

Toward sustainable cities and communities: A qualitative study of motorists' response to an anti-drunk driving media campaign in Southeast, Nigeria

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The 17 sustainable development goals (SDGs) are a worldwide partnership's urgent call to action for all nations, developed or developing. While it is practically impossible to accommodate the entire goals in a single research paper, this study focused on Goals 3 and 11 through a qualitative evaluation of motorists' response to an anti-drunk driving media campaign in Southeast, Nigeria. Using the protection motivation theory and the Extended Parallel Process Model as the theoretical framework, this study investigated motorists' exposure, knowledge, and compliance as well as factors (if any) that inhibit compliance to the campaign by adopting focus group discussions and an in-depth interview as the research methods. Findings revealed that the motorists were exposed and had knowledge of the campaign; however, these indices did not translate into total compliance on their part with the campaign messages. Therefore, for an effective response, the campaign needs to be evaluated in line with its messages, design/packaging, channels of delivery, and measures of enforcement to be adopted.

Keywords: motorists', sustainable development goals, media, campaign, Nigeria

1. Introduction

Due to the nearly 1.4 million road fatalities that occur every year around the world, road safety has been recognized as a worldwide health emergency issue. Based on this, the United Nations (UN) established the Decade of Action for Road Safety 2011–20 with the intention of first stabilizing and then lowering the anticipated rise in the number of fatalities on the world's roads. Road safety management, better infrastructure, safer vehicles, safer driving habits, and enhanced post-crash response are the five main action pillars of this effort (1).

To this end, on September 25, 2015, road safety was adopted in the UN sustainable development goals (SDGs) under Goal 3 "Good Health and Wellbeing" with the target to "halve the number of global deaths and injuries from road traffic accidents by 2020." This ambition, no doubt, is significantly stronger than the original plan of the UN Decade of Action that was geared toward "stabilizing and then reducing" road traffic fatalities (2). Recognizing the

importance of this goal, Wismans et al. (3) averred that in Asia, road safety has a significant negative impact on productivity, the economy, and people's quality of life.

In addition, road safety is part of Goal 11, "Sustainable Cities and Communities," which aims to improve road safety by 2030 and provide access to safe, affordable, accessible, and sustainable transportation systems for all while paying particular attention to the needs of those in vulnerable situations, including women, children, people with disabilities, and older people (2). The UN General Assembly urged member nations to take additional measures to increase road safety, expressing its concern that the SDG target to halve the number of road fatalities by 2020 will not be met at the current rate of progress, especially in developing or middle-income countries like Nigeria (2, 4).

In an effort to evaluate Nigeria's performance with respect to SDGs 3 and 11, scholars (Department of Transport, 2015; Nowark, 2013) in Ezeibe et al. (5) posited that Nigeria has not really made any significant progress as the lack of

infrastructure such as good and accessible roads has further exacerbated poverty in rural areas and road traffic accident rate in the country.

In recent times, many African countries have been making frantic efforts toward providing safety education and conducting safety campaigns about road traffic accidents; their effectiveness, however, is affected by lack of capacity and resources (6). Some of these countries, like Nigeria, have enacted drunk-driving laws with specific blood alcohol limits (alcohol consumption limit as permitted by law), but implementation and enforcement of this law remains a great challenge.

Owing to this, the Federal Road Safety Corps of Nigeria (FRSC) has launched several campaigns on road traffic accidents in partnership with a number of corporate organizations with the goal of equipping Nigerians with the necessary information and abilities to lessen traffic accidents and increase public awareness of our shared responsibility for road safety. One of these is the “Don’t Drink and Drive” (DDD) marketing campaign, which was launched in 2008 by Nigeria Breweries Plc and the FRSC.

Despite the DDD campaign’s ongoing emphasis on the risks of alcohol-impaired driving, an FRSC analytical sample of accidents in 2009 showed that just 1% of accidents were brought on by drinking and driving. However, most experts contend that due to their officers’ infrequent utilization of scientific examination of alcohol as a contributing factor beyond on-the-spot physical observation, this is likely to be a significant underestimation. Thus, there is a fundamental question concerning the road safety campaign and motorists’ response to it. This study, therefore, investigated motorists’ response to the FRSC’s DDD media campaign in Southeast, Nigeria.

1.1. Statement of the problem

Many African nations have recently made frantic efforts to promote safety awareness and hold safety campaigns regarding traffic accidents, but their effectiveness is hampered by a lack of resources and capacity (6). Some of these nations, like Nigeria, have passed drunk-driving legislation with precise blood alcohol limits (the legal limit for alcohol intake), but it is still very difficult to put these laws into effect and enforce them.

In order to achieve this, the FRSC has launched a number of campaigns on road traffic accidents in conjunction with some corporate organizations. These campaigns aim to equip Nigerians with the necessary information and abilities to lessen traffic accidents and increase public awareness of collective road safety. One of such is the DDD media campaign, which was launched in 2008 by Nigeria Breweries Plc in partnership with the FRSC.

Despite the DDD campaign’s ongoing emphasis on the risks of alcohol-impaired driving, an FRSC analytical sample

of accidents in 2009 showed that just 1% of accidents were brought on by drinking and driving. The majority of researchers have countered that this is probably a significant underestimate because their officers hardly ever conduct a scientific investigation of alcohol as a contributing factor beyond on-the-spot physical observation. Thus, there is a need for this qualitative enquiry.

1.2. Objectives of the study

The study is guided by the following objectives:

1. Ascertain motorists’ exposure and awareness to an anti-drunk driving campaign in Southeast, Nigeria.
2. Determine motorists’ knowledge of the anti-drunk driving campaign messages in Southeast, Nigeria.
3. Find out motorists’ compliance to the anti-drunk driving campaign messages in Southeast, Nigeria.
4. Investigate factors (if any) that inhibit the adoption of the anti-drunk driving campaign messages in Southeast, Nigeria.

2. Literature review

Women reported reverse third-person effects (i.e., the messages would have more of an impact on them than others), while men reported classic third-person effects in Lewis et al.’s (7) study on the effectiveness of physical threats in road safety advertising among male and female drivers in Australia (i.e., the messages would have more influence on others than themselves). Having been pre-exposed to the physical threats embedded in the campaign messages, female drivers reported greater intentions not to speed and not to drink and drive than their male counterparts. In addition, Tay (8) revealed that mass media campaigns on drunk driving have the propensity of reducing alcohol-related crashes among those who are exposed to the campaign messages. Nevertheless, to maximize audience exposure to alcohol-impaired driving campaigns, Tay argued that paid advertising campaigns should take precedence over public service announcements (PSAs) for maximum impact.

However, according to the Ontario Agency for Health Protection and Promotion (9), media interventions have been demonstrated to be helpful in raising women’s knowledge and awareness of alcohol-related issues but have had minimal impact on reducing alcohol intake among women, youth, and the general public. Additionally, their study found that computer- or web-based interventions have been proven to be successful in lowering drinking behavior, especially in young people, high-risk drinkers, the general public, and students in university and college settings.

Meanwhile, Abiona et al. (10) sought to identify the frequency and pattern of alcohol consumption, the degree of knowledge about the negative effects of drinking, and the association between alcohol consumption and a few chosen variables among drivers. It was shown that a substantial percentage of respondents had an unacceptable degree of understanding about the link between current drinking and physical issues and traffic accidents. As a result, it was determined that risky alcohol use is a significant public health issue among Nigerian commercial road transport workers. Similar findings were made by Hammoudi (11), who discovered that failure to use a seatbelt, using a phone while driving, and consuming too much alcohol were to blame for road traffic accidents in Abu Dhabi. Surprisingly, 84.9% of the respondents, comprising men and women, confirmed that they had never heard of or were aware of any traffic campaigns in Abu Dhabi.

Furthermore, Bachani et al. (12), in a Knowledge, Attitudes, and Practices study on drinking and driving in Cambodia: 2010–2012, found that a sizable majority of respondents reported driving within 2 h of drinking alcohol at least once in the 30 days before the poll, despite the common notion that this would increase the likelihood of traffic accidents. It was determined that drunk driving still exists in Cambodia and has to be properly addressed through a multifaceted and coordinated approach. A strategy like this should incorporate social marketing, public awareness campaigns, stronger enforcement, and initiatives that either restricts how many drinks drivers can have or offer alternatives to drinking and driving.

2.1. Sustainable cities and communities

The rate of global development is unprecedented. In developing nations, the urban population will double to 4 billion people during the next 20 years, while the territory that is inhabited by urban areas will treble. Rapid expansion has brought about significant social, economic, and environmental concerns, but it also helps create new opportunities. Over 1 million individuals are thought to die in automobile accidents every year. Traffic accidents are now the leading cause of death for kids and young adults between the ages of 5 and 24 years. The effects, particularly in less affluent areas, can be disastrous (13).

It is estimated that 1.5 billion people live in countries where violent cycles are common, while 1 billion people reside in urban slums. Natural disasters now affect 2 billion more individuals than they did 10 years ago. Only 9% of disasters since 1980 have occurred in low-income nations, but they have caused 48% of the fatalities. Disasters, conflicts, criminal activity, and violent acts disproportionately affect the poor. Urban and rural communities all around the world are feeling an increasing need to address these issues and build their resilience to risks from climate change and natural disasters, as well as poverty, inequality, social exclusion, violence, and fragility. It will be essential to create sustainable communities whether they are villages, towns, nations, or societies as a whole to end poverty and increase shared wealth (World Bank, 2020).

The world is developing at an unprecedented scale. Over the next 20 years, urban population in developing countries will double to 4 billion, while the urbanized land area

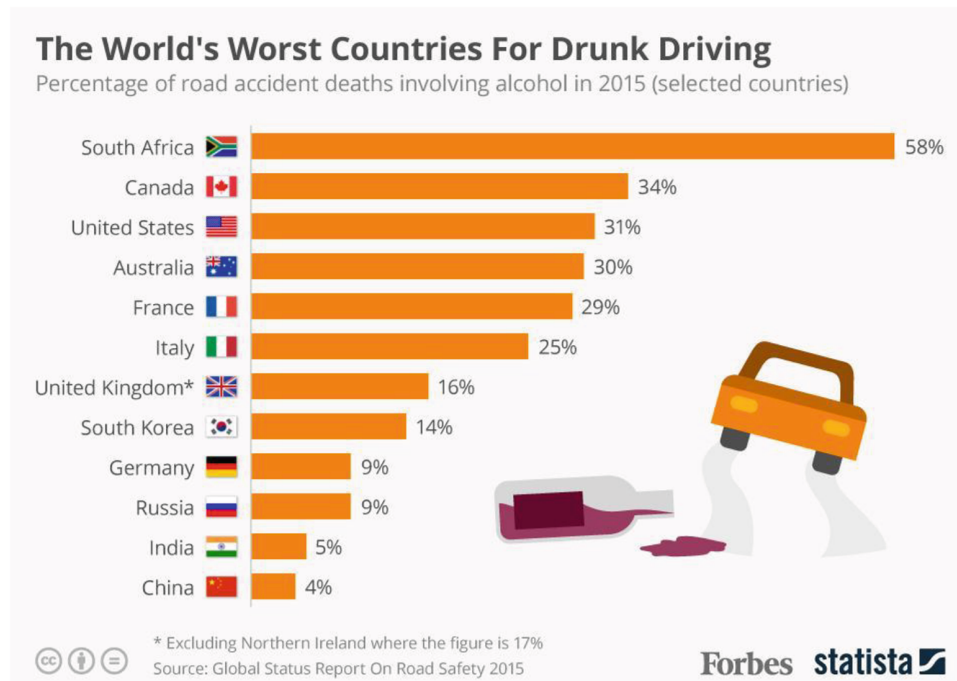


FIGURE 1 |

will triple. Rapid growth helps create new opportunities, but it has also brought serious social, economic, and environmental challenges. This need gave rise to the inclusion of sustainable cities and communities as one of the driving goals of the SDGs.

2.2. Theoretical framework

This study is anchored on the protection motivation theory (PMT) and the Extended Parallel Process Model (EPPM).

2.2.1. Protection motivation theory

This theory, which was formulated by Rogers in 1975 (14), proposes that people tend to protect themselves based on four factors: the perceived severity of a threatening event (drunk driving), the perceived probability of the occurrence or vulnerability to accident based on excessive alcohol intake, the efficacy or effectiveness of the recommended preventive behavior (as contained in the DDD campaign messages), and the perceived self-efficacy (a person's ability) to carry out the recommended instructions contained in the campaign messages in order to avoid injury or death from drunk driving.

Since road traffic accidents are a public health issue, this theory is used to explain decision-making and action about drunk driving. Its relevance to this study lies in its ability to explain how a person who has a threat of being injured or possibly dying in a road traffic accident due to excessive alcohol consumption before or during driving would respond to the suggestion to quit drunk driving. In addition, what are the cognitive appraisals (threat and coping appraisals) taking place that will ultimately influence his decision whether or not to drunk-drive?

2.2.2. Extended Parallel Process Model

The EPPM was propounded by Witte in 1992 (15). The model makes an attempt at describing how logical factors (efficacy beliefs) and emotional responses (fear of a health threat) interact to influence a person's desire to act, which is determined by how much they feel threatened by a health concern (driving while intoxicated), and the action itself is determined by how confident they are in their ability to successfully lessen or prevent the threat.

The four major variables in the EPPM, two of which are related to thoughts about danger and the other two to beliefs about efficacy, can be used to relate this theory to the study. In the event of an alcohol-impaired driving, it tries to answer the questions that would be asked to measure one's beliefs on alcohol-impaired driving:

Threat variables:

- *Perceived severity*: How serious are the consequences of excessive alcohol intake should one get involved in a road traffic accident?

- *Perceived susceptibility*: How likely is it that one might injure or die from drunk driving?

Efficacy variables:

- *Response efficacy*: How effective is a proposed solution, as contained in DDD campaign messages, at preventing accidents or deaths from drunk driving?
- *Self-efficacy*: How confident is an individual that he could successfully practice the proposed solutions contained in the campaign messages?

3. Methodology

The qualitative research approach comprising of focus group discussions (FGDs) and in-depth interview was adopted for this study. The adoption of this research method is premised on the fact that previous studies in this field majorly adopted the quantitative approach to the investigation. Thus, to ensure the veracity of findings, this study chose to use the qualitative design.

Accordingly, FGDs comprise eight panel members drawn from the commercial and private drivers in the three selected states in Southeast, Nigeria. Three FGDs were conducted in the three states selected for the study. The focus group sessions consisted of eight panel members, giving a total of 24 participants for the three groups to make up for 0.0015% of the entire study population as part of a full research project with 383 respondents. Four commercial and four private drivers were purposefully selected to constitute the panel.

The adoption of three FGD is supported by the view of Evmorfopoulou (2007), cited in Masadeh (16), who asserted that there is no special rule about how many focus groups will be enough for a study. However, Krueger (17) argued that focus group research should comprise a minimum of three groups. The study, therefore, adopted three focus groups that were adequate to generate the needed qualitative information.

In as much as there are divergent views on the number of participants that should constitute a focus group, some researchers advocate between 7 and 10 participants (18, 19), thus the decision to use eight panel members for the FGDs. The decision is also guided by the position of Merton et al. (20), who argued that the size of the group should manifestly be governed by two considerations. It should neither be so small that it fails to provide substantially greater coverage than that of an interview with one individual, nor should it be so large as to be unwieldy or to preclude adequate participation by most members.

The other part of the qualitative collection of data was interview sessions done with the Public Education Officers of the FRSC in each of the three selected state commands with a view to finding out if the target audience is exposed to the campaign, their compliance level, and the extent to which the campaign has reduced road traffic accidents among motorists

in Southeast, Nigeria. Three Public Education Officers of the FRSC, one in each of the three state commands, served as the respondents for the interview sessions.

4. Results

4.1. Motorists' exposure to "Don't Drink and Drive" campaign

The public education officers of the three FRSCs' state commands attached so much importance to the DDD campaign, especially among motorists. Most of their activities are geared toward creating a good avenue through which the target audience can be properly exposed to alcohol-impaired driving communication messages, especially during festive periods such as Christmas, Easter, and Eid Mubarak festivities. Through the tools of communication, such as the radio, television, billboards, print media, religious organizations, and park rallies, the Public Education Officers noted that they disseminate information to the motorists, which makes them exposed to the campaign. According to one of the Public Education Officer in one of the sector commands, "We draw out a schedule for officers and marshals to visit the parks routinely to educate the drivers on the dangers of alcohol-impaired driving." All these deliberate efforts by the officers are to expose motorists to the campaign and the need to avoid alcohol before driving as it impairs their sense of judgment while driving.

On the contrary, discussants in the FGDs noted that they are exposed to the DDD campaign through television, billboards, and radio through PSAs. Some participants shared the view that the dominant media of exposure for them is the billboards. They observed that the campaign is not only from the FRSC but also from some beer companies. According to them, they are exposed to the campaign on a daily basis, especially through the billboard advertisements on roads and on television during the Union of European Football Associations (UEFA) Champions League and other sponsored sports television shows.

Similarly, since awareness stems from exposure, the Public Education Officers noted that motorists' awareness level of the campaign seems to be on the high side considering the various channels of communication through which the DDD campaign messages are brought to them. According to one of them, "We collaborate with organizations such as the Red Cross Society of Nigeria in Abakaliki to achieve the basic goal of the campaign, and as well-run programmes like "Safe to Drive" and "Drive to Live" on Ebonyi State Broadcasting Corporation (ESBC) and Radio Nigeria in order to increase the awareness of motorists' on the campaign." The officers also averred that they determine the extent of awareness among the drivers through the number of feedbacks they receive from radio programs on alcohol-impaired driving as well as from direct responses during motor park rallies.

Furthermore, responding to their awareness of the campaign, some of the FGD participants admitted that they were very aware of the DDD campaign through the various channels of communication deployed by the FRSC. However, others admitted that the organizations for which they work as commercial drivers occasionally organize seminars to educate them on drunk driving and other road safety measures in collaboration with some corporate bodies, making them more aware of the dangers associated with alcohol-impaired driving.

4.2. Motorists' knowledge of "Don't Drink and Drive" campaign

All the Public Education Officers noted that one of the messages the campaign stresses on is that "alcohol impairs judgment on the part of the driver who usually imbibe it before driving." They explained that the campaign messages inform the motorists of the physical effect of alcohol on their health. According to one of the officers, "Over time, alcohol takes its toll on the drinker. It may be gradual but then there comes a time when the driver will be unable to drive. Since driving requires concentration and alertness, alcohol intake actually affects that." As such, many of the drivers have come to memorize some of the messages in the campaign and can even recall them.

In contrast, in their responses on their knowledge on DDD campaign, participants in the FGDs submitted that the campaign clearly warns against drunk driving, especially for long distance drivers. An enthusiastic discussant posits that the DDD campaign messages sometimes come as audio-visual advertisements. Most of the participants opined that they could remember the campaign messages placing emphasis on the health, economic, and social dangers of alcohol-impaired driving.

4.3. Motorists' compliance to "Don't Drink and Drive" campaign

The Public Education Officers interviewed differed in their responses with regard to motorists' level of compliance to the campaign. However, they unanimously noted that some motorists do not welcome the campaign because they are used to taking alcohol before entering the road. However, practical experiences together with the campaign were identified as determinants of attitudinal change. Some of the motorists' complied based on their experience on the road without the aid of the campaign, while others did with the aid of the campaign. Another interviewee stated that, "Motorists have demonstrated lukewarm attitude in terms of change and compliance to the campaign." Thus, despite their appreciable levels of awareness and knowledge of the campaign, the officers argued that attitudinal change and

the compliance rate among motorists concerning alcohol-impaired driving are still very discouraging.

Similarly, an indifferent participant in the FGD observed that, despite his knowledge of the DDD campaign messages, he still drinks alcohol before driving, because it helps to keep him agile whenever he is on the wheels.

4.4. Factors inhibiting compliance to “Don’t Drink and Drive” campaign

As it is with policies that there are certain factors that affect compliance to them, and so it is with the DDD campaign. The Public Education Officers unanimously submit that factors such as the presence of alcohol vendors around the motor parks, and the inability of the government to totally dislodge them pose a major challenge of compliance to the campaign. Other factors identified by the officers include a lack of rehabilitation program for alcohol addicts among motorists by the government and a problem of indiscipline among drivers.

On the contrary, virtually all the discussants identified bad drinking habits and ineffective laws as the dominant factors inhibiting their compliance to the DDD campaign messages. A vexed participant observed that the government cannot set a limit to alcohol intake among motorists, as they cannot also define the volume of alcohol consumption that explains what “responsible drinking” should be.

5. Discussion

Submissions from the public education officers of the FRSC in the selected states revealed that motorists’ level of exposure to the campaign is very high, as officers and men of the FRSC deployed various means through deliberate efforts to reach the motorists with the campaign messages. Data from the FGD showed that discussants were exposed to the campaign. This finding corroborated the findings of Lewis et al. (7) and Tay (8), who inferred that respondents’ level of exposure to mass media campaigns against drunk driving was significant. Again, the in-depth interview revealed that the campaign was given emphasis by the FRSC officials through their scheduled motor park sensitization activity on radio programs like “Safe to Drive” and “Drive to Live” on the Ebonyi State Broadcasting Corporation (ESBC) and Radio Nigeria, respectively, in order to enhance the consciousness of the drivers about the campaign.

However, it is inconsistent with the findings of Hammoudi (11) and Abiona et al. (10), who found that the level of awareness on alcohol-impaired driving was very low as the majority of the respondents have never heard of or are aware of any drunk-driving traffic campaign. The implication of the findings underscores that motorists in Southeast, Nigeria, were well exposed to and conscious about the DDD media campaign. The radio, billboards, and television were

identified as the major platforms through which motorists were exposed; however, radio was the dominant channel for communicating the campaign message. This confirms the potentials of radio as a medium of communication for reaching large heterogeneous audiences at a go.

Although findings revealed that motorists’ knowledge of the DDD campaign was strongly aided by the mass media campaign messages, Bachani et al. (12) discovered that knowledge did not necessarily translate into safe driving practices, as only 15.2% of the respondents do not drink alcohol before entering the road to drive. This was supported by the Ontario Agency for Health Protection and Promotion (9), which found that media interventions have little effect on reducing alcohol consumption among women and youth, but possess the potential to increase knowledge and awareness of the dangers of alcohol-impaired driving among the target audience. Again, data from the in-depth interview revealed that “As to whether the campaign has affected motorists’ attitude to drunk-driving it is uncertain. However, practical experiences by individual drivers on the road together with the DDD campaign were identified as determinants to attitudinal change. Some of the motorists’ complied based on their experience on the road without the aid of the campaign, while others did with the aid of the campaign.”

Similarly, most of the discussants in the FGDs, due to the threat appeals contained in the campaign messages that emphasize the dangers of alcohol-impaired driving, said they are very careful when taking alcohol in order not to be intoxicated, especially when they want to drive. This again finds support in the PMT and EPPM adopted in the study, which explain motorists’ decision-making and action about drunk driving based on the severity of the threat alcohol-impaired driving poses to their health and socioeconomic status. In this case, their perceived severity of the threat and vulnerability made them decide to stay away from alcohol before or during driving. According to one of the discussants, “There is a clause in the appointment of any driver in my company that any driver caught taking alcohol during the work hours will be dismissed.” Consequently, messages that are designed in a way that warns individuals of the consequences of misbehavior (drunk driving) are likely to be given serious attention by majority of the respondents.

Furthermore, data from in-depth interview revealed that factors such as the presence of alcohol vendors around the motor parks and the inability of the government to totally dislodge them have affected motorists’ compliance to the campaign. Other factors identified by the FRSC officers are lack of rehabilitation program for alcohol addicts among motorists by the government and the problem of indiscipline among the drivers. More so, data from the FGD showed that virtually all the discussants identified bad drinking habits and ineffective laws as the dominant factors inhibiting their compliance to the DDD campaign messages. Accordingly, law enforcement agencies should be on the vanguard of promoting the campaign in the region. This is very important if Nigeria must achieve SDGs 3 and 11, for which scholars like

Ezeibe et al. (5) argued that little or no significant efforts have been made toward their attainment.

6. Conclusion

As various nations of the world are making efforts toward actualizing the 17 SDGs, especially those that have a strong direct bearing on their national existence, by putting in place mechanisms and measures that would enhance their attainment, Nigeria, as a member of the international community, is not left out. The SDGs 3 and 11, upon which this paper is predicated, cover the overall wellbeing of the people and the need for sustainable cities and communities through a mass media campaign against drunk driving aimed at ameliorating the rate of road traffic accidents occasioned by excessive alcohol consumption in Southeast, Nigeria. While the government can be applauded for queuing into the social responsibility program of the Nigerian Breweries to promote the DDD media campaign among commercial and private drivers, it has been observed from the findings of the study that the drivers were indeed exposed to, aware of, and knowledgeable about the campaign. However, these indices did not translate to effective compliance on the part of the drivers, thereby communicating the need for a proper review of the campaign and its messages, packaging, delivery, and enforcement measures for maximum compliance.

Author contributions

AN conceived the idea for this manuscript, gathered, designed the instrument for data collection, supervised, and wrote the manuscript and agreed to be accountable for the content of the work.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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