Drink-Driving in the Netherlands: Evaluation of Publicity Campaigns

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Summary

From 1986 to 1991 a mass-media publicity campaign was mounted by the Dutch Road Safety Organisation (VVN), aimed at reducing the incidence of drink-driving. The campaign was evaluated using a postal questionnaire survey and behaviour observation. The questionnaire was sent to the target group, young male drivers aged 18-25 years. It contained items about alcohol usage in general as well as about the use of alcohol before driving. The central part of the evaluation research was the analysis of the so-called Fishbein- and Ajzen model of reasoned action. Repeated measurements were carried out to establish possible changes within the same group over the period from 1986 to 1991. In addition, both before and after the campaign, a new sample was selected every year to control for unintended panel effects. The behaviour observations took place every year near bars, discotheques and sports centres.

The evaluation study showed that the campaign messages are recognized by the vast majority of respondents.

Both the results of the questionnaire and the behaviour observations indicated a decrease in the use of alcohol before driving.

Analysis of the Fishbein- and Ajzen model showed an increasingly negative attitude towards drink-driving, compared to the pre-campaign measurement.

Introduction

From 1986 to 1991 the Dutch Road Safety Organisation organised annual publicity campaigns with the aim of reducing the incidence of drink-driving and enhancing social control over drink-driving. The campaign activities took place from December to March.

The campaigns were designed on the basis of a two-sided approach. The first approach involved communicating to the public at large that driving under the influence of alcohol is unacceptable. This message was presented in an emotive way and it’s primary objective was a general opposition to drink-driving. This also formed the base for the second approach that involved a more specific appeal to the target group, the young male driver in the age-group from 18 to 35 years of age.
To convey the message to the public the organisation made use of radio and television commercials, posters along roadsides and pamphlets. More specific actions were carried out near sports centres and a special manual was developed for the set up of transportation to and from discotheques.

Method

The evaluation of the campaigns was carried out from 1986 to 1991. Both postal questionnaire surveys and behaviour observations were used. The questionnaire contained items about alcohol usage in general as well as the use of alcohol before driving and knowledge about drink-driving. The main part of the questionnaire was based on the model of reasoned action, developed by Fishbein and Ajzen (1975). This model was used to measure changes in intention, attitude and social norms related to alcohol usage and drink-driving. Repeated measurements were carried out to establish possible changes within the same group over the years. In addition, both before and after the campaign a new sample was selected every year to control for unintended panel effects.

Next to the registration of reported behaviour, actual drink-driving behaviour was measured by means of behaviour observations. For this, a new method was developed. A team, consisting of both a male and a female interviewers, approached drivers and cyclists when they were about to enter traffic and politely requested their co-operation in a breathalyser test. These observations were carried out every year near bars, discotheques and sports centres.

Before the campaign was started a baseline study was carried out to determine base rates of attitudes and both reported and observed behaviour.

Results

The obtained results showed the developed measurement instruments to be applicable within the framework of the study. The response patterns appeared similar to the drink-driving data obtained from other sources such as police reports. The data obtained from the behaviour observations and the questionnaire were also comparable.

Panel group

In the first year, the panel group consisted of a representative sample of 1200 male-drivers aged 18-25 years.

The evaluation study showed that the campaign messages were recognized by the vast majority of respondents in the panel group (Söder, 1991a). That held for each year of the campaign. The respondents usually noticed the campaign through radio or television commercials or through billboards along roadsides. 75% of the respondents stated that they never or hardly ever drink and drive. In the Netherlands the legal limit is 0.05 percent. If drivers drink three or more glasses
of alcohol, in most cases the legal limit is exceeded. The percentage of drivers who stated that they sometimes drive after drinking three or more glasses of alcohol was steadily decreasing. However this did not apply to visitors of sports centres. They were more likely to admit that they drive under the influence than people who visited other places of entertainment. This finding had led to a greater emphasis on the issue of "sports and drink-driving" in the 1987-1988 campaign. For the behaviour 'driving under the influence', it appeared that the contribution of the attitude component was stronger than that of the subjective norm. A closer analysis of the attitude components showed that three opinions demonstrated a significant trend. The opinion that one drives more carefully after having drunk alcohol had lost adherents. Besides, the respondents found it less likely that people will drive under the influence when transporting passengers, and it is regarded more unlikely that passengers feel at ease if the driver had drunk alcohol. The influence of the social environment had declined in some ways and increased in others. The impact of opinion of parents, police, employer and colleagues had decreased, while that of the wife or girlfriend had increased. This could perhaps be attributed to the increase in age of the panel group during the evaluation period.

Control groups between 1987 and 1991

The results from the panel group in 1991 concerned drivers who are now 25 years of age or older. The age range of the control group had become steadily wider. That meant that not only men of the same age as those in the panel were interviewed, but also men aged 18-25 years. In this way the developments among younger drivers could be monitored over the years. The younger drivers (18-25 years) showed the same trend as the panel group. Although the differences between the years were not always significant, there was a tendency to drive less frequently under the influence of alcohol in later years. In addition, the intention to drink and drive was also decreasing. These results concerned self reported behaviour, but national drink-driving research showed a decline in drink-driving among the younger drivers as well (Söder et al., 1989; Söder, 1990).

There was evidence that drink-driving attitudes showed a favourable change too. Younger drivers had more negative views about driving under the influence in the later years of the study. The subjective norm did not show any significant differences between the average scores for the various measurements, although it showed a negative trend.

Behaviour observation

The observations were carried out from 1986 to 1990 and took place in the autumn. Drivers and cyclists aged 18-35 years were observed. The percentage of cardrivers with a BAC of 0.05 percent or more decreased during this period (Söder, 1991b). In 1986 there were 16% offenders and this had
declined to 10% in 1990. In 1990, in comparison with 1986 particularly, the high BAC values had declined. During the five years in which the observations had been conducted, social controls on driving under the influence had increased. In 1989, particularly, drivers with passengers had a lower BAC level than drivers without passengers. But in 1990 it appeared that this held only for drivers with one female passenger. Therefore we could presume that the observations validated the information from the questionnaire that the wife or girlfriend of the driver exercises influence on drink-driving behaviour.

In the Netherlands it is considered less serious when cyclists are driving under the influence. For most people cycling is an acceptable alternative way of transport when they had been drinking. The results for cyclists showed an increase of offenders. In 1986 28% of the cyclists had exceeded the legal limit, and in 1990 this was 35%. The increase was especially noticeable for the higher BAC levels. The results suggested, that drivers who consider the bicycle to be a reasonable alternative when they had been drinking were more often represented in the higher BAC levels.

**Conclusion**

After five years of campaigning against the use of alcohol in traffic it could be established that the percentage of male drink-drivers (18-35 years) was decreasing (See fig. 1).

![Driving under influence](image)

Figure 1. Percentage of self-reported drink-drivers (3 or more glasses of alcohol), and observed drink-driving (BAC > 0.05%) between 1986 and 1991 (s=September test; m= March test).
Not only the behaviour but also the attitude towards drink-driving had changed for the better. Drink-driving was increasingly viewed in a negative way. An indication for an increase in the effect of social controls was the finding that car drivers with passengers tend to have a lower blood alcohol concentration than car drivers without passengers. This held especially for the wife or girlfriend of the male-driver.

It was not possible to isolate the effects of the campaigns from other factors, like regional publicity campaigns, police enforcement and legal measures.

References


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References


