THE FACTS
Advertising as a road safety counter-measure

- Each year, in Australia, approximately 1,600 road users are killed and 21,000 are hospitalised as a result of road trauma.
- Risky driver behaviours, such as speeding and drink driving, remain major contributors to road crashes.
- Persuading road users to adopt safer attitudes and behaviour can significantly reduce transport-related injury and mortality.
- Mass media advertising is used as a tool to achieve this goal, and constitutes a large portion of Australian governments’ annual expenditure on road safety initiatives.
- Estimated median production costs for television road safety advertisements range from AUD$10,000 (simple talking head advertisement) to $450,000 (cinema verite type executions featuring graphic crash scenes).

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Designing road safety advertisements

- There are two main factors to be considered when developing an advertisement: (a) determining the message content to motivate appropriate action, and (b) executing the message in a way that the target audience understands and accepts, while retaining its motivational potential.
- A number of message-related and individual-based characteristics have been identified as influencing the effectiveness of advertising messages.
- Message-related characteristics represent aspects of actual message design and content; while individual characteristics include factors particular to individuals (or groups of individuals) such as socio-demographic factors. The “effectiveness” of advertising messages is typically defined by the degree of “message acceptance” or “persuasiveness” (i.e. its ability to achieve attitudinal, intentional and/or behavioural change).

Message-related characteristics¹:
- Response efficacy. Providing strategies to prevent or minimise the threat of a crash appears crucial to enhancing a message’s persuasiveness. For example, designating a driver who does not consume alcohol is a strategy which may appear in a drink driving advertisement. The extent to which strategies are able to be provided varies between driving behaviours with, for example, a wider range of strategies available for messages addressing drink driving than speeding.
- Threat relevance. The extent to which the threat is relevant to the audience, and their vulnerability to it, has an important influence on message effectiveness. Depending on the issue and the target audience, different messages emphasise varying negative consequences. Some of the threats that can be highlighted in road safety advertising include legal sanctions (fines, licence loss), physical injury or death, social ostracism, or guilt or remorse as a result of causing injury or death to another party. The differences in negative consequences portrayed (i.e. differences in message content), reflect what the message creators perceive to be appropriate motivators for the different target audiences for particular campaigns.
While road safety has tended to rely upon physical threats of injury and death, evidence suggests that such appeals may not influence males, despite the fact that many of these messages intend to target such road users. Evidence suggests that social threats (e.g. licence loss and the social stigma attached to it) may be a more effective threat appeal, particularly for male drivers.

- **Type of emotional appeal**
  As noted in the preceding point, there has been a long-standing reliance upon negative, fear-based appeals in road safety advertising. For such fear and threat-based appeals, the role of emotion (i.e. fear) in influencing persuasion has been extensively studied. More recent research shows that more positive emotion-based messages such as those incorporating humour may be relatively more effective for males than females, and vice versa for negative, fear-based appeals.

- **Ordering the message**
  Evidence suggests (based upon fear-based messages only) that the provision of strategies (i.e. response efficacy) should appear subsequent to the threat or issue of the message.

Individual-based characteristics:
Each and every time an individual is exposed to a health message, their gender, a range of socio-demographic characteristics, and the beliefs the individual possesses will function to influence the extent to which the message will be effective.

- **Gender**
  Males are an important target of road safety advertising, as males, relative to females, are more likely to be involved in road trauma and report engagement in risky behaviours (e.g. speeding). Research shows that males are more likely to regard fear-based messages as having a greater influence on others than themselves, yet perceive themselves as influenced as much as other drivers by positive, humour-based appeals. The opposing findings are true for females.

- **Pre-existing beliefs**
  Pre-existing attitudes continually represent one of the strongest predictors of intentions. The more strongly an individual identifies with an issue and/or behaviour, the more strongly they are found to process the advertising message and the more enduring its persuasion is.

While each of the listed message and individual-based characteristics are key determinants of message effectiveness, it is individuals and their perception of the message which ultimately determines how effective it is.1

**Exposure**
In addition, the number of times an advertisement is viewed (exposure) may also influence its persuasiveness. It is difficult to determine how many exposures are optimal to maximise message effectiveness.

**Evaluating advertising messages**
- There have been few evaluation studies based on uncovering the effects of road safety advertising campaigns.2

**Challenges for road safety advertising**
- **Health advertising campaigns aim to improve individuals' health and safety via motivating behaviour change.**
- **Contention however, surrounds the role that advertising plays as a road safety countermeasure, and more specifically, whether it functions to influence driver safety directly (i.e. by persuading individuals to change their behaviour), or indirectly (e.g. by supporting other initiatives such as enforcement).** The prevailing wisdom appears to be that enforcement campaigns are more effective when accompanied by widespread advertising and publicity than when they are not, and that advertising and publicity alone may have only a short-term effect which soon dissipates in the absence of enforcement.2
- **Evidence relating to health advertising generally, as well as road safety advertising more specifically, has found theoretically-based persuasive messages and campaigns to be more effective.** Despite this evidence, most message campaign development in road safety is designed in the absence of any clearly defined guiding principles.1
- **Negative fear-based messages, as opposed to positive approaches, have been favoured in the road safety advertising context and this practice has continued**
The degree to which participants have adopted by several other Australian states and New Zealand. 

° The artificialness of the testing laboratory (i.e. participants being sat down in a controlled laboratory setting at a designated time with prior knowledge of what is being researched);
° The degree to which participants have been exposed to the message;
° The timing and follow-up of testing post-exposure; and as participants may be required to provide responses in relation to their current and future intended engagement in illegal behaviours, their responses may be influenced by their desire to conform to socially acceptable responses. As different driving behaviours are viewed with varying levels of social acceptance, the accuracy of responses may vary depending on the behaviour of focus. For example, participants may be more willing to report accurately on their speeding than drink driving behaviour, to the extent that the drink driving may be regarded as less socially acceptable than speeding. As message effectiveness is usually measured in terms of attitudinal or intentional change, this bias may influence, adversely, the accuracy of road safety advertising evaluations.

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Within this campaign, the messages were generally high cost, dramatic, cinema verite type executions that featured graphically portrayed crashes and their emotional and physical aftermath. While a number of TAC ads included threats of harm to self, others focussed on the emotions of guilt, remorse and sadness following (avoidable) injury or death to others as a result of the driver’s actions; and on the distressing effect on others as a result of the driver’s injury or death.

The TAC ads in this campaign were generally longer than most ads (i.e. 60 and 90 seconds) and had relatively high production costs (estimated around AUD$250,000–$450,000), compared with other Australian states’ ads which have generally been lower cost ads, and far less dramatic and emotional in execution. Given the differences between Victoria’s ads and the other states’ ads, it might be expected that a comparison of Victoria’s road trauma data with that of other states and territories during this period would provide some indication of the relative efficacy of different types of execution. However, there is considerable diversity between the states and territories with respect to media spend and level of enforcement activities, further confounded by different penalty schedules, road density and residential: rural ratios which make comparison difficult.

Analyses of the contribution of the TAC advertising to the reduction in road trauma appear to have been interpreted as evidence that the advertising type has been effective. However, while the level of TAC advertising was shown to be related to the level of road crashes, the type of execution has not been tested. A review of the Australian and overseas campaign data suggests, however, that there is no direct evidence of the inherent superiority of dramatic, highly emotional ads depicting crashes in a highly graphic way, over other less dramatic, low emotion ads. 

CARRS-Q’S WORK IN THIS AREA

• Assessing drivers’ on-road responses to speeding and tailgating messages displayed on highway Variable Message Signs.
• The beliefs which influence young males to speed and strategies to slow them down: Informing the content of anti-speeding messages.
• Extending the explanatory utility of the EPPM beyond fear-based persuasion.
• Response efficacy: The key to minimising rejection and maximising acceptance of emotion-based anti-speeding messages.
• What do we really know about designing and evaluating road safety advertising?: Current knowledge and future challenges.
• An examination of message-relevant affect in road safety messages: Should road safety advertisements aim to make us feel good or bad?
• Delivering road safety messages to the next generation of older drivers.
• Predicting future speeding behaviour: The appeal of positive emotional appeals for high risk road users.
• Examining the effectiveness of physical threats in road safety advertising: The role of the third-person effect, gender, and age.
• A theory-based approach to the design and evaluation of anti-speeding messages to target high risk road users’ attitudes and behaviours.
• The impact of advertising on driver speeding behaviour: A quasi-experiment in a natural setting.
• Australian motor vehicle advertising content analysis and overseas comparison studies.

A State example

In Australia, the use of paid advertising as a component in road safety campaigns is widely accepted and practised by road safety authorities; the debate having shifted from whether or not paid advertising can be effective to what type of advertising is more or less effective.

As an example of this notion, the Victorian Traffic Accident Commission (TAC) began a multi-faceted approach to reducing road trauma in December 1989. The TAC campaign included a range of enforcement and public education activities, but it is the TAC’s advertising style that attracted much attention. The TAC and its advertising agency (Grey Advertising) received a number of advertising awards for the campaign, the advertising approach received international attention, and the executional approach has since been adopted by several other Australian states and New Zealand.
FUTURE DIRECTIONS

- Road safety advertising represents an important component within the array of strategies implemented in the attempt to minimise road trauma. As such, it is crucial that health advertising practitioners continue to research and identify the most effective advertising interventions using methodologically sound evaluation designs.
- Future research, practice, and policy must continue the search for innovative advertising strategies which are most effective for influencing particular road users.
- The role of different emotional appeals in road safety advertising needs to be further explored.
- There is growing support for the potential effectiveness of positive relative to negative appeals for high risk road users such as males. With males at greater risk of being involved in road trauma, further research in this area is warranted.
- There has been a particular and consistent focus on evaluating the effectiveness of advertising to address the behaviours of drink driving and, to a lesser extent, speeding. There remain, however, other high risk driving behaviours for which research is needed to determine the most effective persuasive strategies. Examples of these behaviours include fatigue, inattention, mobile phone use, and drug driving.

REFERENCES


SEE ALSO:

STATE OF THE ROAD is CARRS-Q's series of Fact Sheets on a range of road safety and injury prevention issues. They are provided as a community service and feature information drawn from CARRS-Q's research and external sources. See the reference list for content authors.

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