Road Safety Council Community Education Campaigns on Speeding
– February 1998 to March 2001

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Abstract

The aim of this paper is to present an overview of the community education campaigns on speeding, implemented in Western Australia by Transport's Office of Road Safety, on behalf of the Road Safety Council. Each campaign utilised a range of media and promotional tools, as well as involving key stakeholders. The speeding campaigns under analysis have been running since February 1998, with the most recent campaign airing January to March 2001. The paper covers the campaign development process, implementation and evaluation. Data from the evaluations conducted since February 1998 right through to the most recent campaign will highlight trends in attitudes, knowledge, beliefs, behaviours and behavioural intentions in relation to speeding.

Introduction

This paper examines the effectiveness of the Western Australian Road Safety Council's community education campaigns on speeding from February 1998 to March 2001. The paper is presented in two parts.

First, community education campaigns are set in the context of the Council's comprehensive road safety strategy involving a range of partnerships with other agencies and the broader community.

Second, the paper details the research and evaluation processes associated with such social policy campaigns and reports on the effectiveness of speeding campaigns in particular.

Background

The Road Safety Council has established a five-year strategy to reduce road trauma in Western Australia. A key component of the *WA Road Safety Strategy 2000-2005* is to focus education programs to encourage safer road user behaviour and to improve the effectiveness of enforcement. Each year data collected by the Police and Main Roads WA are reviewed to determine the most effective timing of campaigns. However, flexibility in timing is possible to include, for example, drink driving messages during a major wine festival.

The strategy targets the four major road user behaviours that contribute to road trauma:

  ?? Speed;

  ?? Drink Driving;

  ?? Driver Fatigue; and

  ?? Non-use of restraints.

Other education programs address other issues or are used to inform on changes to road safety legislation (eg prohibiting riding in open load spaces and using mobile phones while driving, or the reduction in speed limits to 50km/h in local streets).

The Western Australian approach to road user behaviour change is multi-faceted, involving a coordinated mix of education and police enforcement. Such an approach has been shown to be effective, but research also shows that inadequate levels of advertising can decrease the effectiveness of enforcement and impede efforts (Cameron, Harrison, Vulcan, Pronk, Shtifelman & Narayan, 1997).

While the enforcement component harnesses the resources of the WA Police Service, the matrix approach of the Road Safety Council also enables involvement by other State Government agencies, local government and community groups, schools, industry, and road user representative groups such as the RAC. There are also nine Council taskforces covering specific major road safety issues. The contribution of all these road safety partners cannot be over-estimated as they provide essential planning, support and reinforcement of education messages.

Changing road user behaviour

Research shows that there are three key factors in behaviour change. People need to:

- ??Believe they are able to change their behaviour (involves awareness of alternatives)
- ??Recognise the moral norm and anticipate regret of the behaviour; and
- ??Perceive that the behaviour of others is consistent with the desired behaviour.

The Road Safety Council's community education programs are designed to:

- ??build knowledge and beliefs about a particular behaviour (eg that a small increase in speed has a significant effect on braking distance);
- ??change attitudes and build on social norms (eg that speeding is anti-social behaviour with serious potential consequences such as killing a child).

WA's approach is based on a behaviour change framework, developed specifically for targeting road safety behaviours. The framework is based on the premise that people are motivated by three factors:

- ??Personal morality and legitimacy (ie believing it's the right thing to do);
- ??Harm prevention or minimisation (ie fear of harming others); and
- ??Deterrence (ie perceived risk of being caught and the associated consequences).

It has been shown that media advertising can contribute significantly to reducing road trauma and that television is the most effective medium because its moving images can show the effects of driver behaviour and convey human emotions in a realistic way. Television is also a cost effective medium. Advertisements reach a broad audience in large numbers and can also be targeted to reach specific groups (eg males aged under 25 in country areas). On average, the cost per target audience member is just 52 cents.

The Campaign Development Process

Our development of public education campaigns follows a 28-33 week planning cycle, which starts with a development team meeting and ends with a final debrief.

The preparation of the brief includes analysing ten years of road crash statistics and best practice experience, detailing the extent of the problem, and clearly identifying the aim of the campaign, the target audience and communication objectives. This, plus the timeframe, executional guidelines, media strategy, advertising pre-testing and evaluation requirements are presented to the advertising agency to inform the development of creative concepts.

We may consider using existing advertisements based on the evaluation of their past successful effect. This saves money.

When new advertisements are required, advertising concepts are developed and pre-tested with the target groups to ensure they understand the concept, take out the right message and aren't turned off by the advertisement's execution. The total advertising research process, and particularly the in-depth evaluation and tracking of attitudinal and behavioural change, is dealt with in greater detail in the second part of this paper.

Speed

Research shows that speed was a factor in 37 per cent of driver fatalities (1992-96). Those killed are more likely to be males and aged between 17 and 29 years. Speeding is a State-wide problem.

It regard to drivers' attitude to speed our research shows that young males believe speed limits are too low, it is all right to speed, and that they are in control of their vehicle and unlikely to crash. However, they also recognise that they cannot control the external environment (eg a child running into the road) and the risk of collision and injury (particularly harming others) is a powerful motivating factor to keep within speed limits, as is the likely consequence of being caught by the police.

The second half of this paper provides a comprehensive look at the advertising research and evaluation process, with a focus on speeding campaigns conducted over the past three years.

Research Objectives

The Office of Road Safety's overall **program objective** for market research requires a holistic methodology - one component of this is the evaluation of road safety community education campaigns. In essence, the ORS's approach to research and evaluation follows models developed by Egger, Donovan and Spark (1993), as summarised in Table 1 below:

Table 1: Research Program and Approach

RESEARCH NEED	RESEARCH OBJECTIVES	RESEARCH APPROACHES
Pre-campaign Formative Research	1. Exploratory / investigative	Qualitative: focus group discussions; individual depth interviews; stakeholder forums; etc.
		Desk: literature reviews; background materials; etc
	2. Advertising pre-testing	Quantitative: ADTEST®
Process Evaluation	Campaign measures (eg. awareness / exposure; message takeout; etc)	Quantitative: Continuous Tracking®; Pre-post surveys.
Impact Evaluation	Short-term effects (eg. attitudes; beliefs; self-reported behaviours; etc)	Quantitative: Periodic community attitude surveys; Specific ad-hoc community surveys on key issues; Continuous Tracking®.
	Long-term effects (eg. reported crashes / deaths; other 3rd party data; etc)	Desk: Analysis of the Road Crash Database; Hospital databases; Police contact statistics; etc

Each of the **three required research needs** described above comprises extensive and varied research objectives, as required by the particular piece of research at the time. In terms of **process evaluation** specifically (ie. the primary focus of this paper), the **core objectives** relating to road safety campaign evaluation[1] are as follows:

?? to measure **awareness** and **reach** of the campaign and **understanding** of the campaign messages:

- prompted and unprompted awareness of campaign strategies / paid media;
- take-out of key message elements;
- appeal of campaign positioning statements;
- believability and personal relevance of campaign strategies;
- overall approval of the campaign per se;

?? to measure the **attitudinal impact** of the campaign (ie. in terms of a range of road safety 'beliefs' and perceptions of 'risk' behaviours and their potential consequences).

?? to assess the degree to which the campaign has had an impact on **behaviour** or **behavioural intentions**.

?? to measure the overall impact of the campaign amongst **key segments** of the community.

?? to measure the **relative effectiveness** of different campaign elements (eg. TV vs. Radio vs. Press vs. Outdoor advertising; etc).

The Research Approach

MarketMind Continuous Tracking[?]

Since 1997, the Office of Road Safety has evaluated most of their major campaigns using short-duration *MarketMind Continuous Tracking*[?] studies (ie. 12 week evaluations covering a pre-campaign 'baseline' period through to the end of the campaign. In July 2000, the Office of Road Safety commenced a continuous 52-week campaign evaluation process utilising the *MarketMind Continuous Tracking*[?] approach – thus, all campaigns are evaluated in terms of both short-term 'campaign' effects as well as longer-term 'strategic' impact (NFO Donovan Research, 2001). The research sampling and interview procedure comprises 2600 face-to-face interviews in Perth and 780 telephone interviews in rural WA annually. The interviews are conducted each week

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1   NOTE: Several of these objectives are addressed via campaign pre-testing, so that any required changes can be made *prior to the launch of the campaign.*

amongst male and female drivers aged 17-59 years. The data is post-weighted to correct for age, gender and metro country distribution.

**Conceptual Framework For Campaign Evaluation**

In essence, the specific measures used in the tracking program are derived from the basic model of behavioural change. In its simplest form, this can be represented as follows:

Thus, behaviour (the *'end effect'*) is presumed to be a function of the individual's **awareness** of the issue, their **image, beliefs and knowledge** about the issue and, based on these, the **disposition or attitude** they have toward the issue. These are referred to as *'outcome effects'*, and the 'issue' in this instance is road safety / safe driving behaviour.
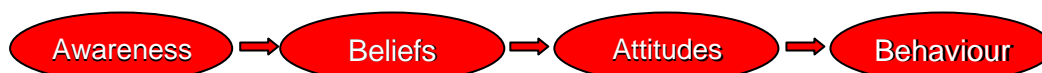

Expanding on the above, the *conditional hierarchy* model proposes that the role of advertising is to move consumers through a *sequence* of stages – this process is often assumed to be *sequential* and *ordered*, as depicted above. The various marketing inputs that contribute to this process are summarised in Figure 2 below:

Figure 2: Market Inputs / Desired Outputs
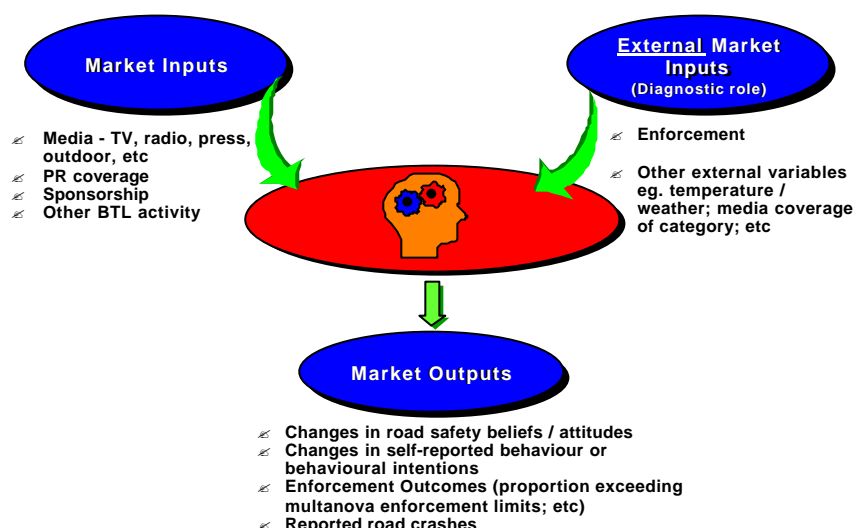
A communications campaign (the *input*) aims to bring about a change in behaviour through changes to one or more of these *'intermediate effects'*. While this *sequential* model still applies in some cases (eg. consumer durables / fast moving consumer goods), in many instances, including social policy advertising, the sequence of effects may in fact work in a different order, whereby each variable can interact with, and "condition" another, as summarised in Figure 3 below:

**Figure 3: Interactive Model of Behavioural Change**
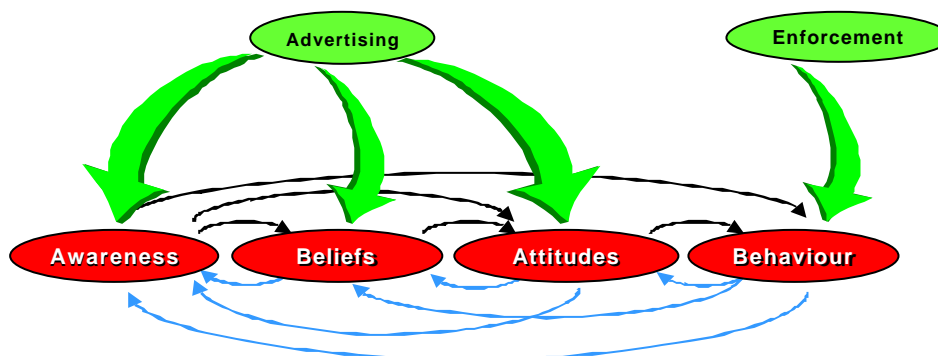
It is likely that in road safety advertising, the combined effects of 'enforcement' and 'consequences'-based advertising campaigns, as well as police enforcement activities, may result in a different sequence of events. As an example, one common argument from drivers against the introduction of 50kph speed limits is a claimed

increase in length of trip times. Thus, whilst drivers may be *aware* of the new law and *behave* in the appropriate way (assuming high levels of police enforcement), their *beliefs* about the effect the new law will have on their trip times are such that their resultant *attitudes* towards the law per se will be negative. Over time however, drivers may come to realise that in fact their trip times have not been significantly affected, thus their attitudes towards the law may become more favourable, particularly where crash benefits can be demonstrably proven. Thus, the *conditional hierarchy* model does not apply as such, as the relationships are more dynamic and *interactive*, yet the end benefit is the same.

The Measures For Social Policy Campaign Evaluation

A range of 'direct' and 'indirect' measures is required to address each component of the behavioural model, so that the interactions between these measures and the relevant contribution of advertising campaigns can be assessed. A typical range of measures to evaluate speed campaign advertising might include:

Figure 4: Campaign Evaluation Measures
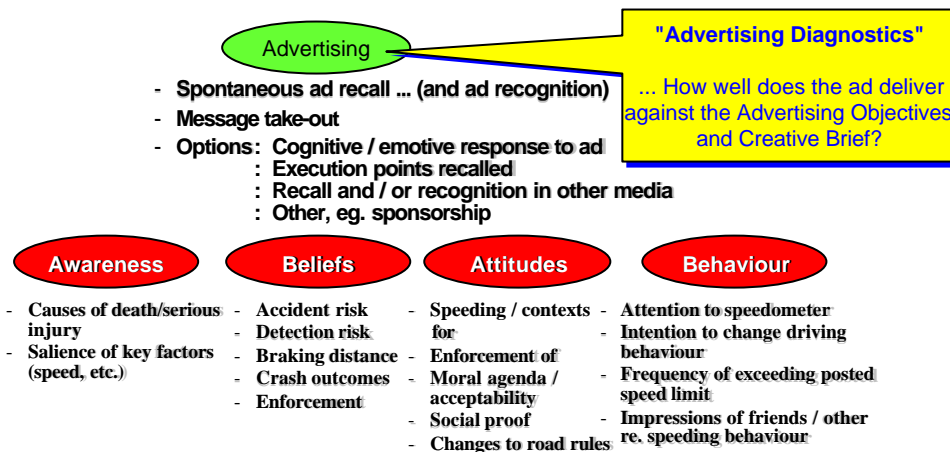
This paper will take one key measure from each category above and examine the extent to which the various campaign *inputs* may have contributed to changes in *outcome effects* observed between February 1998 and March 2001.

The Research Findings

A total of **four 'consequences'-based ads** have been developed in WA and used between February 1998 and March 2001. The *'processing impact'* of each campaign can be described in terms of the key evaluation measures of *awareness* and *message takeout*, as summarised in Table 1.

Table 1: Key Campaign Effect Measures

CAMPAIGN	TARPS / DURATION	CUT-THROUGH / RECOGNITION	MESSAGE TAKEOUT
"Woman and Pram" Feb/Mar 1998	2025 / 8 weeks	72% spontaneous 94% prompted	- Braking distances increases the faster you go (43%)
"Hospital Chaplain" Feb/Mar 1999	2144 / 8 weeks	25% spontaneous 89% prompted	- You could seriously injure or kill other people (25%) - You will have to live with the guilt (7%)
"The Difference" Jan/Mar 2000	1998 / 9 weeks	58% spontaneous 80% prompted	- You could seriously injure or kill other people/ the faster you go the worse the outcome (51%)
"Kids Bike" Aug/Sep 2000	1650 / 9 weeks	70% spontaneous 92% prompted	- Slow down in residential streets (31%) - Less chance to react in an unexpected situation (27%)
"Kids Bike" / "Woman and Pram" Jan/Mar 2001	2200 / 10 weeks	54% / 35% spontaneous 97% / 91% prompted	- Slow down in residential streets (41%) - Less chance to react in an unexpected situation (31%) - Braking distance increases the faster you go (37%)

The campaigns used to date have been designed for **maximum impact** and the media schedules and TARP weights designed for **maximum exposure**. Peak levels of spontaneous campaign recall and recognition are

typically very high, while levels of *primary* message takeout have been high and 'on strategy'. The Four key outcome effect measures presented in this paper are summarised in Table 2.

Table 2: Key Campaign Outcome Measures, February 1998 vs. March 2001

Measure	Feb 1998	Mar 2001	Statistically Significant
Spontaneous Issue Awareness (Causes of death/serious injury) Speeding (all mentions)	66%	66%	
Knowledge/Beliefs Driving 10kph slower would reduce crash risk… - *"a great deal"* - *"not very much / not at all"*	 18% 22%	 45% 16%	 99%
"Moral acceptability" of driving 10kph over in a 60kph zone[1]… - *"acceptable"* - *"unacceptable"*	 43% 48%	 12% 83%	 99% 99%
Self-Reported Driving Behaviour - admit *"never deliberately speeding"* (ie. exceeding the posted speed limit by any amount) - admit *"often"* exceeding the posted speed limit by any amount	 28% 21%	 36% 16%	
Multanova Enforcement Statistics - % vehicles exceeding enforcement limit	3.4%	2.6%	99%

1. First measured in December 1998.

As a cause of death and serious injury on our roads, speeding and excessive speed remains acknowledged as a major contributing factor. Over a three year period between February 1998 and March 2001, the Road Safety Council speeding advertising campaigns have contributed to an increased knowledge of (and acceptance of) the relationship between vehicle speed and crash risk. In addition, speeding per se, particularly in 'built up' areas is today largely considered morally unacceptable behaviour with significant changes in attitudes observed over the past 3 years. Furthermore, although not statistically significant, encouraging changes in self-reported speeding behaviour have been observed that correlate with a decreased proportion of vehicles detected exceeding multanova enforcement levels over that time. Although the number of speed-related fatal crashes and their relative proportion of all fatal crashes is largely constant over that time, there is evidence to suggest short-term decreases in such crashes during on-air TV activity when combined with police enforcement initiatives.

Conclusions

In short, speed campaign advertising is designed to address both short-term 'tactical' objectives (ie. minimise speed-related crashes during holiday seasons) and longer-term 'strategic' objectives (ie. driver information and education), and substantial progress has been made over the past three years in a number of key areas. Western Australian 17-39 year old drivers of today…

- ✍✍Are considerably more accepting of the notion that driving slower reduces crash risk, however <u>16%</u> still believe that a 10kph speed reduction would make *'no difference'*.

- ✍✍Are significantly less likely to consider driving over 10kph in a 60kph zone to be 'morally acceptable', however <u>12%</u> still consider such behaviour to be *'morally acceptable'*.

- ✍✍Are somewhat less likely to report speeding *'often'*, with a somewhat higher proportion reporting *'never deliberately speeding'*.

References

Cameron, Harrison, Vulcan, Pronk, Shtifelman & Narayan (1997). Development of a five year action plan for community education on road safety in WA : report to RSC of WA.

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