

INFLUENCE OF BROADCAST MEDIA'S FEDERAL ROAD SAFETY CORPS' (FRSC) SEASONAL AWARENESS CAMPAIGNS ON MOTORISTS' COMPLIANCE TO TRAFFIC RULES IN SOUTH-EAST NIGERIA

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Abstract

The study was aimed at examining the influence of broadcast media's Federal Road Safety Corps' (FRSC) seasonal awareness campaigns on motorists' compliance to traffic rules in south-east Nigeria. A descriptive survey was used to elicit information from 384 selected motorists in the zone. Findings revealed that average motorists do not obey road safety rules all the times. It was also found that the proportion of respondents (64.3%) who were not so exposed was higher than those who were exposed. The findings also showed that the relationship between broadcast media's road safety corps' seasonal awareness campaigns (level of exposure to these FRSC messages) and motorists' compliance level to traffic rules reached statistical significance ($r=.92$, $n=384$, $p<.000$). Based on the findings of the study, it was concluded that compliance is not encouraging at the moment. While the influence of the environmental factors and the personal characteristics were identified, the gap existing in the messages transmitted have been highlighted. The author recommended, among others that the FRSC and other stakeholders should focus more on designing messages that do not appeal to fear.

Keywords: Awareness campaign, Broadcast media, FRSC, Interventions, Road crashes, Traffic accidents

Introduction

Road traffic accidents are one of the leading causes of death, injuries and disability all over the world (Agency, 2023; Onyemachi and Ofoma, 2016; Samuel and Amini, 2021). The World Health Organisation reported that

1.35 million people die yearly owing to road traffic accidents (WHO, 2020). Besides the physical or biological impact of road traffic accidents on the world population, there are indications that road traffic accidents leave a huge costs on the global economy. The WHO reported that road traffic accidents cost most

countries 3 per cent of their gross domestic products (WHO, 2020). While it is indicated that over 50 per cent of deaths resulting from road traffic accidents affect most vulnerable road users like pedestrian, cyclists and motorcyclists, 93 per cent of these fatalities occur in low- and middle countries despite the fact that these countries only possess about 60 per cent of all global vehicles (WHO, 2020). This is perhaps why the 2030 Agenda for Sustainable Development has set an audacious goal of cutting the number of deaths and injuries from road traffic accidents by half.

To this end, there is evidence showing the types of road traffic interventions that have been conducted on the African continent. Bonnet, E., Lechat and Ridde (2018), conducted a scoping review of 23 articles with the aim of producing a synthesis by identifying the kind of interventions and outcomes which have been investigated in Africa. The authors found that interventions were designed along the following lines: road safety policy, health education, safety collection and data collection. The study also revealed that these interventions mostly exist in 12 countries (Eastern and Southern Africa). The study first concluded that there is a dearth of required interventions in African countries. It also maintained that there are several limitations in the assessment of those interventions performed. This suggests that more assessments are needed to examine the impact that these interventions have on road traffic accidents in this region.

This study is focused on the influence of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in Nigeria. There is a wide spread belief that there is an association between increase in road traffic accidents and particular seasons in Nigeria. Empirical evidence also lends credence to this belief. For example, Bonnet, Lechat, &

Ridde (2014), reported that the seasonal pattern of road traffic accidents clearly portrayed quarter four (October, November, and December) as the season with high prevalence of motor accident. Iwok (2016), also buttressed this claim by saying that road traffic accidents appears to be seasonal and most rampant in the last four months (also known as 'Ember Months' in the local parlance) of the year than others. A more recent report showed that in the last six years (2014-2020), 'Ember Months' account for at least 30 per cent of all road traffic accidents in Nigeria (Proviso Consulting, 2020). The report also revealed that road traffic accidents that are higher than the monthly average occur in December, January and April (Proviso Consulting, 2020). Plausible reason for this rise might be connected to the festivities that take place within these periods. It is during this period that Nigerians are mostly motivated to travel across states.

It is as a result of this realities that the Federal Road Safety Corps (FRSC) have continued to regulate, enforce and coordinate all road safety management activities by starting off a road safety campaign during this period (Proviso Consulting, 2020). Several campaigns on road traffic accidents (Afolabi and Kolawale, 2017; Elder *et. al.* 004; Asemah and Omosotomhe, 2016) have been launched by the Federal Road Safety Corps (FRSC), an agency established by the Nigerian government in 1988 to oversee to issues on road safety. This agency in collaboration with some corporate organisations like Mobil Producing Nigeria (MPN), Guinness Nigeria Plc, Manufacturers Association of Nigeria (MAN) among others have in the past organized intervention campaigns on drunk-driving. The broadcast media used by FRSC in the interventions include the Internet, Billboard, Television and radio. By these means, the FRSC media broadcast have been at work aiming to sensitize the people (road users), and

motivate them to adopt road safety behaviours at all times. While this effort is commendable, evidence aiming to assess the effectiveness of these interventions is scanty. Nonetheless few studies have examined the effectiveness of these interventions on road safety compliance behaviours among road users in the country. As an example, Wunubo (2016), investigated the impact of Federal Road Safety Corps (FRSC) Public Enlightenment and traffic Law enforcement on road users in controlling traffic crashes in Maiduguri metropolis from 2013-2015. The author found that the intervention had been effective in their performance especially in the area of educating roads users via several public enlightenment campaigns. Although the author highlighted the role of law enforcement in compelling road use to adapt to safety rules, the importance of public enlightenment campaign was emphasized.

To reduce the rates of this seasonal problem in the region under study, several FRSC programmes continue to air on several radio and television stations (Personal Observation). Aside the television and radio programs, the FRSC in collaboration with the Beer Sectoral Group (BSG) have employed the use of electronic media messages on social media links like Facebook, flier and free medical check-up exercise to encourage compliance to anti-drunk driving media messages (Ngene and Anorue, 2021). Despite these efforts by the corps, evidence showing the effectiveness of these media interventions is scanty. Only few recent studies conducted by Ejikeme, Udegbunam and Uwaechie (2020) and Ngene and Anorue, (2021) assessed the effectiveness of the current interventions. While the former study found that FRSC interventions have not been successful and that poor implementation of road safety education and absolute absence of institutional capacity hinder the success of the scheme, the latter showed a promising result with the FRSC campaigns showing a

potential positive effect on anti-drunk driving compliance. So far, available results concerning the effectiveness of these interventions in the south-east region are mixed. Meanwhile, reports on road traffic accidents between 2010 and 2019 revealed that the south-eastern part of the country experienced 9,430 cases, 65,833 casualties, and 4,080 deaths resulting from incidents within this period (Proviso Consulting, 2020). The fatality rates in the five south-eastern states of Enugu, Anambra, Imo, Ebonyi and Abia were 51 per cent, 43 per cent, 36 per cent, 46 per cent and 44 per cent respectively.

As a result, there is need to conduct more studies in this regard. Against this background, the main objective of this study was to examine the influence of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in south-east Nigeria. Specifically, the study attempts to achieve the following: (1) examine the level to which motorists are exposed to these broadcast media's road safety corps' seasonal awareness campaigns, (2) ascertain the factors influencing the impact of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in south-east Nigeria and (3) determine the influence motorists' personal characteristics on their compliance to traffic rules in south-east Nigeria and (4) determine the influence of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in south-east Nigeria. The research questions were (1) what are the level of exposure of motorists to broadcast media's road safety corps' seasonal awareness campaigns, (2) what are the factors influencing the impact of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in south-east

Nigeria, (3) are there influence of motorists' personal characteristics on their compliance to traffic rules in south-east Nigeria, and (4) what are the influence of broadcast media's road safety corps' seasonal awareness campaigns on motorists' compliance to traffic rules in south-east Nigeria.

Literature Review

As has been earlier noted, there are several factors which affect the effectiveness broadcast media messages aiming at improve compliance to road safety rules. One of the most important determinants in literature is the content of messages that are disseminated (Afolabi and Kolawale, 2017). Content in this context refers to the kinds of language that is being used in the dissemination of the messages. Ngene and Anorue (2021), in their examination of motorists' exposure to FRSC's "Don't Drink and Drive" media campaign in South-east, Nigeria and its effects on their compliance levels, found language and the simplicity in communication influenced the ways through which motorists understood the messages that were passed. Further to this, the influence of fear appeal or fear inducing messages has being investigated in literature. Because of the confidence in the effects of fear inducing messages, fear appeals have been used in public service announcements (Rhodes, 2015). The Author noted that the effectiveness of messages that are designed to compel motorists to comply with road safety behaviours have not been fully established in literature. In Rhodes' research, it was found that messages with medium MSV (message sensation value) resulted in intentions to drive more slowly than messages with low or high MSV. Measures of affective attitudes indicated that medium MSV messages resulted in fast driving being rated as less fun and exciting than those of either high or low MSV. These affective evaluations mediated the effect of message exposure on driving

intention. Message derogation was not related to message intensity. Production of message-related thoughts decreased, and emotional thoughts increased with message intensity. This decrease in processing of message content suggested a limited capacity explanation for the effect of highly intense fear appeals.

Also, Lewis *et al.*, (2008), revealed that females indicated more prominent goals not to drink and drive following their presentation to the negative appeals (i.e., the fear-evoking advertisements evoking feelings such as being 'afraid' and 'scared') with respect to their knowledge of the positive appeals like the humourous advertisements evoking feelings such as being 'amused' and 'happy in the counter drinking promotions. Their findings suggested the existence of associations among key variables and proof of the more prominent persuasiveness of negative appeals following presentation with more prominent improvement of positive appeals after some time. The above finding is an indication that the influence of these messages type or design of the content cannot not be understood in isolation; other important factors must be considered. The roles of gender, years of experience in driving and age have been studied.

In addition, a study conducted by Sunmola (2014), investigated the influence of FRSC's public enlightenment programmes on commercial drivers' behaviour (CDB) in urban centres in Southwestern, Nigeria. The study found that public enlightenment programmes on radio, motor park rallies and road safety lectures positively influenced commercial drivers' behaviour. Furthermore, Uzundu (2019) found that education and information campaigns have the potentials of influencing road safety behaviours positively although small changes were observed following the sample's exposure to

interventions. He discovered the factors likely to influence the various outcomes of these interventions to include driving safety culture and driving environment.

Similarly, Iversen and Rundmo (2004), Uzundu (2019) and Ward and Lancaster (2003) established the relationships existing between driving behaviour and these demographic variables as well as some environmental factors. Other research has also determined how these personal and environmental factors combine to influence compliance to road safety guidelines as it were. Weng and Meng (2012), analyzed the effects of environment, vehicle and driver characteristics on the risky driving behavior at work zones and found that bad weather, poor road and light conditions, partial/no access control, no traffic control devices, turning left/right and driving in an old vehicle were the risky driving behavior at work in the zone. The study also found that drivers are likely to engage in the risky driving behavior associated with the single-lane road under bad light or weather conditions.

Theoretical Framework

The Theory of Planned Behaviour

Propounded by Ajzen (1991), the theory of planned behaviour, which was developed from the theory of reasoned action (Fishbein and Ajzen, 1975), concerns those behaviours over which people have incomplete volitional control. The Theory of Planned Behaviour (TPB) predicts that planned behaviors are influenced by behavioural intentions which are largely determined by an individual's attitude toward behaviour, the subjective norms encasing the execution of the behaviour, and the individual's perception of their control over the behaviour (Fishbein and Ajzen, 1975). This theory is related to this study because it has the power to explain causative factors of safety compliance

behaviours. Within the context of this study, motorists' perception of broadcast media messages on road traffic safety can influence his/her intentions or desire to carefully obey all the stipulated safety rules while driving or using the road. Also, the driver's perceived environmental pressure or influence at festive period, bad weather, poor road and light conditions, partial/no access control, no traffic control devices, turning left/right and driving in an old vehicle, among others. Finally, the inability to exert control over the innate desires to adhere to the broadcast media messages on the phenomenon under study and environmental pressure may lead to non-compliance and vice versa.

The theory has also been validated by several empirical studies (Castanier, Deroche and Woodman, 2013; Rowe, [Andrews](#), Harris, [Armitage](#), [McKenna](#) and [Norman](#), 2016). For instance, Rowe *et al.*, (2016), used the TPB to identify the pre-driver beliefs underlying intentions to drive over the speed limit, and while over the legal alcohol limit, talking on a hand-held mobile phone and feeling very tired. Findings from the study revealed that the TPB explained between 41% and 69% of the variance in intentions to perform these behaviours. Attitudes were strong predictors of intentions for all behaviours. Subjective norms and perceived behavioural control were significant, though weaker, independent predictors of speeding and mobile phone use. Behavioural beliefs underlying these attitudes could be separated into those reflecting perceived disadvantages (e.g., 'speeding increases my risk of crash') and advantages (e.g., 'speeding gives me a thrill').

Methods

A descriptive survey was used to elicit information from selected participants. The study population was 36 million according to the data obtained from the World Population Review (2022). This consisted of

all commercial and private drivers in three selected the five states of the south-east (Anambra, Ebonyi, Imo, Abia and Enugu). The sample size for this study was three hundred and eighty four (384). Cochran’s (1963) Equation was used to derive the sample size for the study. With 95 percent level of confidence, an estimated level of compliance to broadcast media about the Federal Road Safety Corps’ seasonal awareness campaigns in south-east at 50% (.5) and a permitted margin of error at .05 (5 percentage points), the researcher determined the sample size for the study. This formula yielded a representative sample for population that is large:

$$n = \frac{[Z/2]^2 (p q)}{e^2} \quad n = \frac{[Z/2]^2 (P) (1-P)}{e^2}$$

.....equ. (1)

Where: n= sample size, Z²= confidence level, p= rate of occurrence or prevalence (the estimated proportion of an attribute that is present in a population), q= complement of p and e= margin of error. Therefore;

$$n = \frac{[1.96]^2 0.5 (1 - 0.5)}{0.04^2}$$

$$n = \frac{3.8416 (0.25)}{0.0025}$$

$$n = 384.$$

The study adopted a multistage sampling approach. This involves a mix of both probability and non-probability sampling approaches. At the first stage, a simple random sampling technique was adopted to select two states (Anambra and Enugu) from the five states in the region. At the second stage, a purposive sampling method was used to select the state capitals of these two states. In Anambra, Awka was selected. In Enugu, Enugu was selected. The state capitals were

selected because of the high volume of vehicular movements, which tend to increase the potentials of being involved in accidents especially if road safety rules are not being complied to. Furthermore, the researcher continued the next stage by randomly selecting car packs, residential areas and centre business districts. Consequently, a convenience sampling method was adopted to approach the drivers. Copies of the questionnaire were administered with the help of two research assistants who were recruited from the University of Nigeria, Nsukka campus and trained intensively for two weeks on how to carry out the exercise. Questionnaire administration became possible after respondents met the following inclusion criteria: (1) presented evidence that they had obtained a provisional drivers’ license or showed a valid drivers’ license; (2) affirmed that they are resident of the states, and (3) indicated willingness to participate in the study. Before the study was conducted, the researcher obtained an ethical clearance from the Health Research Ethics Committee (HREC) located at the University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu. The committee reviewed and approved the study.

The questionnaire was used to elicit the data for the study. The tool was divided into two segments: (a) demographic characteristics and other key questions that informed the study. Exposure to the any of the FRSC campaigns on radio, television, print media and social media was measured by a four item scale. The first item was worded “To what extent are you exposed to the FRSC road safety campaign on radio during the ‘Ember Months’”. A highly reliable Cronbach’s alpha (α) of .72 was observed for the scale. Response options ranged from “a very large extent” to “a very low extent”. This was on a 4 point scale. Summarily, those who answered “a very large extent” and “moderate extent” were

defined as exposed (N =137), while motorists who answered “to a low extent” and “a very low extent” were defined as not so exposed to the FRSC campaigns on radio, television, print media and social media (N =247). It should however be noted that those who belong to the not so exposed group are not totally unexposed or unaware of the FRSC campaigns but it was assumed that they had heard the campaigns from any of the media sources at one time or the other.

Furthermore, factors influencing the impact of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules were measured by a five item scale. An example of one of the items was worded as follows: “Festive period could affect my level of compliance to traffic rules”, “bad weather could affect your level of compliance to traffic rules”, “poor road and light conditions could affect my level of compliance to traffic rules”, etc Response options ranged from ‘1’ (strongly disagree) to 4 (strongly agree). A highly reliable Cronbach’s alpha (α) of .86 was observed for the scale. Finally, compliance level with FRSC road safety was adapted from the study of Ogunkeyede and Osungbade (2019). In this study, it was measured by 4 item scale. Respondents were asked to report whether the following behaviours were consistent with what they do as road users or motorists: obey traffic rules, overtake dangerously, drives against traffic, drives vehicle that are no longer road worthy. Response options ranged from ‘1’ (never) to 4 (always). A highly reliable Cronbach’s alpha (α) of .93 was observed for the scale.

Results are presented with descriptive tools like frequencies, proportions and central tendency measures and inferential

statistics. Pearson Product-Moment Correlation was adopted to analyse the influence of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules in south-east Nigeria. Similarly, a simple regression analysis was conducted to ascertain the influence of personal characteristics on motorists’ compliance to traffic rules in south-east Nigeria. SPSS 23 was used in the organization and analysis of data that were elicited in the study.

Results

Demographic distribution of the respondents indicates that 74.5% were male, and 25.5% were female. The mean age of the males was 46.2 years, while the mean age for the women respondents was 38 years. Regardless of the gender difference, the mean age for all respondents in the sample was 45 years. While the majority of the respondents had graduated from polytechnics, colleges of education and universities (57.2%), the remaining possessed either secondary or primary education (42.8%). Finally, as to their years of experience in driving, majority of the respondents had been driving for more than 10 years (56.8), while 17.3% and 25.9% had been driving for more than 10 years and less than 10 years respectively. Further to this, the mean and standard deviation of the respondents regarding their compliance level to road safety rules were given as follow: obey traffic rules [M=2.0, S=1.98], overtake dangerously [M=1.26, S=2.01], drives against traffic [M=3.07, S=1.02], and drives vehicle that are no longer road worthy [M=2.0, S=2.11]. These outcomes are an indication that, on the average respondents did not really fare well in obeying road safety rules all the times.

The level to which motorists are exposed to these broadcast media’s road safety corps’ seasonal awareness campaigns

Table 1: Level of exposure to the FRSC road safety campaign during the ‘Ember Months’

| Items | Mean | Standard Dev. |
|---|------|---------------|
| To what extent are you exposed to the FRSC road safety campaign on radio during the ‘Ember Months’ | 3.43 | 1.32 |
| To what extent are you exposed to the FRSC road safety campaign on T.V during the ‘Ember Months’ | 1.03 | 3.13 |
| To what extent are you exposed to the FRSC road safety campaign on print media during the ‘Ember Months’ | 1.34 | 3.56 |
| To what extent are you exposed to the FRSC road safety campaign on social media during the ‘Ember Months’ | 0.45 | 3.91 |

Data in Table 1 shows the level to which motorists are exposed to these broadcast media’s road safety corps’ seasonal awareness campaigns. Findings show that respondents were most often exposed to these campaigns on the radio. The mean score of 3.43 shows that the extent of exposure was high only at this point, while at the other end, the extent of exposure was low for FRSC road safety campaigns on social media. Regardless of the media through which these

campaigns are disseminated, respondents were cumulatively categorized. For example, respondents were defined as exposed (N =137), while motorists who answered “to a low extent” and “a very low extent” were defined as not so exposed to the FRSC campaigns on radio, television, print media and social media (N =247). Overall, this implies that the proportion of respondents (64.3%) who were not so exposed is higher than those who were exposed.

Factors influencing the impact of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules

Table 2: Factors influencing the impact of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules

| Items | Mean | Standard Dev. |
|---|------|---------------|
| Festive period could affect my level of compliance to traffic rules | 3.72 | 1.19 |
| bad weather could affect my level of compliance to traffic rules | 3.90 | 1.00 |
| poor road and light conditions could affect my level of compliance to traffic rules | 3.34 | 1.06 |
| Clarity of the messages could affect my level of compliance to traffic rules | 3.27 | 1.10 |
| Trigger warnings could improve my level of compliance to traffic rules | 1.07 | 2.45 |

Data in Table 2 shows the factors influencing the impact of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules. Results

reveal that the festive periods, bad weather, poor road and lights and clarity of FRSC messages had high scores. This suggests that an average respondent admitted that these

factors could affect the level of their compliance to traffic rules. On the other

hand, trigger warnings appeared to have less influence on compliance levels.

Influence motorists’ personal characteristics on their compliance to traffic rules in south-east Nigeria

Table 3: Influence motorists’ personal characteristics on their compliance to traffic rules in south-east Nigeria

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | 95.0% Confidence Interval for B | |
|-------------------------|-----------------------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 21.356 | .631 | | 21.178 | .000 | 12.734 | 18.028 |
| | Gender | 5.415 | .337 | .310 | 8.480 | .000 | 3.607 | 5.203 |
| | Age | 4.312 | .741 | .086 | 9.531 | .000 | .3781 | 8.910 |
| | Education | 4.195 | .622 | .347 | 11.765 | .000 | 4.256 | 7.097 |
| | Driving experience in years | 4.322 | .432 | .021 | 10.469 | .000 | 3.561 | 8.892 |
| R ² .782 | | | | F 1459.201** | | | | |
| Note. **p < .001 | | | | | | | | |

Data in the Table 3 is a summary of the result of a regression analysis that was performed on this data. Findings show that 78.2% of the variance in respondents’ compliance level was explained by their personal characteristics (F(4,380)=1459.201,p<.001). A look at the individual contribution to the model indicate that gender (p=.000), age, (p=.000), education (p=.011) and years of driving experience (p=.000) significantly contributed to the respondents’ compliance level. The direction of the relationship in the contribution was positive.

The influence of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules in south-east Nigeria

Pearson Product-Moment Correlation analysis was performed to ascertain the influence of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules in

south-east Nigeria. Prior preliminary analyses were conducted to ensure that all assumptions of normality, linearity, and homoscedasticity were not violated. Following analysis of data, it was revealed that the relationship between broadcast media’s road safety corps’ seasonal awareness campaigns (level of exposure to these FRSC messages) and motorists’ compliance level to traffic rules reached statistical significance (r=.92, n=384, p<.000). In other words, high levels of exposure to broadcast media’s road safety corps’ seasonal awareness campaigns led to high compliance level to traffic rules among motorists.

Discussion of Findings

This study attempted to examine the influence of broadcast media’s road safety corps’ seasonal awareness campaigns on motorists’ compliance to traffic rules in south-east Nigeria. Following analyses of

data which was performed according to the study's objectives, several findings were observed. First, it was observed that respondents did not always obey traffic rules but sometimes overtake dangerously, drives against traffic, and drives vehicle that are no longer road worthy. This finding is related to the results from a previous study in the commercial city of Ibadan, Oyo, Nigeria showing that about 50.6% (n= 222) of the motorcyclists were compliant with road safety measures and 25.6% (n = 58) had a good attitude toward road safety. Plausible explanation for the outcome in the present study might not be unconnected to the finding showing that the proportion of respondents (64.3%) who were not so exposed is higher than those who were exposed. Although this finding is not consistent with that of Ngene and Anorue (2021), showing that slightly over half of motorists in their sample were more exposed (to anti-drunk driving media messages in South-east, Nigeria) than those who were unexposed, it indicates that there is an important implication for further intervention in that it highlights the importance of this type of media messages on the attitude of road users.

Furthermore, findings showed that festive periods, bad weather, poor road and lights and clarity of FRSC messages were factors that could improve compliance to road safety behaviours. Nonetheless, trigger warnings, which is capable of increasing fear in persons appeared to have less influence on compliance levels. The former findings are corroborative of earlier results from authors like Uzundu (2019). Uzundu highlighted the effectiveness of these environmental factors on compliance levels in an Imo state sample. This present study revalidates knowledge on the importance of these factors and once again points at the problems that the government and other stakeholders need to tackle in order to improve compliance levels among motorists in the region.

For instance, by focusing on building infrastructures that could put fix these environmental challenges, we might begin to experience significant improvement in compliance. Also results from the regression analysis that was performed showed that gender ($p=.000$), age, ($p=.000$), education ($p=.011$) and years of driving experience significantly and positively contributed to the respondents' compliance level. Although the outcome on gender influence is not consistent with the finding from Ngene and Anorue (2021), it is in consonance with the studies by Lillard *et al.* (2018) and Beck and Moser (2004). However, results on the influence of education, age, gender and years of driving experience are consistent with that of Ngene and Anorue (2021).

Finally, findings showed that high levels of exposure to broadcast media's road safety corps' seasonal awareness campaigns led to high compliance level to traffic rules among motorists. This finding is equally related to the results of extant studies (Hoekstra and Wegman, 2011; Sunmola, 2014; Uzundu, 2019). These findings in this study have also revalidated some of the key premises of Ajzen's (1991), theory of planned behaviour. For example, the finding that festive period, bad weather, poor road and light conditions, etc could influence compliance to road safety behaviour highlight the importance of the important factors that motivate such behaviours as keeping to necessary road safety rules. Even though the origin of the theory is traced to the understanding of health behaviours, it can be extended to that of driving and keeping to road safety behaviours.

Study Limitation

Like any other studies, the study is limited in a number of ways. The present study only focused on two areas out of the many areas in the southeast region of Nigeria. As a result, the findings might run into a problem of

generalization to motorists outside these areas of focus. Future research could address this gap by extending focus to other areas within the region and beyond. Similarly, the number of respondents included in the study is low and this also tends to limit the study's generalization. The study is also limited in the sense that it only employed a quantitative approach into the understanding of the phenomena under study. The powerful potential of a qualitative method to uncover in-depth findings on the subject was not explored. Future research efforts should capture the identified lapses in the study.

Conclusion

Based on the findings of the study, it is concluded that compliance is not encouraging at the moment. While the influence of the environment factors and the personal characteristics is identified, the gap existing in the messages transmitted have been highlighted. For example, it was found that trigger warnings might not be able to improve compliance levels among motorists. This shows that there is need to focus more on designing messages that do not appeal to fear. Overall, compliance with road safety rules is an important factor in preventing road accidents because when the motorists are

motivated to recall and adhere to carefully designed messages, the frequency of road traffic accidents could be brought to the barest minimum.

Recommendations

The success of interventions on traffic enforcement must be associated with the context of the countries. As with the outcomes of the present study, the following suggestions were made:

1. Government, FRSC and other stakeholders should focus more on designing messages that do not appeal to fear. Attention should also be focused on clarity of messages that are being disseminated. This could further help beneficiaries of these interventions to better understand and be motivated to adopt the necessary safety measures.
2. Some environmental factors identified such as challenges poor road and light conditions should be fixed. By fixing these challenges, the purpose for which the interventions are implemented would be achieved because the right environment would be created for the motorists to comply.

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