

Assessment of the Effectiveness of Road Safety Programmes in Namibia: Learners' Perspective

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Abstract

Road traffic injuries have become a global health and development problem. Global research indicates that road travel puts people at the greatest risk of injury. Road crash rates remain high in developing countries, and Namibia is no exception, as road crashes continue to cause untold suffering to families and rob the country of productive citizens. This paper presents the findings of investigative research on road safety, with specific focus on the effectiveness of road safety programmes. The study was commissioned by the National Road Safety Council of Namibia (NRSC) in March 2011 to the University Central Consultancy Bureau (UCCB) of the University of Namibia (UNAM). The authors of this paper were the main consultants of the project study. The findings from this study show a high percentage of self-reported awareness of road safety among road users. However, there is a low percentage in awareness of specific campaigns and programmes, which is a cause for great concern. The study further found that there are many different road safety awareness campaigns and a number of road safety measures being implemented by different stakeholders. However, there is need for appropriate guidance in the implementation of these awareness campaigns. This paper presents only the perspectives of learners, as stakeholders, towards the effectiveness of road safety programmes in Namibia. Given the above purpose, the study, therefore, trusts that the results, conclusions and recommendations will inform road safety campaign designers on how to effectively and efficiently craft road safety campaigns and programmes aimed at road user behaviour change to improve road safety. Equally, the findings should influence other designers of behavior change road safety messages in the area of mass communication in general.

Keywords: assessment, road safety awareness, National Road Safety Council of Namibia, campaigns/programmes

INTRODUCTION

The National Road Safety Council of Namibia (NRSC) is a statutory body under the Ministry of Works and Transport (MWT) established in terms of Section 2 of the National Road Safety Act, Act 9 of 1972. Among its main functions, the NRSC carries out research to effect road safety, gives guidance with regard to road safety by means of mass communication/awareness campaigns based on: usage of safety belts, saying no to drinking and driving, sticking to the prescribed speed limits and resting regularly. Other institutions that are actively involved in the promotion of road safety are the Motor Vehicle Accident Fund (MVAF) and the Roads Authority (RA) of Namibia.

According to the NRSC (2006), all over the world, the consequences of road traffic accidents continue to be a drain on the scarce financial resources of nations in terms of the carnage, damage to vehicles, medical costs, and most of all, unquantifiable loss of lives. In Namibia, just like elsewhere in the world, coordinated efforts to reduce road traffic crashes have been undertaken and geared towards awareness campaigns and traffic law enforcement.

A study that was conducted by the NRSC (2006) in collaboration with Namibia Economic Policy Research Unit (NEPRU) found that the main media through which the public received the messages in all campaigns was the TV, followed by radio. A strong message that came from the respondents of this study was that law enforcement agencies should be at the forefront in ensuring safety on the road. Some felt that others should do more. The report recommended, among other things, the need for continued public education campaigns using various media, both print and electronic, such as TV, radio, stickers, leaflets, posters, billboards and newspapers, on road safety. According to the report, the NRSC can accomplish this by joining hands with other institutions that also conduct road safety campaigns in the country, such as the RA, MVAF, GRSP (Global Road Safety Partnership) and WHO (World Health Organization). Given this background, the purpose of this consultancy study was to determine whether road safety programmes being implemented in Namibia have achieved the desired results thus far. Specifically, the objectives of the study were to (a) assess the effectiveness of road safety awareness campaigns conducted by all stakeholders; (b) evaluate the research programmes, including road

audits, conducted by all stakeholders; and (c) evaluate enforcement and emergency response programmes. However, this paper only presents the perspectives of learners, as one of the stakeholders, regarding the effectiveness of road safety campaigns and programmes in Namibia.

STATEMENT OF THE PROBLEM

Road traffic injuries have become a global health and development problem. Research done around the globe indicates that road travel puts people at the greatest risk of injury. In developing countries road crash rates remain high and Namibia is no exception, as road crashes continue to cause untold suffering to families and the country of productive citizens (NRSC, 2006). Given the serious nature of road traffic injuries, various stakeholders on road safety had conducted road safety campaigns in the country. However, there was no study done to determine whether road safety programmes implemented achieve the desired results.

LITERATURE REVIEW

There is a large body of existing international literature that examines the effectiveness of road safety programmes. In this study, a literature review was conducted in order to provide a broad overview of past evaluations conducted from different perspectives.

According to the website of the American Traffic Solutions, road safety programmes provide a powerful solution to improve driving behaviour and prevent crashes and the resulting deaths and injuries. This, in an ordinary sense, means that the primary focus of road safety programmes is of course to reduce the negative impacts of road transport on the lives and health of road users (Angle, Greggs, Goddard, 2009). Road safety programmes targeted at improving road user behaviour are a common element of many road safety interventions implemented by different stakeholders (Delhomme, 2002). In Namibia, statistics confirm that road traffic crashes continue to be a major concern. However, despite the country's economic constraints, resources are being injected into different initiatives aimed at reducing road traffic crashes and their effects. Surprisingly, the high crash rates appear to continue. As a result, several attempts have been made both nationally and globally by researchers to explore this same predicament. According to WHO and the World Bank, any traffic system is highly complex and hazardous to human health. Elements of the system include motor vehicles, roads and road users, and the physical, social and economic environments thereof. Making a road traffic system less hazardous requires a systematic approach, understanding the system as a whole and the interaction between its elements, and identifying where there is a potential for intervention (WHO, 2004).

Elvik and Vaa (2004) have stressed that when designing road safety programmes, the relationship between three components, namely knowledge, attitudes and behaviour of road users, is relatively poorly understood. On the other hand, reduction in the number of crashes and injuries is the ultimate objective of all measures, which try to influence knowledge, attitudes and behaviour in traffic. Furthermore, Elvik and Vaa explain that road users ought to acquire the knowledge needed to travel safely by means of formal training and their own past experiences. Elvik and Vaa (2004) further state that it is estimated that if road users respect road traffic legislation perfectly, the number of injured road users could be reduced by 27% and fatalities by 48%.

Lewis, Watson and White (2009) explain that the aim of publicity is to improve the road users' behaviour, attitude and knowledge in order to increase road safety. However, usually, "road safety campaigns can succeed if advertising is only one of the elements in the campaign and usually not the key element". The authors further state that mass media campaigns can achieve increased awareness of a problem or a behaviour, raise the level of information about a topic or issue, help to form beliefs, especially where they are not firmly held, make a topic more salient, sensitize the audience to other forms of communication, and stimulate interpersonal influences through conversations with others (e.g., police, teachers or parents), generate information seeking by individuals, and reinforce existing beliefs and behaviours. On the other hand, Delhomme (2002) argues that the best way to reduce road crashes in developing countries is to provide road safety education to children during their formal education. Nelson and Moffit (1988) agree with Delhomme that a major contributory factor in road fatalities involving children in developing countries is a lack of road safety knowledge, which leads to unsafe behaviour. In the same vein, effective programmes require understanding of the epidemiology of the problem, including factors that predispose, enable and reinforce the target behaviour.

According to Delhomme (2002), campaigns work best when combined with other interventions, such as enforcement of traffic laws and regulations, or provision of other safety services and products. Well-planned and targeted campaigns are more likely to encourage personal commitment. Otherwise, individuals may see little or no personal relevance in adopting a changed behaviour, and their direct personal experience may run counter to the evidence being presented. Delhomme believes that the issue is not whether a campaign approach is too emotional or too negative, but rather whether the targeted motives are correct, and also whether the portrayed emotions are consistent with the target and credible. On the other hand, GRSP asserts that simple messages which

use realistic scenarios have been found to be the most effective, and that the local context should be taken into account.

Lewis et al (2009) propose that communications in road safety have two distinguishable purposes, i.e., to inform and to persuade. However, it is rare for a campaign to be either purely informative or purely persuasive. Motshengwe (2007), however, stresses that for public information campaigns to be successful, measures in the form of persuasive communication can only maintain effectiveness in influencing behavioural change amongst target audiences, if grounded on issues of professionalism such as proper planning, research, implementation and evaluation.

Bourlanger et al (as cited in Wundersitz, Hutchinson & Woolley, 2010) emphasise that a campaign message should be pre-tested with the target audience. Wundersitz et al used this understanding to assess whether a message fits with the characteristics of the target audience and how the message is received and interpreted. The authors cite a number of different strategies for pre-testing a campaign, including interviews, focus groups, questionnaires and thought-listing. On the other hand, Henderson (1991) states that there has been little or no evaluation of the effectiveness of campaigns in reducing the number and severity of road traffic accidents.

A study conducted on behalf of the NRSC of Namibia, seeking to assess the effectiveness of road safety campaigns in different media, reported that the campaigns were received by road users at different rates depending on the availability of the media in a particular area. As regards behaviour change levels, the study also noted positive behaviour for those who were aware of the campaigns (NEPRU, 2006).

In an effort to address previous research indicating that media campaigns work best when messages are appropriately targeted, a drink-drive communication campaign aimed at 16-24 year olds was launched by the National Board of Road Safety in Sweden in 1998. An evaluation of this initiative was conducted in two parts, focusing on changes in attitudes and self-reported behaviours only (Linderholm, 2000). The results of the evaluation suggest that the communication campaign did not get widespread exposure. The results also show that those who had seen the programme were more likely to have more negative attitudes towards drink-driving than those who had not seen the programme. The second key effect of the campaign was to increase knowledge of the blood alcohol concentration (BAC) limits as they apply in Sweden. The results of this study do not identify any evidence of behaviour change. However, it appears that the campaign was successful in changing attitudes, at least in the short term.

From a public health point of view, Noar (2006) argues that in the last decade, health-related mass media campaign designers have increasingly adhered to principles of effective campaign design, rather than discovering new principles. This, in turn, has resulted in increased campaign success.

The practical guide on road safety, which is a tool kit for National Red Cross and Red Crescent Societies, states that road user behaviour may be changed in various ways, which may be short term or long term measures. Short term measures may include campaigns and enforcement, while long term measures may involve introducing road safety education in schools (IFRC, 2007).

On the other hand, Delhomme et al (as cited in Wundersitz et al, 2010) have observed that it is not practical to conduct a rigorous outcome-based evaluation of the effectiveness of mass media campaigns on road safety. According to the authors, campaigns are enhanced when combined with other activities, such as enforcement, education and/or legislation; the use of a theoretical model; and whether the campaign is based on prior research.

Elliott (2003) examined the literature on appeals to fear from 1996 to 2003 and concluded that road safety media campaigns should use fear with caution, as fear arousal can have both facilitating and inhibiting effects, and can lead to defective coping mechanisms. Indeed, a number of studies have found that exposure to such appeals can elicit maladaptive responses that do not try to control or remove the threat implied by the fear message, but attempt to cope with unpleasant feelings that result from the advertisement.

A subsequent study by Lewis et al (2008) suggests that positive emotional appeals may be more persuasive for males than fear-based negative emotional appeals. Nevertheless, recent evidence suggests that positive emotional approaches can be more effective than negative fear-based approaches for males (Lewis et al, 2008). Political advertising research suggests that positive emotional (or reward) appeals may work better with people who are less authoritarian (Delhomme, 2002). For instance Delhomme's study found that males with high response efficacy regarded a positive appeal as more personally influential to themselves than to others, while both males and females with low efficacy reported that a positive appeal message was more influential on others than themselves.

RESEARCH METHODS AND DESIGN

Since this research dealt with the review of road safety programmes, a mixed method approach was adopted to describe road safety awareness campaigns among road users in Namibia. This involved the

collection of data through document or desk analysis, a questionnaire and focus group discussions. The questionnaire was administered to individuals in order to elicit information regarding the behaviours, beliefs, attitudes and/or characteristics of their road safety awareness and campaigns.

POPULATION AND SAMPLING PROCEDURE

The target population was drawn from road users, including drivers, pedestrians, traffic law enforcement officers and other road safety stakeholders found either on the roads, in shopping centres, at bus and taxi loading zones, as well as in offices during the interview process. The sample of participants was selected based on convenience, and included individuals who were readily available at the time of the fieldwork. A sample of 750 from all the regions of the country (which was estimated at the time of the project) was used. However, only 681 people participated in this study. This number also included 50 school learners drawn from grades 8-12. The age range of the learners was 16-20 and they came from the Caprivi, Omusati, Kavango and Ohangwena regions of Namibia. The learners, as important stakeholders, were included in the study because they can be directly or indirectly affected by road traffic injuries as pedestrians and as users of public transport. It should be noted that the perspectives presented in this paper are those of the learners only.

SOURCES OF DATA AND ANALYSIS

Prior to the data collection exercise, the NRSC posted a public notice in the print media over a two-week period requesting co-operation from the public and stakeholder institutions for the UNAM research teams. Although the study used other methods of data collection such as questionnaire and document analysis, the learners only participated in the focus group discussions. The focus group discussion was considered as an appropriate method to draw out the perceptions, opinions, beliefs and attitudes of the learners on the road safety awareness campaigns (Blanche, Durheim & Painter, 2006). In this study, focus group discussions were conducted with 50 school learners of both sexes in groups of eight to ten, as recommended by Krueger and Casey (2000) on the number of participants for a focus group discussion. A total of five focus group discussions took place and lasted for approximately one hour each.

Two assistant researchers took careful notes during the focus group discussions. With the assistance of the principal investigator, the notes were later summarized into broad categories of themes as emerged from the discussions by writing small key words, short phrases, ideas or concepts in the margin of the text summary.

LIMITATIONS OF THE STUDY

This paper was part of a bigger study that investigated the effectiveness of road safety awareness campaigns carried out by all road safety stakeholders in Namibia. However, this paper only presents the perspectives of learners, as one of the stakeholders, regarding the effectiveness of road safety campaigns and programmes in Namibia. This, itself, could be the main limitation of this paper. Further, the study was only carried out in Namibia; therefore the results cannot be generalized to other countries. However, other countries can draw some lessons from this study.

DISCUSSION OF FINDINGS

Most learners agreed during the focus group discussions that they had heard of some road safety campaigns and organizations that conduct such campaigns on radio, in newspapers and through road shows (public relations). As stated earlier, the views of the learners based on the focus group discussions were summarized into the following theme categories: road campaigns and programs, road safety messages, communication of road safety messages, timing of road safety messages and campaigns, effectiveness of road safety messages and campaigns, and target audience of road safety messages and campaigns. These themes are discussed next.

Road Campaigns and Programs

The school learners stressed that the public should be informed mostly through road shows because people tend to be more careful after seeing the shows. Learners were also of the opinion that radios should mostly be used for the campaigns because most people have time to listen to the radio and it reaches a lot of people, including those who cannot read and/or write, or understand other languages, such as English. In addition, other media to be used should include fun shows, public meetings and community meetings to be carried out by village headmen/women, newspapers, television, posters and billboards erected in towns or public places to ensure that as many people as possible are reached with road safety messages. Overall, some of the learners felt that little was being done because there was no education on traffic signs, in some places there were no proper road signs, and/or the signs were vandalized.

Road Safety Messages

The majority of the learners felt that road safety messages should be made more simple and understandable. A few learners also felt that messages were not convincing enough; for example, the messages were not detailed and thus left out important information. Also, the learners felt that the messages were not translated into different languages for some people, such as old people, who were not English literate. Furthermore, learners felt that fines for breaking the laws should be increased, and constant

offenders should be made to serve a jail term. Some learners said that drunken drivers' vehicles should be confiscated for a period of time, and reckless drivers should be punished with community service work. Additionally, traffic officers should control drinking places and confiscate vehicle keys when drivers are drunk and want to drive. Road users, particularly learners, should try and cross roads in groups to ensure safety.

Some learners expressed that much was being done, i.e., information on road safety was broadcast and road safety messages were easily understood, but people tend to ignore them. They also felt that at times law enforcement agencies themselves did not follow the laws and regulations of the roads, but placed blame on other people for ignoring the laws and regulations.

Communication of Road Safety Messages

The school learners suggested that road safety messages should be put in music and fun games for young people. Also, the messages could be provided while people are in queues at hospitals or at any other public places, such as old people's pension pay points, during trade fairs and through the use of social networks, such as Facebook.

Timing of Road Safety Messages and Campaigns

The school learners felt that campaigns were more prominent during the festive seasons and school holidays, but they should be done throughout the year as people may forget or some might be new to towns and other places. The learners also suggested that road safety messages on television and radio should be aired as from 19h00, since learners have afternoon classes and study sessions. Some learners also suggested that it would be helpful to teach people and give them rewards, such as what the MVA does.

Effectiveness of Road Safety Messages and Campaigns

The learners felt that people were getting the road safety messages, but they were just ignoring the messages. According to the learners, some people ignore the messages, and when they break the laws they try to bribe police officers to get away with crime.

The learners indicated that road safety campaigns had increased the way people adhere to the rules of the road. For instance, the traffic officers on Good Morning Namibia (a local TV programme) have had a positive impact in announcing road safety messages, warnings and statistics. Further, the learners expressed that while road safety campaigns were a joy for *all* road users, they affected drivers the most.

Target Audience of Road Safety Messages and Campaigns

With regard to the target audience of the road safety messages, the learners expressed that there was a need to emphasize more on people living in rural areas as they are the majority who do not know the rules of the roads. Also, different people should have different message content and targets (audience segmentation). For example, young people should be targeted mainly using music, such as when Namibian artists once joined together to sing an awareness song for road safety. Some learners stated that the *Don't Drink and Drive* campaign was not relevant to them because they did not own cars and did not drive. However, some learners disagreed and said that the message *was* relevant nevertheless, because they would also become drivers in future. The earlier the message is given, the better. Some learners also suggested that road safety should be introduced as a subject in schools, starting from lower grades, to educate the young ones about road safety. They also said that the travelling public too need to be informed of their right to tell or report drivers in cases where they are driving badly.

Conversely, some learners said drinking and driving was fun (such as spinning), and that alcohol together with loud music kept the driver alert, especially during long distance driving.

RECOMMENDATIONS

Based on the findings from the learners, the following recommendations are worth considering for curriculum development and/or planning of road safety messages and campaigns by the relevant authorities:

- There should be more traffic officers on the roads, especially to check taxis and long distance buses. In addition, there should be police officers to set up road blocks in villages as well.
- A subject on road safety in schools should be introduced.
- Taxi ranks should be put up in all areas.
- More traffic lights should be erected in towns, and to ensure traffic safety, sidewalks should be constructed for pedestrians so that they do not walk on the roads.
- Roads should be maintained and traffic officers must be strict.
- Due to language barriers, the broadcasting of road safety messages on television should be broadcast in all indigenous languages.
- Traffic patrols should be everywhere and a complete inspection should be done.
- Public holidays should be used to approach communities with road safety messages.
- Fencing the area along the road side should be done to prevent domestic and wild animals jumping into the road.

CONCLUSION

As road injuries are the main killers of young people worldwide, teaching across curriculum should include lessons on road safety campaigns and programmes. Learners clearly pointed out that effectiveness of road safety campaigns and programmes depends on proper planning, implementation and evaluation. It cannot be over-emphasized that planners, including curriculum developers, should be cognizant of variables such as message content and message mode of delivery. If planned and implemented well, road safety campaigns and programmes can manipulate road user behaviour and raise public awareness on road safety issues, especially among the learners, which will possibly remain with them throughout their lifetime.

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