ISSN No:-2456-2165

Influence of Commercial Motorcyclists to Road Safety Campaign on Helmet Use in Nnewi, Anambra State

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Abstract:- Motorcycle related crash is one of the major concerns of nations in the 21st century. Thus, it can be characterized as the latest challenge to sustainable human development. Nigeria, as a nation, is particularly vulnerable to road traffic crash because a large share of its economy is dependent on road transportation. This has necessitated public enlightenment campaigns by the government and non-governmental organizations (NGOs) through various media platforms such as radio, television and new media among others to ameliorate the impact of road traffic crashes. The level of success recorded by these messages, particularly as it relates to helmet use remains a subject of enquiry. The study sought to determine the level of exposure of commercial motorcyclists to road safety campaign on helmet use and their response to helmet use. The study adopted quantitative method. This study has demonstrated that high level of exposure and knowledge of road safety campaign on helmet use among the respondents has not translated into ideal attitudinal response. This study therefore suggested that, even though radio was found as dominant communication platform among the respondents, a combination of communication platforms will yield more effective results in delivering messages on helmet use.

Keywords:- *Attitude, Commercial Motorcyclists, Helmet, Road Safety Campaign.*

I. INTRODUCTION

According to World Health Organization (2013), half of the world's road traffic deaths occur among motorcyclists at twenty-three percent. This is because motorcyclists are at risk of sustaining injury more than motor vehicle drivers (Slesak et al, 2015).

Previous studies have shown that head injury is the commonest causes of morbidity and mortality in motorcycle accidents (Slesak et al., 2015; Oluwadiya et al., 2004). In order to reduce the rate of head injury accident in Nigeria, the Federal Road Safety Corps (FRSC) implemented compulsory use of helmet as a New Year gift to motorcycle riders on January 1st 2009. However, major states in Nigeria including Anambra banned commercial motorcyclists in major cities, due to cases of crimes and criminalities with the exception of Nnewi.

According to Chidoka (2009), FRSC has since its establishment, conceptualized, designed and implemented various intervention measures in the form of road safety campaigns to improve the commercial motorcyclists' attitude on the roads. Some of such road safety campaigns on the use of helmet include: "Wear helmet, Stay safe", Use helmet for Safe Driving", Use your head; wear your helmet", "Be Careful: Use helmet while driving bike" etc. These campaigns are geared towards the goal of reducing the impact of road traffic crash by having a positive attitudinal change emanating as a result of the audience knowledge and positive response to the messages disseminated through various media.

Consequently, since the campaign on helmet use are on-going and there are influx of commercial motorcyclists in Nnewi with significant fatalities incurred during motorcycles crash, this work is an attempt to interrogate audience knowledge of and response to road safety campaign on helmet use.

A. Background to the Study

Several programmes and messages on helmet use have been going on in the print and electronic media, on the internet, as interpersonal communication, and as outdoor communication such as rallies, billboards and posters targeted mainly at motorcyclists. Some of these messages and programmes are usually aired during news broadcast, documentaries, talk shows etc. where it is believed that commercial motorcyclists will have the opportunity of getting the information mainly targeted at them.

These road safety campaigns such as "Wear helmet, Stay safe", Use helmet for Safe Driving", Use your head; wear your helmet", "Be Careful: Use helmet while driving bike" etc. focus on increasing awareness, knowledge and adoption of the various intervention messages among the commercial motorcyclists resulting in attitudinal change which is the essence of communication for development.

The messages and programmes on helmet use were created by governmental agencies. These include the messages disseminated by the Federal Ministry of Transportation, Federal Road Safety Corps, FRSC, Churches, Rotary Club International, Motorcycle Transport Union of Nigeria, MTUN etc.

Despite these messages in enforcing the use of helmet, it is presumed that the rate of helmet use among commercial motorcyclists in Nnewi, Anambra State remains uncertain.

B. Statement of Problem

Road Crashes involving motorcyclists remain a major concern that is negatively affecting the lives of millions of people worldwide. In Nigeria, the emphasis on road traffic control has shifted to include attitudinal responses among motorcyclists in places where public campaigns play a paramount role. Hence, road safety campaigns on helmet use on radio, television, posters, handbills and billboards have been mounted in the country. Such messages include, "It is dangerous to ride a bike without helmet"; "Don't be another road traffic statistics"; "Protect your head; only the living celebrates" etc.

Despite all these messages on road safety campaign, there is still little attendant reduction in motorcyclists road injuries even as anecdotal evidence seemed to suggest low use of these helmet by commercial motorcyclists. Though findings of some literature on helmet use (Penprapa 2012; Piyapong 2012) showed that there is awareness and knowledge of road safety campaign on helmet use, but the extent this has been translated to attitudinal change is still uncertain.

The worry now is: Why does it seem that road safety campaign on helmet use failed to elicit positive attitudinal responses from the commercial motorcyclists in Nnewi? Are road safety campaigns on helmet use disseminated to the targeted audience through the right channels and in understandable language? Assuming the target audience is aware of and knows the road safety campaigns on helmet use which advise: Wear helmet, Stay safe", Use helmet for Safe Driving", Use your head; wear your helmet", "Be Careful: Use helmet while driving bike" etc. could these probably influence their attitude to wearing helmets while riding in order to prevent head injuries resulting from road traffic crashes involving motorcycles and if it does not, why?

C. Objectives of the Study

The objectives of the study are:

- To find out the level of exposure and knowledge of commercial motorcyclists to road safety campaign on helmet use in Nnewi, Anambra State.
- To find out the dominant communication channel(s) through which the audience was exposed to road safety campaign on helmet use in Anambra State.
- To determine their attitudinal response to road safety campaign on helmet use in Anambra State.
- To determine the factors that affect the audience response to road safety campaign on helmet use in Anambra State.

D. Scope of the Study

There are several road safety campaigns in Nigeria. However, this work is limited to evaluating the attitudinal responses of commercial motorcyclists in Nnewi, Anambra State to road safety campaign on helmet use. The target audience was limited to those in the road traffic affected areas because they are mostly vulnerable to the impact of road traffic.

II. LITERATURE REVIEW

Nigeria is one of the few developing countries that have a mandatory helmet law. This law was passed in January, 2009. Although many risk factors for crashes have been identified, such as alcohol use, driver fault, speeding, vehicle design, there has been little reported success in reducing motorcycle crash rates. The most successful injury prevention approach has been secondary—that is, reduction of the severity of injury after the crash and the secondary countermeasure most employed worldwide for this purpose has been motorcycle helmets.

A. Concept of Road Safety

Tay (2002), observes that road safety also includes the measures and methods that are put in place to enhance safety on the roads and reduce any forms of accidents or crashes while on the roads and as a result, eliminate the occurrence of deaths or accidents to those using the road network.

Lawal (2008) describes it as freedom from danger and situations that can cause harm, injury or health-related problems. It is a protection against injury and traumatic issues (Balogun, 2006). Road traffic safety deals with how to reduce road traffic crashes and accidents and their consequences.

From the forgoing, it means the attitudinal responses of commercial motorcycle riders in Nnewi to road safety commercial.

B. Road Safety Mass Media Campaign Development

- *Target Audience*

Identifying the target audience is a key factor to campaign success. The more that is known about the target audience characteristics, knowledge, beliefs, attitudes, social environment and stage of attitude change, the greater the chance of developing an effective campaign that might influence attitudes and/or behaviour.

Crimmins and Callahan (2003) illustrate the importance of understanding the background of the target audience in social marketing by examining the precipitating factors, underlying causes, motivations and needs of drivers prone to road rage.

The audience in this study includes the commercial motorcycle riders in Anambra, particularly Nnewi where it is believed they have different characteristics, knowledge, beliefs, and attitudes of road safety campaign on helmet use.

- *Message*

Once a target audience has been identified and the necessary stakeholders established, the next step is to develop a campaign message. Developing an effective and

attractive campaign message is crucial to capturing an audience's attention and convincing them to consider the desired outcome in any context.

The core objectives, as well as the desired outcomes of the campaign must be clearly articulated and conveyed to the target audience in a way that interests and engages them.

This work will interrogate the persuasive and informational messages on road safety campaign and their effects on the commercial motorcycle riders in Nnewi, Anambra State.

➢ *Means of Communication*

Decisions related to where, when, and how to communicate a campaign message can be just as important as decisions about the message itself. This means that it is important to determine the best and most appropriate means to reach the target audience, as well as gauge the feasibility of these means in the context of the population under study.

From the literature, it is observed that for a successful road safety campaign to be achieved, various communication channels must be employed in order to reach the targeted audience, Therefore, this study is poised to finding the available and dominant communication channels through which commercial motorcyclists in Nnewi receive road safety campaign on helmet use

C. Mass Media Campaign on Helmet Use – Nigeria Perspective

In view of the need for effective road traffic management and prevention of road traffic crashes on Nigeria roads, the public education office was established by the Federal Road Safety Corps to ensure effective public education and sensitization of drivers, motorists, motorcyclists and other road users on the proper use of highways. The basic function of the office is to create awareness on safer road use among categories of road users.

The public education office also serves as a bridge between the Commission and the public such as the stakeholders (transport unions, government and corporate agencies). The Corps public education office strives to achieve a synergy in safety management by performing all public relations function in an attempt to build a healthy environment for effective service delivery and sustainable growth. The office equally performs press relations to ensure that mutual and cordial relationship exists between the FRSC and the various media organization.

The bulk of the road safety campaigns as initiated by the Corps include:
"Use helmet for safe driving"
"Use helmet while driving bike".
"Wear your helmet; protect your head".

D. Helmet and Its Functions

A motorcycle helmet is the most common and best protective headgear to prevent head injuries caused by direct cranial impact (Cheng et al., 2003).

Primarily, the helmet purpose is understood as head protection against skull fractures, and modern helmets are usually efficient in this sense. Another main purpose of motorcycle helmets is the prevention of brain injury, since brain injuries are often very severe and result in permanent disability or even death. Thus, the purpose of protective helmets is to prevent head injury by decreasing the amount of impact energy that reaches the head, reducing the severity or probability of injury (Deck et al., 2003; Liu et al., 2003).

E. Theoretical Framework

This study is anchored on Protective Motivation Theory. This theory was used to evaluate the commercial motorcycle riders' attitudinal responses to road safety campaigns on helmet use.

➢ *Protection Motivation Theory (PMT)*

This theory targets an individual's motivation to avoid actions that would be detrimental to their health.

In other words, if commercial motorcycle riders in Nnewi perceived that road safety campaign on use of helmet is to avoid head injuries during crashes, thus severing their health, they are motivated to wear helmets in order to avoid injuries that would even incur costs during treatment.

F. Empirical Review

A study of helmet use and associated factors among Thai motorcyclists during Songkran festival was conducted by Penprapa et al (2012). A cross-sectional survey was conducted by Penprapa et al (2012) to determine the prevalence of helmet use among Thai motorcycle riders (sample size = 18,998) during four days of the Songkran festival. For this sample, the population of motorcycle riders was consecutively selected using quota sampling from 12 petrol stations in four provinces from each of the four main geographical regions of Thailand. The study was conducted at petrol stations at roads in town, outside town and highway at different time intervals when trained field staff administered a structured questionnaire and performed an observation checklist. Results indicate that 44.2% of the motorcycle riders and 72.5% of the motorcycle passengers had not been using a helmet. They concluded that the awareness communication campaign has a slight positive impact on increasing helmet use among motorcyclists. The researchers also claimed that motorcyclists who had a lower exposure to road safety awareness campaign were more probably not to use a helmet frequently compared to a higher exposure to road safety awareness campaign. Therefore, this current study is also geared towards finding out if high exposure to campaign on helmet use could lead to helmet use or otherwise.

Sanusi et al (2015) in their study explored the commercial motorcyclists' risk perception and factors influencing risk-taking behavior in Nigeria. A qualitative approach was used with 10 in-depth interviews conducted to explore the risk perceptions of commercial motorcyclists in Ibadan, Nigeria. The main finding was that there were multiple intertwined factors responsible for risk-taking behaviours among this group. These factors contribute to

risk-taking being perceived as an acceptable process that is required for daily living, and include individual factors that pertain to the rider: inadequate training and licensing of riders, lack of adequate knowledge of traffic rules, and having many financial expenses to cover with an unstable income. The study suggested that there is a great need for adequate regulation as regards training and licensing of riders as well as the need to tighten enforcement of traffic rules as paramount to road safety in Nigeria. This study overlooked the response of commercial motorcyclists to helmet use, the gap the current study is to fill.

Seidu (2017) while studying barriers and facilitators to the use of motorcycle helmet in Tamale explored the factors that explain individuals' decision to use or not to use motorcycle crash helmet. A questionnaire survey was administered to 300 motorcyclists at three different locations in the city. Data were edited, coded and entries made into SPSS version 20, and descriptive statistical analysis was extensively carried out. The results show that helmet use is mainly influenced by individuals' need for protection, knowledge that helmet use is mandatory and presence of road traffic police. On the other hand, participants' perception that helmet use disturbs head and hearing ability emerged as the leading discouraging factor (63%) for non-use of crash helmet. They also hinted that Public health interventions on helmet use should be tailored to surmount the perceived barriers to the use of helmet. That is, concerns for heat, headache and discomfort resulting from helmet use would need urgent attention if public educations on helmet use are to be successful. They further demonstrated that Road safety education campaigns can promote the facilitators to motorcycle helmet use by highlighting the benefits and protective efficacy of helmet as well as increased presence of road traffic police and strong enforcement of helmet use legislations would also be germane to improving road safety behaviours of motorcyclists.

Akinleye et al. (2017) studied helmet use as a safety tool among motorcycle riders in Ibadan. The instrument of data collection was a structured interview administered on 400 motorcycle riders at Mokola and Sango areas. 330 responses were obtained to give a return rate of 82.5%. The analysis of the results showed that the frequency of helmet use in the study areas is 77.6% and that of non-user is 22.4%. 80% of the respondents felt that helmet use should be mandatory while only 20% felt that it should be at the discretion of riders. 150 (45.5%) respondents have ever been involved in motorcycle accidents out of which 94 (62.7%) were involved in head injury accidents. Up to 86 (91.5%) of these were involved in head injury accident before the introduction of legislation for compulsory crash helmet wear by motorcyclists in Nigeria while only 8 (8.5%) were involved in the accident after the legislation of the law. They found that there was decrease in head injury accidents after implementation of crash helmet law.

III. RESEARCH METHODOLOGY

This study is designed to assess audience level of awareness, knowledge, and response to the Intervention measures on road safety communication in Nnewi, Anambra State. The target audience for this study comprises the individuals in the risk areas. This is because the efforts to respond to road safety campaigns on helmet use is a responsibility that involves everyone but mostly targeted at the commercial motorcyclists in Nnewi, Anambra state.

A. Research Design

The survey method was considered appropriate for the study because of the benefits which survey can offer the social researcher. Chief among these benefits, as explained by Harman et al (1989), is:

The ability to gather equivalent information from a large number of individuals quickly and economically, by asking the same questions to each and recording the answers in standardized form; it is possible to capture group dynamics amongst the various categories of respondents… (p. 35-36).

B. Area of Study

Since this study is about commercial motorcyclists in Anambra State, the study was conducted in Nnewi, Anambra State because of large concentration of businesses and presence of commercial motorcyclists.

C. Population of Study

The population for this study was all commercial motorcyclists registered with Motorcycle Transport Union of Nigeria, Nnewi Branch Anambra State. According to Nnewi offices of Motorcycle Transport Union of Nigeria (2019), there are currently 740 estimated registered commercial motorcyclists in Nnewi, Anambra State.

D. Sample Size and Sampling Procedure

In this study, three hundred (300) respondents served as the sample size. This sample size was determined based on Comrey and Lee (1992) cited in Wimmer and Dominick (2011) which recommend sample guideline for multivariate studies as follows; 50 = very poor, 100 = poor, 200 = fair, 300 = good, 500 = very good and 1000 = excellent. Going by this recommendation, the sample size of 300 is good enough to provide data that will be used to determine response of commercial motorcyclists to road safety campaign on helmet use.

E. Data Collection Instrument

The instrument used to gather data from participants of this study was structured closed-ended questionnaire. Survey questionnaire is an effective way of gathering "information about the characteristics, actions, or opinions of a large group of people" (Pinsonneault & Kraemer, 1993, p. 77). The items in the questionnaire addressed the variables related to the research questions developed for this study.

F. Measurable Variables

The questions in the questionnaire design were grouped into different sections based on the response to helmet use. This enhanced the ability of the instrument to be able to measure what they were designed to measure.

G. Method of Data Collection

In order to collect data for this study, the researcher sought permission of the leadership of the Motorcycle Transport Union of Nigeria within the selected areas. When permission was granted, three trained assistant data collectors assisted the researcher in administering the interview. Copies of the administered interview schedule were collected on the spot. The assistants were selected based on familiarity with the study location and their ability to translate Igbo language to English language. To clear confusion and deviation from the purpose of the study and data collection process, the assistant data collectors were given proper orientation and supervision by the researcher.

H. Method of Data Analysis

Quantitative data collected was analyzed using descriptive analysis.

IV. DATA PRESENTATION AND ANALYSIS

The first section of this chapter starts with data presentation on the response rate; respondents demographic variables; communication platform/access/use; exposure of road safety campaign on helmet use; knowledge of road safety campaign on helmet use; attitudinal response to road safety campaign on helmet use and factors that affect audience response to road safety campaign on helmet use. This is followed by interpretations related to the five research questions. A synoptic discussion of the findings rounds off the chapter.

A. Response Rate

A total of 300 copies of the questionnaire were distributed to commercial motorcyclists in Nnewi covered by the study.

Local Government	Copies Administered	Copies Returned	Percentage
Nnewi South	45	33	73.33
Nnewi North	255	176	69.01
Total	**300**	**209**	**69.66**

Table 1:- Questionnaire Distribution

Out of the 45 copies of the questionnaire distributed in Nnewi South Local Government Area, 33 copies of questionnaire were returned while 12 copies were lost while in Nnewi North Local Government Area, out of the 255 copies of questionnaire distributed, 176 copies were returned while 79 copies were lost.

The total number of copies of the questionnaire returned was N = 209 which represents 69.66 percent return rate.

Item	Variables	Frequency	Percentage
What is your gender?	Male	209	100
	Female	0	0
	Total	**209**	**100**

Table 2:- Respondents' Gender

Table 2 shows the ratio between the male and female gender among the respondents. Out of 209 respondents, 100 percent were male and zero percent for female. The implication of the finding is that the commercial motorcyclists in Nnewi are predominantly male.

Item	Variables	Frequency	Percentage
What is your marital status?	Single	90	43.06
	Married	96	45.93
	Divorced	8	3.83
	Widowed	15	7.18
	Total	**209**	**100**

Table 3:- Respondents' Marital Status

As shown in table 3, 90 respondents representing 43.06 percent were single while 96 respondents representing 45.93 percent were married. 8 respondents representing only 3.83 percent were divorced whereas 15 respondents representing 7.18 percent were widowed. It shows again that on the average, commercial motorcycling in Nnewi is considered a business for the married.

ISSN No:-2456-2165

Item	Variables	Frequency	Percentage
What age bracket do you belong to?	18 - 29	44	21.05
	30 - 39	82	39.23
	40 - 49	52	24.88
	50 – 59	21	10.05
	60 and above	10	4.78
	Total	**209**	**100**

Table 4:- Respondents' Age

The data above show the age distribution of the respondents sampled in the study. The findings indicate that 21.05 percent of the respondents are between 18 and 29 years; 39.23 percent are between 30 and 39 years; those within the age bracket of 40 - 49 constitute 24.88 percent of the population while 10.05 percent fall within the age bracket of 50 – 59. 4.78 percent of the respondents fall within the age bracket of 60 years and above. This data have several implications for the study. First, it points to the fact that majority of commercial motorcyclists in Nnewi, Anambra State fall within the age bracket of young adults (30 and 49 years). This is expected since commercial motorcycling is perceived to be a job for the young and energetic. Another implication may be that this age constitutes an age where most adults would have acquired some education and therefore may be considered knowledgeable of the campaign on helmet use.

Item	Variables	Frequency	Percentage
What is your highest education qualification?	FSLC	117	55.98
	SSCE	86	41.15
	Bachelors Degree	0	0.00
	Masters	0	0.00
	PhD	0	0.00
	Others (Specify)	6	2.87
	Total	**209**	**100**

Table 5:- Respondents' Academic Qualifications

The data above represent the respondents' academic qualifications. The data indicate that majority of the respondents (55.98 percent) have FSLC; 41.15 percent have obtained SSCE while zero percent for Degree, Masters and PhD. Only 2.87 percent have obtained either NCE or OND. The implication of this finding is that the respondents formally acquired at least basic education and education can have a direct impact on the ability of evaluating information on helmet use.

- *Communication Platforms/Access/Use*

In this section, the primary goal was to determine the communication platforms, access and use among the respondents. And the questions on this section were measure using questions 10 -17 in the questionnaire. The data generated from the communication platforms, access and use variables are presented below.

Item	Variables	Frequency	Percentage
Which is your available source of information?	Radio	94	44.98
	Television	21	10.05
	Newspapers	17	8.13
	Magazines	2	0.96
	Church	0	0.00
	Rally	4	1.91
	Internet	13	6.22
	All of the above	58	27.75
	Total	**209**	**100**

Table 6:- Available medium

The analysis in Table 6 shows that about two thirds of the respondents have access and use the various communication platforms. This trend goes from 44.98 percent for agreeing to own a radio, 10.05 percent for television, 8.13 percent for newspapers, 0.96 percent for magazines, zero percent for church, 1.91 percent for rally, 6.22 percent for internet and 27.75 percent for all of the above. This finding suggests that radio is the most available medium of information used by commercial motorcyclists in Nnewi, Anambra State.

- *Exposure To Road Safety Campaign On Helmet Use*

This section looks at respondents' exposure to road safety campaign on helmet use. There is need to measure the respondents' exposure to the road safety campaign on helmet use with a view to seeing if it leads to attitudinal response. The Nigerian government, Non-governmental Organizations (NGOs) and other concerned bodies have sent out a flurry of messages

through various medium such as radio, television, newspapers, and new media on helmet use targeted at commercial motorcyclists. The data generated were presented in the table below.

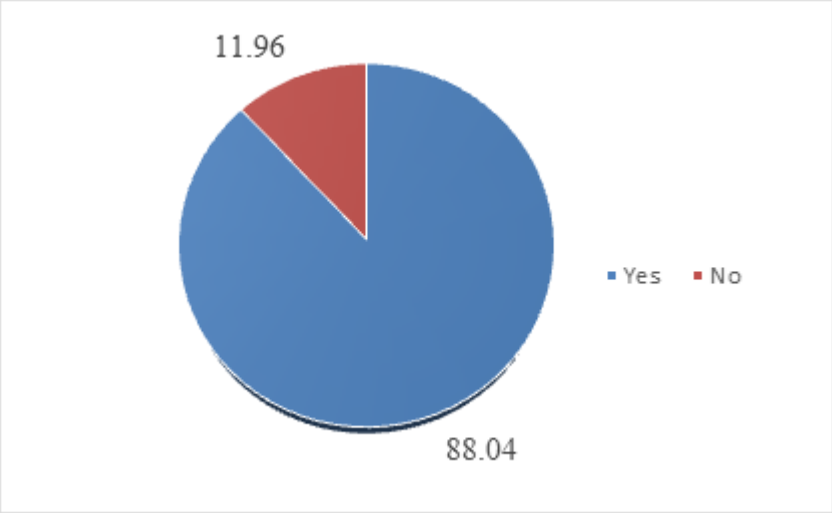

Fig 1:- Respondents' Exposure to Road Safety Campaign on helmet Use

Figure 1 reveals that most of the respondents were exposed to road safety on helmet use. The data show that greater percentage of the respondents at 88.04 percent have heard campaign on the use of helmet while as low as 11.96 percent have not heard any campaign on helmet use. The implication of the finding is that commercial motorcyclists have high level of exposure to road safety campaign on helmet use which is a means of protection against any form of danger on the road during a crash.

➢ *Level Of Knowledge Of Campaign On Helmet Use*

The level of knowledge of road safety campaign on helmet use among respondents was measured by asking the respondents a battery of three questions on helmet use in the table below.

Items	Variables	Frequency	Percentage
It is mandatory that you wear helmet while driving.	True	178	85.17
	False	31	14.83
	Total	**209**	**100**
Helmet is beneficial to reducing head injury and mortality.	True	201	96.17
	False	8	3.83
	Total	**209**	**100**
It is dangerous to drive motorcycle without helmet.	True	173	82.78
	False	36	17.22
	Total	**209**	**100**

Table 7:- Respondents' Level of Knowledge of Road Safety Campaign on Helmet Use

The data in the table above geared toward ascertaining the audience knowledge of mandatory use of helmet while driving. Majority of the respondents 85.17 percent answered in the affirmative that it is mandatory to use helmet while 14.83 percent on the contrary do not agreed to the terms. 201 respondents representing 96.17 percent agreed that helmet is beneficial to reducing head injury and mortality while 8 respondents representing only 3.83 percent did not agree to this. More so, 82.78 percent maintain that it is dangerous to use bike without helmet while 17.22 percent declared this to be false. Thus, the finding is suggestive of the fact that commercial motorcyclists in Nnewi know the benefits of wearing helmets during their routine businesses of motorcycling.

➢ *Response To Helmet Use*

This section discusses the attitudes towards helmet use based on their and knowledge. The data generated were presented from figure 2 to figure 4.

ISSN No:-2456-2165

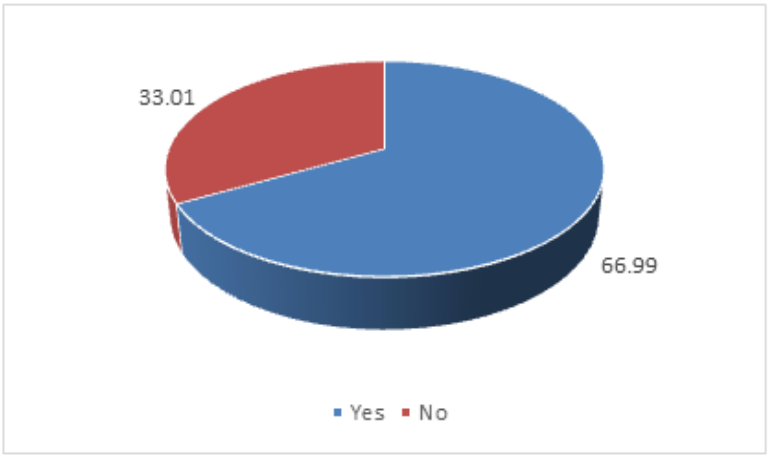

Fig 2:- Respondents' Possession of Helmet

From the data above on possession of helmet by the respondents, 66.99 percent of the respondents have crash helmet while 69 respondents representing 33.01 percent do not have crash helmet. The finding suggests that there is a slight reduction between the number of respondents who understood the message and those who have crash helmet. Though, the commercial motorcyclists in Nnewi knew and understood the campaign on helmet use, it reflected rather poorly on their possession of helmet.

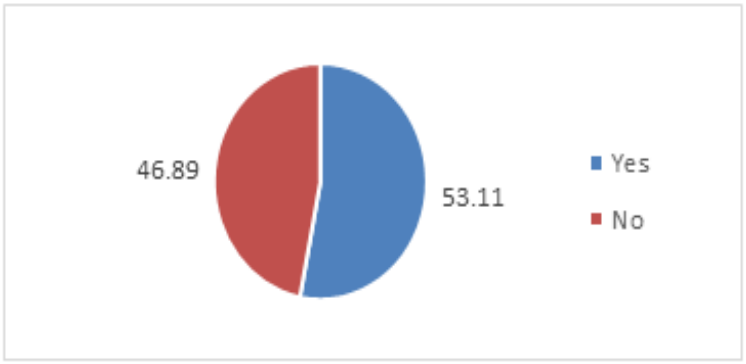

Fig 3:- Respondents' Wearing of Helmet

The main finding here in Figure 3 is that 111 respondents representing 53.11 percent do wear crash helmet while driving while 98 respondents representing 46.89 percent do not wear it. The finding again showed another slight reduction between those who have helmet and those who actually wear it.

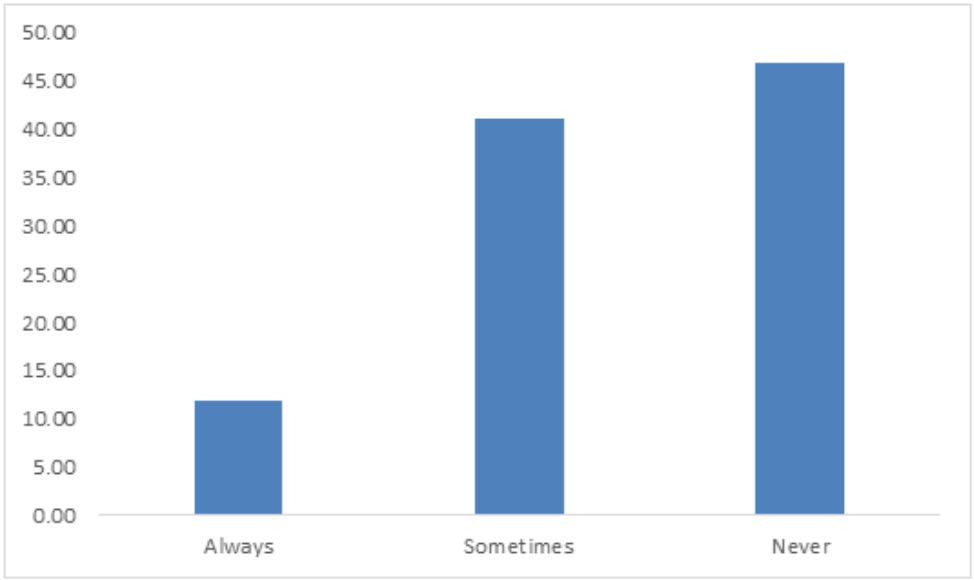

Fig 4:- Respondents' Frequency of Helmet Use

ISSN No:-2456-2165

The figure above reveals how often respondents respond to the use of helmet. 25 respondents representing 11.96 percent wear helmet regularly; 86 respondents representing 41.15 percent wear sometimes while 98 respondents representing 46.89 percent never consider it suitable to wear helmet. This finding revealed that campaign on helmet use does not translate into improved use of crash helmets by the motorcyclists as pointed out by (Oyelade, 2015).

- *Factors That Affect Audience Response To Road Safety Campaign On Helmet Use*

This section examined the audience to know if there are some factors that affect their response to the use of helmet. Such factors were old age, young age, cultural belief, educational background, peer influence and discomfort. To this end, a set of questions were constructed to measure these factors.

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Undecided	Mean	Remark
Old Age	11	22	47	84	45	**2.38**	**Reject**
Young Age	67	67	31	36	8	**3.71**	**Accept**
Educational Background	10	29	75	42	53	**2.53**	**Reject**
Cultural and Religious beliefs	2	29	65	59	54	**2.36**	**Reject**
Peer Influence	61	66	38	31	13	**3.63**	**Accept**
Discomfort	62	83	28	18	18	**3.73**	**Accept**

Table 8:- Factors that affect Audience Response to Helmet Use

The data on table 8 show the frequency with which respondents that were sampled expressed their opinion on some factors that influence their attitudinal response to helmet use. The table above shows that with the mean of 3.71 greater number of the respondents strongly agrees that young age affects their response to helmet use. Thus, this finding supports the literature that helmet users are more likely to be drivers of older age.

Also, the table showed that majority of the respondents at the mean of 3.73 accepted that helmet causes discomfort. This finding is against the view of McKnight (1995) that helmet wearing did not restrict the ability to hear from signals nor did it have an appreciable effect of visually detecting a vehicle in an adjacent lane.

B. Discussion of Findings

Data analyzed in this study was obtained from 209 commercial motorcyclists drawn from Nnewi in Anambra State. As previously stated, the central research question revolves around ascertaining the audience attitudinal response to road safety campaign on helmet use through several communication platforms.

- *The Protection Motivation Theory (PMT) served as the basis for this investigation.*

The idea underlying the Protection Motivation Theory (PMT) is the process of getting people who have knowledge of an issue to adopt the process which invariably is the goal of any communication. The essence of this theory would suggest that the audience who are exposed and know of road safety campaign on helmet use will take positive actions to avert the perceived health risk of not wearing helmet and then enjoy the perceived benefits of adhering to the campaign on helmet use.

Data analysis also showed in table that greater percentage of the respondents was highly knowledgeable about road safety campaign on helmet use. For instance, majority of the respondents admitted to knowing that "helmet reduces head injury and mortality rate", "helmets protect the head" and "it is dangerous to ride bike without helmet". This is an indication that may be the message was given adequate publicity and such message was communicated in a clear and ambiguous manner.

Furthermore, under the educational background, the respondents rejected the fact that education was fundamental to their response to helmet use while at the mean of 3.63, respondents agreed that peer influence is one of the factors affecting their response to helmet use. As low as 2.36 mean, respondents disagreed that culture is the reason for not wearing helmet. The implication of these findings is that there various factors working against wearing of helmet among commercial motorcyclists in Nnewi. Chief among them is that helmet causes discomfort. Some of them also agreed that young age and peer influence play a vital role. In sum, commercial motorcyclists in Nnewi, Anambra State have high exposure and knowledge of campaign on helmet use, but discomfort, peer influence and young age are among other factors inhibiting them from wearing helmets.

Radio was identified as the dominant communication platform of exposure and knowledge of the respondents to campaign on helmet use as contained in table 6. This, therefore, confirms the view of Okunna (1992) that radio sets are widely owned all over the Third World, even in remote areas. This finding points to the obvious importance of radio as a popular medium of information with the ability to stimulate audience imagination of its personalized nature. However, even though radio channel has been identified by scholars (Moemeka 1981; Sobowale and Sagbamu, 1984; Okunna, 1992 and Okigbo, 1995) as an important medium of information for development especially among rural population in the Third World countries, data analysis especially from the qualitative data showed that a combination of the communication platforms is better than using one medium for effective communication. Whittam (2006) thus emphasized the importance of using a

combination of the communication platforms in information dissemination targeted at achieving attitudinal change.

The results emanating from the study point to the negative influence of some factors among the respondents in the response to campaign on helmet use. What this means is that there are some personal inconveniences, peer influence and young age factors that affect the respondents to the roads safety campaign on helmet use and these factors may be a determinant in their response to helmet use. The findings as can be seen in table 17 are indications that discomfort, peer influence, and young age would affect their response to helmet use.

V. CONCLUSION

The overall purpose of this study was to examine the audience response to road safety campaign on helmet use. Five research questions were stated for the study. These sought to determine the level of exposure, level of knowledge of road safety campaign on helmet use, the various communication platforms through which the audience were exposed to road safety campaign on helmet use and the dominant communication platform, their attitudinal response to road safety campaign on helmet use and the factors that affect the audience response to road safety campaign on helmet use.

Protection Motivation Theory provided the framework for the discourses in this study. They formed the basis for most of the general discourses about attitudinal response in relation to helmet use.

The survey research design was adopted for the study.

Findings revealed significant relationship between respondents' level of exposure to road safety campaign on helmet use and their level of knowledge of the messages on helmet use.

It further indicated that the level of knowledge is somewhat high but this is not the case with the attitudinal response which is low. The influence here is that whereas the knowledge of the road safety campaign on helmet use is high, certain factors mainly peer influence, discomfort and young age could make the respondents to be disinclined to helmet use.

VI. RECOMMENDATIONS

- This study recommends that further efforts be made by all concerned bodies to review the content of the campaign messages on helmet use for clearer and better understanding to the audience. This will address the issue of communicating helmet use campaign in an unclear and ambiguous manner.
- There is need for sustained messages and media campaign plans that would take into account the communication and the inhibiting factors to road safety campaign on helmet use addressed in this study. It is believed that if this aspect is effectively handled, it would provide solution to the factorial issues that impinge on attitudinal response to helmet use.
- Government should ensure proper and full implementation of policies on helmet use through its concerned agencies and bodies towards positive response to helmet use in the state.
- The study further recommends that future replication of this study could be undertaken in states not covered in this study.
- The agency should ensure the design of a more quality helmet for commercial motorcycling to enhance comfortability.

ACKNOWLEDGEMENTS

I want to express my sincere gratitude to God for making this study a very successful one. Also, the scholarly input and guidance of my supervisor, Professor Ifeoma Vivian Dunu are beyond words could ever say.

REFERENCES

[1]. Akinleye, M. (2017). Helmet as a Safety Tool among Motorcycle Riders in Ibadan, Oyo State, Nigeria. *Journal of Engineering and Technology 9 (1). 131 – 138.*
[2]. Aldoory, L., & Bonzo, S. (2005). Using Communication Theory in Injury Prevention Campaigns. *Injury Prevention*. 11(5): 260-263.
[3]. Atkin, C. K., & Rice, R. E. (2013). Theory and Principles of Public Communication Campaigns. In *Public Communication Campaigns* (4th ed., pp. 3-19). Santa Barbara: SAGE Publications.
[4]. Baglo, K., Habib, A., & Peterlin, M. (2013). Share the Road Nova Scotia: Volume 1 Best Practice Review & Stakeholder Consultation. Dalhousie Transportation Collaboratory (DalTRAC), Halifax, NS.
[5]. Brown, V., Hejl, K., Bui, E., Tips, G., Coopwood, B. (2009). Risk Factors for Riding and Crashing a Motorcycle Unhelmeted. *The Journal of Emergency Medicine* .
[6]. Cheng, L.T., Chang, G.L., Huang, J.Z., Huang, S.C., Liu, D.S., Chang, C.H. (2003). Finite Element Analysis of the Effect of Motorcycle Helmet Materials against Impact Velocity. Journal of the Chinese Institute of Engineers 26, 835–843.
[7]. Cheng, L. P., Wang, C. & Lu. J. (2014). Examine Factors Associated with Motorcycle Injury and Fatality, *Applied Mechanics and Materials*, Vol. 577, pp. 1045-1054.
[8]. Cismaru, M., Lavack, A. M., & Markewich, E. (2009). Social marketing campaigns aimed at preventing drunk driving: A review and recommendations. *International Marketing Review*, 26(3): 292-311.
[9]. Crimmins, J., & Callahan, C. (2003). Reducing Road Rage: The Role of Target Insight in Advertising for Social Change. *Journal of Advertising Research, December*, 381-389.

[10]. Deck, C., Willinger, R., Baumgartner, D., Meyer, F. (2003). *Helmet Optimization Against Biomechanical Criteria*. In: Proceedings of IRCOBI Conference, Lisbon, Portugal, pp. 351–352.
[11]. Delhomme, P., De Dobbeleer, W., Forward, S., & Simoes, A. (2009). *Manual for Designing, Implementing and Evaluating Road Safety Communication Campaigns*. Brussels: Belgian Road Safety Institute.
[12]. Elliott, B. (1989). *Effective Road Safety Campaigns: A practical handbook.* Canberra: Federal Office of Road Safety.
[13]. Elliot, M.A., Banghan, C.J. & Sexton, B.F. (2007). Errors and Violations in Relation to Motorcyclists Crash Risk. *Accident Analysis and Prevention*. 39:491-499. Retrieved from www.hinari.com on 15th March, 2011.
[14]. Federal Road Safety Corps (2005). Drivers' Licence Report, FRSC, Abuja.
[15]. Federal Road Safety Corps (2007). An Article on FRSC Establishment Act.www.Frsc.gov.ng. Dec. 15, 2007.
[16]. Hung, D.V., Stevenson, M.R. & Ivers, R.Q. (2006). Prevalence of Helmet Use among Motorcycle Riders in Vietnam. *Injury Prevention*, *12*(6), 409–413.
[17]. Hung, D., Stevenson, M., Ivers, R. (2008). Barriers to, and Factors Associated with Observed Motorcycle Helmet Use in Vietnam. *Accident Analysis and Prevention*, *40*, 1627 – 1633.
[18]. Klassen, T. P., MacKay, J. M., Moher, D., Walker, A., & Jones A. L. (2000). Community-based Injury Prevention Interventions. *The Future of Children*, 10(1): 83-110.
[19]. Liu, D.S., Chang, C.Y., Fan, C.M., Hsu, S.L. (2003). Influence of Environmental Factors on Energy Absorption Degradation of Polystyrene Foam in Protective Helmets. Engineering Failure Analysis 10, 581–591.
[20]. McKnight, A. J., & McKnight A. S. (1995). The Effects of Motorcycle Helmets upon Seeing and Hearing. *Crash Analysis and Prevention*, Volume 27, No. 4, pp. 493-501.
[21]. Mwakapasa, E. G. (2011). *Attitude Towards and Practice of Helmet Use among Commercial Motorcyclists in Dar Es Salaam Region, Tanzania*. Dissertation, Degree of M Sc. Nursing (Critical Care &Trauma) of the Muhimbili University of Health and Allied Sciences.
[22]. Noar, S. M. (2006). A 10-year Retrospective of Research in Health Mass Media Campaigns: Where do we go from here? *Journal of Health Communications, 11*, 21-42.
[23]. Ogunmodede T. A., Adio G, Ebijuwa A. S., Oyetola S. O., Akinola J. O. (2012). Factors influencing High Rate of Commercial Motorcycle Accidents in Nigeria, *America International Journal. Contemporary Research* 2 (11) :130–140.
[24]. Oluwadiya K. S, Oginni L. M, Olasinde A. A, Fadiora S. O. (2004). Motorcycle Limb Injuries in Developing Country. *West Africa J Med* 23(1):42-7.
[25]. Owoaje E. T., Amoran O. E., Osemeikhain O. O. & Ohnoferi O. E. (2005). Incidence of Road Traffic Accident and Patterns of Injury among Commercial Motorcyclists in a Rural Community in South-Western Nigeria. *Journal of Community Medicine and Primary Health Care*.17(1):7-12.
[26]. Oyelade, B. O. (2015). The Use of Crash Helmets among Commercial Motorcycle Riders in Ogbomosho, South-West Nigeria. *Journal of Medicine and Medical Sciences* 3 (2), pp. 62 -68.
[27]. Penprapa S , Karl P., Supa P. & Sompong M. (2012). "Helmet Use and Associated Factors among Thai Motorcyclists During Songkran Festival." *International Journal of Environmental Research and Public Health* 9: 3286-3297.
[28]. Petty, R. E., & Cacioppo, J. T. (1986). Communication and persuasion: Central and peripheral Routes to Attitude Change. New York: Springer-Verlag.
[29]. Rogers, R. W. (1983). "Cognitive and Physiological Processes in Fear Appeals and Attitude Change: a Revised Theory of Protection Motivation", in Cacioppo, J. T. and Petty, R. E. (Eds), *Social Psychophysiology*, Guilford, New York, NY, pp. 153-76.
[30]. Sanusi, A. A. (2015). Commercial Motorcycle Drivers' Perception of Risk and Road Safety in Urban Nigeria. An Exploratory Study. *Journal of Injury Control and Safety Promotions* Vol 22, pp. 328 – 339.
[31]. Seidu, I. (2017). Barriers and Facilitators to the Use of Motorcycle Helmet in Tamale. *Journal of Humanities and Social Sciences Vol 22, 94 -98.*
[32]. Shuaeib, F.M., Hamouda, A.M.S., Hamdan, M.M., RadinUmar, R.S., Hashmi, M.S.J. (2002). Motorcycle Helmet: Part II. Materials and Design Issues. Journal of Materials Processing Technology 123, 422–431.
[33]. Slesak G., Inthalath S., Wilder-Smith A., & Barennes H. (2015). Road Traffic Injuries in Northern Laos: Trends and Risk Factors of an Underreported Public Health Problem. *Tropical Medicine & International Health.* 20 (11): p. 1578–1587.
[34]. Solagberu, B., Ofoegbu, C., Nasir, A., Ogundipe, O., Adekanye, A., Abdur-Rahman, L. (2006). Motorcycle Injuries in Developing Country and the Vulnerability of Riders, Passengers, and Pedestrians.*Injury Prevention*, 12, 266 -268.
[35]. Strecher, V. J., Bauermeister, J. A., Shope, J., Chang, C., Newport-Berra, M., Giroux, A. (2006). Interventions to Promote Safe Driving Behaviour: Lessons Learned from Other Health-related Behaviours. In *Behavioural Research in Road Safety 2006, Sixteenth Seminar* (pp. p28-38). London: Department for Transport.
[36]. Tay R. (2001). Fatal Crashes Involving Young Male Drivers. Australian New Zealand Journal of Public Health, 25(1), 21-23.
[37]. Tay R. & Watson B (2002).Changing Drivers' Intentions and Behaviours Using Fear-Based Driver Fatigue Advertising. Health Marketing Quarterly, 19(4), 55-68.

[38]. Whittam, K. P., Dwyer, W. O., Simpson, P. W., & Leeming, F. C. (2006). Effectiveness of a Media Campaign to Reduce Traffic Crashes Involving Young Drivers. *Journal of Applied Social Psychology*, *36*(3), 614-628.
[39]. Wimmer, R.D. & Dominick, J.R. (2011) Mass Media Research: An Introduction. 9th Edition, Wadsworth, Cengage Learning, Boston.
[40]. Wundersitz, L. N., Hutchinson, T. P., & Woolley, J. E. (2010). *Best Practice in Road Safety Mass Media Campaigns: A literature review.* Centre for Automotive Safety Research. Adelaide, Australia.