanisms that oppose the message. Such defence mechanisms can take various forms, such as denial where the viewer believes the message not to be true. This mechanism will result in the fear diminishing and the message not being taken seriously. Second, and in contrast, there is a tendency to cope with the message by actually adopting its recommendation; this is the desired outcome of fear appeal advertisements. In both cases fear is the motivating factor, but this motivation can be either negative or positive for the acceptance of the message (Lennon and Rentfro, 2010).

Fear appeals are composed of three main components. These components are fear, threat and perceived efficacy (Williams, 2012). Fear is a negative emotion that is usually accompanied by heightened arousal. Threat is an external motivation which provides viewers with the perception that they are susceptible to the same negative situation or outcome. Many of the threats conveyed by the fear appeal advertisements show how negative behaviour by a driver affects other road users. One particular RSA advertisement shows a drunk driver crashing into a garden and killing a young child as the child's father watches in despair. The aim of such advertisements is to illustrate how dangerous driving behaviours can affect others. Lewis *et al.*, (2007b) explains that fear appeals can evoke a range of negative emotions other than fear such as guilt and remorse. Fear arousing

messages can be persuasive when the audience have high self-efficacy and perceive high response efficacy (Woolley, 2004). Perceived efficacy is a person's belief that the message recommendations can be implemented and will effectively reduce the threat depicted in the road safety message (Gore *et al.*, 1998). White and Allen (2000) claim that fear appeals must contain both high levels of threat and high levels of efficacy. Tay and Watson, (2002) propose an alternative view; that is the fear elicited in the advertisements may have negative outcomes and often result in maladaptive behaviour. A fear appeal may amplify the dominant response and may actually increase the tendency to speed if the target audiences are habitual speeders. Sibley and Harre (2009) compared the effects of positive and negative framed drink driving advertisements on young drivers. They report that the positive advertisements were more effective than the negative advertisements in reducing explicit overestimation of self-enhanced bias.

Fear appeal and road safety advertisements

There is evidence that individuals better remember and more frequently recall advertisements that portray fear than advertisements with no emotional content (Snipes *et al.*, 1999, p. 273). However, a challenge is that there are concerns about the long-term effects of the fear appeals. Williams, (2012, p. 16) proposes that it is unlikely that the response to fear appeals remains static over time and that this *wear-out* effect is a major concern for agencies who use fear appeal advertisements. Furthermore, Lewis *et al.* (2007a) suggest that society is no longer affected by scenes of carnage because these images are now commonly portrayed in the media. Advertising agencies are acknowledging the limitations of shock, so rather than road-safety advertisements based on an explicit car crash or anti-smoking campaigns showing stomach-churning images of fat-filled arteries,

agencies have begun to take a different approach. Advertisements aim to highlight the emotional consequences of the issues - how it will affect your conscience or your loved ones - is the new trend, (Williams, 2011, p. 20).

Road safety advertisements aim to leave the viewer feeling scared with the intention to change driving attitudes and behaviours. There is growing evidence that traffic law enforcement programs such as random breath testing and speed cameras are effective in reducing illegal high risk behaviours. Breath testing is a major contributor to improved road safety; it helps save lives and prevents serious injuries. Other contributing factors include better roads, speed cameras, compulsory driving lessons, police presence, higher fines, penalties and mobile phone bans. The social stigma associated with losing their driving license is more effective than fear appeal advertisements alone (Lewis *et al.*, 2007b). A law enforcement or penalty can aid the effectiveness of a fear appeal advertisement. Messages highlighting financial consequence such as fines for speeding and lifestyle consequences such as the loss of a driving license may be more effective in conjunction with fear appeals than the use of fear appeals alone. Williams, (2011) suggests that a supportive message or reward may produce more favourable results; improving awareness and changing attitudes.

Gender and road safety advertisements

There are concerns surrounding the effectiveness of fear appeals in communicating road safety messages to young males. Harre *et al.* (2005) suggest that males are subject to psychological biases, such as optimism bias. Therefore, males can consider fear appeals to be irrelevant and aimed at someone else. Indeed RSA chairman Gay Byrne has said that hard-hitting advertisements are “a waste of time” when it comes to targeting young men (Nolan, 2009, p. 20). The psychological and psychiatric personalities of young males place

them in particularly exposed to (fatal) road accidents. It is crucial that persuasive appeals targeting this group of road users are designed with the greatest likelihood of being effective. Lennon and Rentfro (2010) and Harre *et al.* (2005) conducted research on the third-person effect to explore its association with the extent to which male and female drivers report intentions to adopt the recommendations of road safety advertisements depicting high physical threats. Their findings suggest that young males are affected more by social threats such as the threat of losing their driving license

Lewis *et al.* (2007b; 2008) reports that females believe they are subject to the consequences displayed in road safety fear appeal advertisements. However, White and Allen (2000, p. 602) report that individual differences do not appear to have much influence on the processing of fear appeals, generally, studies have reported no effect on acceptance of fear appeal recommendations due to gender, age, ethnicity or group membership. Studies suggest that frightening road safety information has less positive effects on males and young people (Tay, 2002; Elliott, 2003). The classic third-party proposes that individuals exposed to fear appeals perceive the message as being more relevant to and a greater influence on others, it is suggested that males are subject to the classic third-party effect (Woolley, *et al.* 2004). Therefore, males are less likely to adopt the recommendation in a fear appeal advertisement (Das, 2001). In contrast the literature suggests that females are subject to the reversed third-party effect which proposes that individuals believe that the threatening and fearful message is aimed at them and they are subject to the negative consequences (Lewis *et al.* 2007b; 2008).

Goldenbeld *et al.*, (2008) report that anti-speeding fear appeals had a positive or neutral effect for females but evoked counterproductive negative reactions from males. After viewing fear appeal advertisements males had less positive attitudes to speed zones, they were less likely to perceive speeding as a problem and had weaker intentions to comply with speed limits in comparison to the females. Male drivers dissociate their own speeding behaviour from a social problem, essentially a defensive self-justification response to the fear appeal (Woolley, 2004). Lewis *et al.* (2007b) conducted an experiment examining pre-exposure and post-exposure driving intentions and perceptions of anti-speeding and drink driving advertising depicting high physical threats. Females reported that the messages would have more influence on themselves than others while males reported the messages would have more influence on others. Males reported more unsafe speeding and drink driving intentions than females after viewing the advertisements.

Fear appeals may fail to reach and influence the most relevant target group for which they were developed (Rossiter and Thornton, 2004). In contrast to the views that individuals do not believe they are vulnerable to the consequences displayed in road safety advertisements. Indeed a study on the relationship between the third-person effect and the acceptance of fear-based advertisement conducted by Lewis *et al.* (2008) indicates that most individuals perceive themselves as more vulnerable to being persuaded by threat-based road safety advertisements than other drivers in general. Lewis *et al.* (2008) suggest that positive emotional appeals may be more persuasive for males than fear-based negative emotional appeals.

Methodology

Data was collected in two phases: firstly, two focus groups were held with six female and six male higher education students. The focus group participants were shown seven road safety advertisements. Only one of the advertisements had been viewed previously by the participants. The adverts were sourced from the UK and Australia.

1. Advertisement 1: This is a graphic fear appeal advertisement that was developed by the Gwent police department to show the consequences of driving and texting. <http://adland.tv/commercials/gwent-police-psa-texting-while-driving-2009-416-uk>
2. Advertisement 2: This is a fear appeal advertisement that uses shock very well to communicate the dangers/possible consequences of speeding. <http://www.youtube.com/watch?v=H5EyOncJLg&feature=related>
3. Advertisement 3: This advertisement shows graphic imagery of an injury but cleverly highlights how this injury could be avoided. It offers a coping strategy. <http://www.youtube.com/watch?v=XUUX77Uzds4&feature=related>
4. Advertisement 4: This advertisement shows the guilt felt by someone through their lifetime as a result of killing a young boy by drink driving. <http://www.youtube.com/watch?v=0s033MjVR7o>
5. Advertisement 5: This advertisement features the father of a boy who got killed in a traffic accident. It is an advertisement from the campaign 'everybody hurts sometime'. It is similar to the RSA in Irelands 'crashed lives' campaign. <http://www.youtube.com/watch?v=pJcXEXbEvY&feature=relmfu>
6. Advertisement 6: This advertisement is called 'dear mom and dad'; this ad contains emotion and informative content. http://www.youtube.com/watch?v=_krbxXawoAU&feature=related
7. Advertisement 7: This advertisement shows the positive effects of slowing down <http://www.coloribus.com/focus/samaya-strashnaya-i-shokiruyuschaya-reklama/9845505/>

After viewing each advertisement the focus group participants filled in an assessment sheet with questions relating to how the advertisement made them feel and what element of the advertisement would encourage or not encourage them to drive safely. The participants were asked to state which advertisement they felt would be most effective at encouraging them to drive more vigilantly. Secondly, depth interviews were conducted to explore the key issues arising from the questionnaire. The interviews were conducted with road safety experts. Guided by Foley (2008) and Farquharson (2005) snowball sampling was used to

identify respondents. Six individuals with a wide variety of experience were approached to participate in this study. Four were available and agreed. The interviews explored three issues: the effectiveness of fear appeals; the impact gender and age have on the effectiveness of a fear appeals; and the ethical concerns relating to fear appeal advertising. The interviews were taped, transcribed, and superfluous material removed such as digressions and repetitions to assist the analysis. Narrative structuring (Kvale, 1996) was used to create a coherent story of the experts' experience(s) of using advertisements to improve road safety.

Findings

The research findings indicate that the attitudes of males and females differ in relation to the effectiveness of particular fear appeal advertisements. The male focus group participants stated that they were more likely to drive vigilantly after being exposed to advertisements containing emotional or positive content rather than gruesome and graphic imagery. Expert 2 cited evidence supporting this:

From conducting surveys after road safety classes and workshops it was evident that the emotional stories told by parents who had lost a child affected males more positively than females (Expert 2).

Lewis *et al.* (2008) suggest that positive emotional appeals may be more persuasive for males than fear-based, negative, emotional appeals. Lennon and Rentfro (2010) report that males are affected by advertisements containing graphic content whilst this study indicates that males are affected by advertisements containing emotional content. In contrast to the males, the females indicated that fear appeal advertisements containing graphic content were more persuasive at encouraging safer driving and communicating a public health

message. Previous studies (Lewis *et al.* 2007; Tay and Ozanne, 2002) indicate that strong physical threats (a fatality) are more effective for females than males.

One female participant stated that:

Once exposed to a fear appeal advertisement for the second time it becomes less effective at encouraging safer driving (Female D).

However, when shown all seven road safety advertisements each of the females ranked advertisement 1 as being the most effective at encouraging safer driving even though each of the females had been previously exposed to a shorter version of that advertisement. Therefore, this study suggests that whilst viewers may believe an advertisement is becoming less effective, the impact of the first time effect remains in the viewer's subconscious and when the advertisement is seen for the second time, although easier to watch it subconsciously triggers the first time effect of being exposed to the advertisement. This idea is supported by Expert 3 who proposes that:

Viewers find fear appeal advertisements easier to watch the second time. However, if the RSA receive the desired effect in their fear appeal advertisements the first time it is viewed then the second viewing may act as a reminder of how the viewer felt the first time they became exposed to the advertisement (Expert 3).

Each of the twelve focus group participants stated that they tend to forget the message communicated in [road safety] advertisements:

Once exposed to the advertisement the message remains with me for a short period, perhaps two days but I eventually forget about it and continue driving as usual (Male B).

White (2007) reports that viewers have learned to simply ignore fear appeal advertisements and block the fear appeal message. However, when asked to recall road safety advertisements each of the twelve focus group participants were able to recall in detail road

safety advertisements. The participants recalled the people and vehicles involved; the music being played and the slogan or message. This indicates that although viewers believe they forget fear appeal advertisements it is evident that the message remains in their subconscious and memory. The assessment sheet results indicated that the majority of focus group participants believe they could be subject to the consequences highlighted in the seven road safety advertisements. The literature (White and Allen, 2000; Thornton, 2005; Williams, 2011) suggests that males are subject to the classical third party effect whereas females are subject to the reversed third party effect. That is females believe that the advertisements are aimed at them whilst the males believe the advertisements to be more relevant to others (Lewis *et al.* 2007b).

The open discussion revealed that both genders were subject to the reversed third-party effect, both the males and females stated that the advertisements were relevant to them and they were subject to the consequences shown. One female stated that they:

Do not drink and drive. However, many people are aware of individuals who do drink and drive and therefore those advertisements are relevant to all viewers as they must encourage those people not to drink and drive (Female A).

And a male made a similar comment:

I know I am subject to the consequences shown in the advertisements, every driver, passenger, pedestrian and cyclist is. However, I ignore the message and forget that I am subject to the consequences until I hear of an actual road accident ... then remember the messages of the fear appeal advertisements but only for a short period and then I block the message from my memory (Male A).

It was evident from the focus group discussions that both genders are subject to the reversed third party effect. That is they know they are subject to the consequences of

dangerous driving. However, they do tend to ignore the consequences. Studies (White and Allen, 2000; Harre, 2005; Williams, 2011) indicate that males are prone to psychological bias such as optimism bias; they consider the advertisements to be irrelevant and aimed at someone else. This view is supported by the road safety experts. One expert stated that:

Males are subject to psychological bias and therefore the females should be targeted through fear appeal advertisements as they will influence the males (Expert 3).

The experts believed that the females were not subject to psychological bias. However, the focus group results have indicated otherwise with one female stating that:

Sometimes whilst driving I realise I am driving too fast and a RSA message or advertisement will come to mind, but I then intentionally forget about it and think that I will not be involved in an accident and continue driving as I did before the message came to mind (Female D).

Lewis *et al.* (2007a) suggest that young males appear to be affected more by social threats such as the threat of losing their driving licence. Each of the experts agreed that law enforcement and/or penalty can aid the effectiveness of fear appeal advertisement. One of the focus group participants stated that:

The fear appeal advertisements are good at creating awareness but it is enforcement that changes attitudes and behaviours to road safety (Male D).

In comparison one expert stated that:

The advertisements are part of a larger toolkit which consists of education, enforcement and engineering (Expert C).

Evidence suggests that a supportive message or reward may produce greater awareness; attitude change: and attempts to quit the undesired behaviour (Williams, 2011). However, Lewis (2007a; 2007b) states that the possibility of using more positive enforcement and rewards in road safety initiatives generally, as well as in advertising more specifically,

represents a rather contentious issue. One male participant highlighted the collaboration between the RSA, the Garda Síochána, a regional radio station and their listeners. They were offering a reward of 100 euro to drivers who were caught driving under the speed limit. The males felt that incentives such as these are effective at encouraging drivers to slow down. However, the females stated otherwise:

Incentives such as those only last for a short period, eventually drivers begin to slow down only when they see an actual speed camera or for the time period that the reward is being offered (Female B).

There was general agreement amongst the focus group participants and the experts that fear appeal advertisements are good at creating awareness. However, it is difficult to quantify how effective they are at changing attitudes and behaviours to driving and it is enforcement that changes the attitudes and behaviours of drivers towards road safety and dangerous driving. Evidence suggests that young adults who have been exposed to graphic and violent images in video games, movies, and television may be desensitized to the kinds of images often used in fear appeals (Lennon and Rentfro, 2010). The focus group discussion uncovered that fear appeal advertisements are no more gruesome or graphic than the content shown in television programmes. It was also identified that the proliferation of graphic media has caused widespread compassion fatigue in society.

Conclusion

Previous research indicates that males were affected more positively by advertisements that contained positive content. This study provides a similar result. Positive and emotional content were identified as the most powerful content for encouraging males to drive more vigilantly. Similar to previous studies, the current study indicates that females are effective more positively by graphic content in fear appeal advertisements than males. Previous studies specified that males were subject to psychological bias, this study identified that both males and females are subject to psychological bias. The literature suggested that females were subject to the reversed third party effect whereas males were subject to the classical third party effect. This study indicates that both genders are subject to the reversed third-party effect, both genders understood that they were subject to the consequences portrayed in road safety advertisement. This study reports that viewers retained road safety messages subconsciously; each focus group participant and each of the experts were capable of recalling a road safety advertisement and describing the advertisement in detail. It was evident from the findings that fear appeals are subject to the wear-out effect; therefore it is important that the RSA ensure their advertisements are realistic and believable. Evidence suggests that it is difficult to quantify if fear appeals change attitudes and behaviours. There was general consensus from the respondents that fear appeal advertisements are a good at creating awareness about road safety. However, in order to change attitudes and behaviours the fear appeal advertisement need to be used in conjunction with a wider toolkit which consists of engineering, education and enforcement.

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