



## Compliance with Road Safety Regulations Among Commercial Motorcyclists in Nigeria

### CONFORMITE A LA REGLEMENTATION DE LA SECURITE ROUTIERE PARMIS LES MOTOCYCLISTES AU NIGERIA

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#### Abstract

Motorcycles account for one out of every four vehicles involved in crashes in Nigeria. The basic question has always been that do these motorcyclists comply with basic requisite safety rules? This paper therefore examined the level of compliance with some basic road traffic regulations among commercial motorcyclists commonly called Okada riders.

The data for the analysis were collected from 334 commercial motorcyclists from Samaru-Zaria in Northern Nigeria through structured questionnaire triangulated with observation and inspection. The data were analysed using descriptive statistics and phi-coefficient.

The study found total (100%) compliance with minimum age limit, number plate registration and motorcycle engine capacity but found 64, 16 and 45 per cent compliance rate with driver license, crash helmet usage and legal passenger permissive respectively. The phi coefficients reveal that there is no single factor that has all-through association with license holding, helmet usage and Highway Code awareness. Union membership has negative association with two of the cases, which confirms the anti-regulation compliance posture of the okada union in the study area.

The paper recommends the overhauling of the driver licensing system; enforcement of road traffic rules to enhance compliance and enactment of state traffic regulations to reinforce the national regulations.

**Key words:** Informal transport; Safety; Regulations; Compliance; Nigeria

#### Résumé

La Moto compte pour un des quatre véhicules impliqués dans des accidents au Nigeria. La question a toujours été que ne motocyclistes se conformer à ces règles élémentaires de sécurité requises? Ce document a donc examiné le niveau de conformité avec certaines règles de base de la route parmi les motocyclistes communément appelés Okada.

Les données pour l'analyse ont été recueillies à partir de 334 motocyclistes commerciaux de Samaru-Zaria au nord du Nigéria par le biais questionnaire structuré triangulées avec observation et de contrôle. Les données ont été analysées à l'aide de statistiques descriptives et phi-coefficient.

L'étude a révélé total, ce qui est de 100%, le respect de la limite d'âge minimum, la plaque d'immatriculation nombre et la capacité de moteur de moto, mais trouve 64, 16 et 45 pour cent le taux de conformité avec le permis de conduire, l'utilisation du casque et le passager juridique permissive, respectivement. Les coefficients phi révèlent qu'il n'ya pas de facteur unique qui a tout-à-travers l'association avec la licence détention, le port du casque et de sensibilisation code de la route. Adhésion à l'Union a une association négative avec deux des cas, ce qui confirme le respect de la posture anti-réglementation de l'union okada dans la zone d'étude.

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#### INTRODUCTION

Road crashes started in Lagos, Nigeria in 1906. Ever since, it has been a major killer in Nigeria. The attempt

to reduce the number and severity of road crashes necessitated the formulation of road traffic regulations to guide operation, conduct and other issues relating to the road and the road users. There are various categories of road users namely vehicle owners including motorcyclists, and pedestrians. The use of motorcycles for passenger transport gained accelerated momentum in Nigeria after the economic recession of the early 1980s. The economic downturn of the 1980s in Nigeria and the subsequent introduction of Structural Adjustment Programme in 1986 led to cut in employment in both the public sector and the organized private sector thereby leading to an upsurge in the activities and relevance of the informal sector of which motorcycle passenger transport is a part. The lack of adequate and sustainable public transport cum poor urban planning in most Nigerian cities created a transport gap for the motorcycles to fill in passenger transportation. A substantial number of road crashes in Nigeria involve motorcyclists. Stakeholders have advocated for outright ban on their operations; some called for restrictions; while others blamed the menace on inefficient road traffic law enforcement. While the above positions cannot be disputed, it is however imperative to investigate the level of compliance of these commercial motorcyclists with road traffic regulation. The overall goal of the Decade of Action for Road Safety 2011 – 2020 is to stabilize and then reduce the forecast level of road traffic fatalities around the World by 2020. The activities to achieve the above goal will take place at local, national, regional and global levels (WHO, 2011). At the national level such as in Nigeria, stabilizing and reducing crash injuries from motorcycles will require inquiry into compliance with road traffic regulations in order to provide direction for enforcement, which is a component of the safe system approach i.e. pillar 4 – safer road users.

This paper therefore examines the level of compliance with road traffic regulations among commercial motorcycle operators and reasons for non-compliance using sample drawn from Samaru-Zaria, Nigeria. The regulations examined in this paper are age restriction, motorcycle capacity, driver license and helmet usage and number of passenger carried per trip.

## 1. COMPLIANCE, ROAD SAFETY AND ECONOMIC DEVELOPMENT

It has been estimated that about 1.3 million people die annually as a result of road crashes-over 3000 deaths per day. Ninety per cent of road deaths occur in low- and middle income countries, which harbours less than half of the world's registered vehicle fleet. Road crash injuries are among the three leading causes of deaths for people between 5 and 44 years of age. The economic burden of road crashes has been put at between 1 and 3 per cent of the Gross National Product (GNP) (WHO,

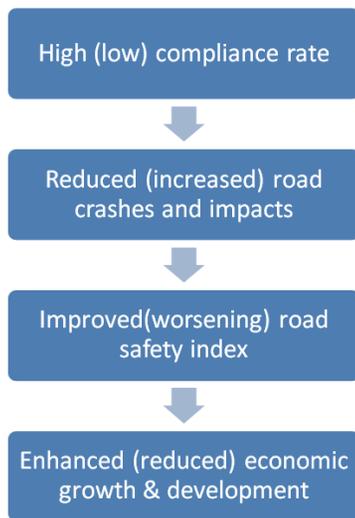
2011:4). The failure of drivers to comply with basic road safety legislations is the main cause of serious crashes (EC, 2003:17). Compliance in road safety is the act of obedience to rules guiding the usage of the roads by road users. The sequential objectives of these rules are; to avoid conflicts among road users; prevent events that are unpleasant to the road users; and mitigate the effects of the unpleasant events. Non-compliance carries penalty. Penalties as defined by the road traffic regulation agencies differ from country to country. Penalties in road traffic law enforcement, in order of severity, range from; no action, written or verbal warning, fines to prosecution or arrest (Southgate and Mirrlees-Black, 1991; Zaal, 1994). The application of the penalty options have been documented in the literature to effect road user behaviour in different ways (Armour, 1984; Dingle, 1985; Assum, 1986; Ross, 1988; Widen, et al. 1989; Robinson and Smiley, 1989; Bjornskau and Elvik, 1990; Evans, 1991; Bailey, 1991; Riley 1991; Williams, et al. 1992; etc). The main objective of the penalty is to serve as deterrence i.e. prevents non-compliant behaviour. The deterrence mechanism could either be specific or general. Specific deterrence relates to compliance based on the assumption that road users will be discouraged from committing or exhibiting non-compliant behaviour; while general deterrence relies on the assumption that road users who become aware of the risk of apprehension and punishment adopt compliant behaviour to avoid the consequences of enforcement (Zaal, 1994).

A high compliance rate will lead to improved safety on the roads, *ceteris paribus*, which will in turn reduce the destruction of human and material resources required for economic growth and development. The schematic link between compliance rate, road safety and economic growth and development is shown in Figure 1.

A typical illustration is the case of crash helmet. Wearing it correctly can reduce the risk of fatal or serious head injuring by 50 per cent (EC, 2003:24); thereby freeing medical resources, productive man-hour, etc., which can be deplored for other economic and social advancement of the society. It has been found that medical charges for un-helmeted motorcycle in-patients suffering brain injuries were 2.25 times higher than for those without brain injuries (NHSTA, 1996). Similarly estimates show that motorcycle helmet use saved US\$ 19.5 billion in economic costs from 1984 through 2002. An additional US\$14 billion would have been saved if all motorcyclists had worn helmet during the same period (NHTSA, 2004).

The rules and their enforcement form a vital component of the tripod of road transport regulations namely economic, service and safety regulations. Economic regulation seeks to promote fairness among competitors in the road industry; service regulation involves ensuring that regulated carriers provide services that are consistent with their operating rights; while

safety regulation is designed to protect the general public, users and operators from crashes as well as unhealthy environment (Wood and Johnson 1993:91). There are various studies on compliance rates with road traffic regulations across the globe among various types of road users- motorists and pedestrians. Studies on seat belt usage and effectiveness are common among motorists (Evans and Frick, 1986; Morgan, 1999; Elvik and Vaa, 2004; Norlen, et al. 2010) while safety helmet usage is common among motorcyclists. The brief review in this section will be limited to compliance with road safety regulations as they pertain to motorcyclists. Motorcycling is the mode of transport involving by far the greatest risk (EC, 2003:32).



**Figure 1**  
**Schematic Link between Compliance with Road Traffic Laws and Economic Growth**  
 Source: Authors' illustration.

In a study of 500 motorcyclists in Kagang, Selangor Malaysia, it was found that 54.4 % of the motorcyclists used helmets properly; 21.4% used it improperly while 24.2% did not wear helmets. Age, gender, race, formal education, prior accident, experience and type of licence held were found to be significantly related to the usage of crash helmet (Kulanthayan, et al. 2000).

A rural study of crash helmet usage in Nigeria has found zero compliance rate (Owoaje, et al 2005). Apart from helmet usage, other studies on compliance with regulations such as Arosanyin (2007a) found compliance rate with driver licence at 57 % among commercial motorcyclists in Ilorin, Nigeria. The non compliance was estimated at 43%. The main reasons given for not having driver's licence were high cost of acquisition and weak enforcement. The same survey also found total compliance with the minimum age requirement and engine capacity. In terms of crash helmet the compliance rate was estimated at 13.5% due to weak enforcement

(Arosanyin 2007b). Iribhogbe, et al. (2009) found among 996 commercial motorcyclists in Benin City, Nigeria that 26.5 % had no driver licence while 73.5 % had it. Only 27.2 5% of those who had licence actually took a road test before they were issued the licence. It further showed that 56.4 % of the operators had crash helmets but do not use them regularly due to what they termed 'inconvenience' and high cost. Incidences of under-aged drivers were also recorded as the minimum age found in the study was 16 years against the stipulated legal minimum of 18 years. Evidences of the use of motorcycles with lower capacity were found in the works of Oluwadiya, et al. (2009). The range of engine capacity was between 85cc and 125cc. In the study about 15 % of the operators carry more than one passenger; and 96.5% were found not wearing safety helmet.

## 2. METHODOLOGY

### 2.1 Analytical Tool

In examining the compliance rate of commercial motorcyclists in this paper, two broad analytical tools were employed. The first is descriptive statistics, which gives the percentage of those who complied with the provisions of the regulations. If the proportion of compliance and non-compliance are statistically adequate for categorical analysis, then the data are subjected to phi analysis (see Liebetrau 1983; Agresti 1996). The main analytical tool due to the categorical nature of the data is therefore the Phi coefficient.

The phi coefficient is a measure of the degree of association between two categorical variables, especially when the two variables are binary. Therefore, phi statistic is a chi-square based measure of association between two variables measured at nominal level. It is mainly applicable to 2-by-2 contingency table and is similar to the Pearson Product Moment Correlation coefficient in its interpretation as it lies between  $\pm 1$ . However in larger tables, phi may be greater than 1.0 in which case there will be no simple intuitive interpretation, which is a reason why phi is often used only for 2-by-2 tables. It may still be used for larger tables provided the value lies within the range of  $\pm 1$ . Two categorical variables are considered positively associated if most of the data falls along the diagonal cells and in contrast, two variables are considered negatively associated if most of the data falls off diagonal (Rosenberg, 1968; Goodman and Kruskal, 1972; Liebetrau, 1983; Agresti, 1996). The phi computation in this paper relates to driver licence holding, Highway Code awareness and crash helmet usage. The independent variables used are age, educational status, marital status, household size, ownership status, type of motorcycle purchased, mode of operation and union membership.

The square of the phi-coefficient gives a measure of

the percentage improvement in predicting Y from X or vice versa. Since phi-coefficient has a known distribution, it is possible to compute its standard error and therefore determine its significance.

## 2.2 Source of Data

The data for this paper was sourced randomly from 334 commercial motorcyclists in Samaru, Zaria, where the main campus of Ahmadu Bello University, Zaria is located.

The main campus, 13km Northwest of Zaria City, is bounded on the north by the Kubani River. It covers a land area of over 21km<sup>2</sup> (2133 hectares).

The campus has a population of about 34 thousand students and staff, excluding economic and social service providers. The population moves to various destinations on campus and to Samaru the host community in Zaria using private transport and commercial motorcycles. Motorcycle transport belongs to Class IV of the Classes of informal transport mode (Cervero, 2000:24). The information required for this study was obtained from primary data sourced through administration of carefully designed questionnaire, which was triangulated with observation and inspection.

The Ahmadu Bello University Security Unit is responsible for regulating commercial motorcycle operation on campus. It gave the total population of registered motorcycle operators on the campus as 716 at the time of the survey. The study chose the sample using simple random sampling technique. The procedure adopted was the use of odd-even number relying on their registered number. Fifty percent of the operators were sampled based on this procedure. The expected questionnaire was therefore 358. However only 334 were returned, which is about 47 per cent of the operators. The questionnaires were mostly administered personally to the operators, except few who collected and filled themselves. The difference in the expected and actual was as a result of those who collected but failed to return. They were however not replaced, since over 93 per cent of the expected questionnaires were returned.

## 2.3 Data Measurement

The data for this paper were measured categorically. The categorically data are ownership (owner-operator = 2; otherwise = 1); type of purchase (new = 2; otherwise = 1); mode of operation (full-time = 2; otherwise = 1); licence holding( licensed=2; otherwise=1);highway code awareness (aware = 2; otherwise = 1); membership of union (member = 2; otherwise = 1); educational attainment (junior secondary school (9 years of schooling) and above= 2; less than junior secondary school (9 years of schooling)=1); age (below 31 years=1; 31 years and above=2); household size (1-6=1; 7 and above=2); crash helmet usage (used =2; not used=1).

## 3. ISSUES IN ROAD CRASHES AND TRAFFIC LAW VIOLATIONS IN NIGERIA

Road crashes started in Nigeria in 1906 in Lagos. Ever since it has been a public health concern based on the number and magnitude of persons killed and injured. Between 1960 through to 2006, a total of 969,618 road crashes were reported leading to a casualty figure of 1,159,642 persons distributed as 292,703 persons killed and 866,939 persons injured<sup>1</sup>.

The above figures of crashes and casualties are underestimation of the realities on Nigerian roads as it has been studied that there are high incidences of non-reporting and under recording of road crashes (see Arosanyin, 2004). A comparative assessment of causes of deaths in Nigeria has placed road crashes as the most killer of Nigerian than a combination of 35 notifiable diseases including malaria and HIV/AIDS. The economic burden of road crashes is in the neighbourhood of 2.46 per cent of the Gross Domestic Product (GDP) using human capital costing method. This burden is more given that the estimate covers only casualty component only (see Arosanyin, 2008 for details).

The category of vehicles and their proportion of involvement are shown in Table 1.

**Table 1**  
**Vehicle Involvement in Road Crashes in Nigeria (2000-2009)**

Year	Heavy vehicle	Light vehicle	Motorcycle	Total
2000	2092 (17.73)	4748 (40.23)	4961 (42.04)	11801
2001	2330 (17.05)	7172 (52.47)	4166 (30.48)	13668
2002	2626 (19.29)	7345 (53.97)	3639 (26.74)	13610
2003	2535 (19.14)	7759 (58.57)	2953 (22.29)	13247
2004	1343 (13.20)	4388 (43.14)	4441 (43.66)	10172
2005	736 (10.90)	4298 (63.67)	1716 (25.42)	6750
2006	726 (5.99)	9851 (81.27)	1544 (12.74)	12121
2007	1275 (9.02)	10905 (77.15)	1955 (13.83)	14132
2008	1513 (15.27)	5787 (58.40)	2610 (26.34)	9910
2009	1880 (20.42)	5236 (56.88)	2090 (22.70)	9206
Total	17056 (14.88)	67489 (58.88)	30075 (26.24)	114,620

Note: % share in parenthesis; computed by the Authors  
 Source: Federal Road Safety Commission, Abuja

<sup>1</sup>The data was sourced from the Nigeria Police and the Federal Road Safety Commission (FRSC).

It shows that motorcycles accounted for 42 per cent of crashed vehicles in 2000; 43.7 per cent in 2004; 26.34 per cent in 2008; and 22.7 per cent in 2009. The percentage involvement of motorcycles in the decade data (2000-2009) stood at 26.24 per cent. This means that one in every four vehicles involved in crash is a motorcycle.

Crashes do not just happen, they are caused. Adherence to road traffic regulations and codes of conduct as enshrined in the Highway Code reduces the risk of occurrence, but road users often flout these crash prevention and impact mitigation rules. The traffic law enforcement agencies restore discipline by apprehending violators and applying sanctions based on the principles of the theory of deterrence. The Federal Road Safety Commission (FRSC) has 37 offence and penalty schedule. The penalty ranges from a fine of N2000 (US\$13.3) to N50,000 (US\$333.3)<sup>1</sup>; and a point system from 2 to 10 depending on the severity of the offence. In some of the offences, no points are attached probably because they are institutional offences. Such offences are Hospital Rejecting Accident Victims (HRAV) and Inadequate Construction Warning sign (ICW). Some of the offences

and penalties relating to motorcycle operators include the following: driver's licence violation (DLV)-10 points and a fine of N10,000 (US\$66.7); excessive smoke emission (ESE)- 5 points and a fine of N5,000 (US\$33.3); overloading violation (OLV)- 10 points and a fine of N10,000 (US\$66.7); riding motorcycle without safety helmet (RMH)- 2 points and a fine of N2,000 (US\$13.3); under aged driving /riding violation (UDRV)- 2 points and a fine of N2,000 (US\$13.3); use of phone while driving (UPWD)- 4 points and a fine of N4,000 (US\$26.7); vehicle licence violation (VLV)- 3 points and a fine of N3,000(US\$20); vehicle number plate violation (NPV)- 3 points and a fine of N3,000 (US\$20); and other violation offences (OVO)- 3 points and a fine of N3,000 (US\$20).

The custody fee for any vehicle including motorcycle impounded is N200 (US\$1.33) per day payable after 24 hours of grace. Official statistics from the FRSC as shown in Table 2 indicate that 634,037 offences were sanctioned in 1988; 554,173 in 1990; 600,438 in 1995 and over 1.2m in 2000. The figure stood at 672,669 in 2005 and 553,362 in 2010.

**Table 2**  
**Road Traffic Offences in Nigeria for Selected Years (1988-2010)**

Year	1988	1990	1995	2000	2005	2008	2010*
Total	634,037	554,173	600,438	1,268,098	672,669	419,739	553,362

Note: \* Data are for the first eleven months (January to November).  
Source: FRSC, Abuja.

The above figures on road traffic offences apprehended provide indication on the level of non compliance to traffic rules in Nigeria. The figures are probably higher given the operational constraints of the FRSC which include; limited patrol hours per day; unscientific traffic policing, non coverage of most roads, etc.

#### 4. COMPLIANCE WITH SELECTED ROAD SAFETY REGULATIONS

The compliance rates of commercial motorcyclists with the selected road traffic regulations are shown in Table 3.

**Table 3**  
**Compliance Rates with Road Traffic Regulations**

Variable	Regulation	Survey results	Compliance rate
Age	18 years minimum	All operators were found to be 18 years and above.	100 percent
Motorcycle capacity	Two wheel: Min. 100cc – 200cc Max.	100cc = 100%	100 percent
Number plate	Compulsory	All the motorcycles had it.	100 percent
Driver license	Compulsory	No license = 27.6% Ever licensed = 72.4% <b>Validity of license</b> Expired = 11.3% Valid = 88.7% <b>Highway Code awareness</b> Not aware= 41.8% Aware=58.2%	(0.887 x 0.724)%= 64.2 per cent

To be continued

<sup>2</sup>The US Dollar equivalents were computed by the authors using the exchange rate of N150=US\$1. The fines are paid in Naira.

Continued

Variable	Regulation	Survey results	Compliance rate
Crash helmet	Both rider and passenger	<b>Rider only</b> Not used = 84.2% Used = 15.8% <b>Passenger only</b> <b>None of the passengers used it on motion</b>	15.8 percent
Passenger	One	<b>Survey point</b> One = 99.1% Two or more = 0.9% <b>Retrospective analysis</b> One = 44.5% More than one 55.5%	44.5 percent

Source: Authors' analysis of field data.

The regulations with respect to driver license and age are stated in Part V of the document. A motorcycle rider is expected to have Class A category and the person must not be less than 18 years. Section 22(8) made it an offence for an unlicensed person and a person below 18 years to drive a vehicle or ride a motorcycle on the highway (FRN, 2004: B192).

The study found that no operation was below the stipulated minimum age of 18 years. About 91.8% of the operators were within the age bracket of 18 and 40 years while the rest fell between the age brackets of 41 and 58 years. It therefore depicts a 100 percent or total compliance. Only 72.4 percent had license to ride motorcycle, whether currently valid or expired, while only 27.6 percent did not have at all. In terms of currency or validity of driver license, only 88.7% of those who have license were found to be valid. The compliance rate for valid driver license holding is therefore estimated at 64.2 percent.

Part IV of the 2004 Regulations deals with number plates in respect of commercial motorcycles. The specific requirements are in Part IV: Section 21(1and2a). Generally for a motorcycle, one number plate shall be fixed in front and one at the rear with the plate having white background but blue lettering for private; green lettering for the Federal, State and Local Government; black lettering for the Armed Forces, Paramilitary services; and red lettering for commercial (FRN, 2004: B189). The dimension of number plates for motorcycle is 228.6mm by 101.6mm. It is an offence for any vehicle, private and commercial, not to have vehicle identification number plates- Section 21(16) (FRN, 2004).

In terms of number plate requirement, which is a secondary safety issue, since it has implications for database management and security, all surveyed operators were found to have registered number plates i.e. 100 percent or total compliance.

Part VI: Section 41 of the regulations deals with the issues of use and construction of motorcycle (FRN 2004: B199). Section 41(a) stipulates the capacity of motorcycle for hire or rewards on any road to be between 100cubic capacity (cc) and 200cc. Section 41(1c) stipulates that the motorcycle shall carry only the rider and one passenger; Section 41(1d) states that the motorcycle shall not carry any other load on the tank in front of the rider or in between the rider and passenger; while Section 41(1e) stipulates that both the rider and the passenger shall wear safety crash helmet while on motion.

In terms of motorcycle capacity measured in cubic centimetre (cc), all the motorcycles used by operators were found to be 100cc. High capacity motorcycles above 200cc were not found. This may be attributed to cost of acquisition and its implications on running and maintenance cost. It shows 100 percent or total compliance with the provision of the law.

The study also found that about 84 per cent of the operators did not use crash helmet while only 16% used it while riding their motorcycles. The compliance rate stood at 15.8 percent.

The number of passenger stipulated by regulation for motorcycle in Nigeria is one. In 99.1 percent of the cases sampled, only one passenger was carried, while 0.9% carried two. A further retrospective inquiry into the number of passengers usually carried revealed that 55.5 percent of the operators usually carry more than one passenger. This therefore makes the compliance rate to be 44.5 per cent using retrospective analysis. Evidence of motorcycles taking more than one passenger in contravention of the regulation is very common in the survey area given the fact that the area is an institutional town hosting several educational institutions, research institution, etc.

The results of phi analysis of license holding, Highway Code awareness and helmet usage are shown in Table 4.

**Table 4**  
**Phi Coefficients for License Holding, Highway Code Awareness and Helmet Usage against Selected Variables**

Variable	License holding		Highway Code Awareness		Helmet usage	
	phi	p-value	phi	p-value	phi	p-value
Age	0.001	0.985	0.060	0.282	0.060	0.292
Educational status	-0.072	0.228	0.011	0.854	0.184	0.002*
Marital status	0.077	0.174	0.051	0.368	0.019	0.741
Household size	0.012	0.864	-0.006	0.938	0.038	0.589
Ownership	-0.006	0.921	0.017	0.762	0.122	0.031**
Type of motorcycle purchased	0.094	0.257	0.088	0.288	-0.106	0.205
Mode of operation	0.100	0.080***	0.028	0.622	-0.124	0.033**
Union membership	-0.023	0.677	-0.108	0.054***	-0.142	0.013**

\*Significant at 1%; \*\* significant at 5%; \*\*\*significant at 10%.  
Source: Computed by the authors using SPSS 17.

The results in Table 4 show that only mode of operation was significant for licence holding, though the association is very weak (0.1). The percentage improvement in predicting licence holding using mode of operation is just 1% (that is 0.1<sup>2</sup>). For Highway Code awareness, union membership was the only significant variable. The association too is weak and negative at -0.108. Union membership has a small percentage (1.1%) improvement in predicting Highway Code awareness among commercial motorcyclists. Four factors were however found to be significant for helmet usage. They are educational status of operators, ownership type, mode of operation and union membership. Education and ownership had positive association of 0.184 and 0.122 respectively, while mode of operation and union membership has negative association of -0.124 and -0.142 respectively. Educational status has the highest predictive value of 3.4%; followed by both union membership (2.0%) and mode of operation (1.54%) while ownership type has the least at 1.49%.

What can be inferred from the overall results of the phi-coefficients is that there is no single factor that was found to be significant across the three cases. Mode of operation was found to be significant in two of the three cases namely license holding and helmet usage but with different signs. Union membership was found to have a significant but negative association in two of the three cases namely, Highway Code awareness and helmet usage.

The negative sign of union membership shows the type of influence the commercial motorcyclists union has on compliance with road traffic regulations. The unions are so powerful and have constituted themselves into another 'government'. They have consistently opposed some rules particularly crash helmet usage. They asked their members not to wear it. In Nigeria, States where the law on crash

helmet have been implemented are States with legislations on it, which reinforces the National Regulations and also where the State government is apolitical with respect to Commercial Motorcyclists Unions.

## 5. IMPLICATIONS

The results presented above have implications on road safety in Nigeria at three levels.

One, driver licensing procedure is faulty. The fact that about 42% of the motorcyclists are not aware of the existence of the Highway Code which is expected to guide their conduct on the road is indicative of the fact that they did not pass through the theory and practical test required for issuing driver license. The administration of driver license in Nigeria should be overhauled. No matter how good your licensing system may be, non adherence to guideline before certification will jeopardise the intention. Most Vehicle Inspection Offices (VIO) in Nigeria has been reduced to revenue generation outfit instead of safety promotion and inspection agencies. Testing grounds and facilities for the conduct of theory and practical sessions before issuance of driver licenses are not longer available. These facilities should be built and put to use. The current reliance on licensed private driving schools for the certification has just shifted the corruption from the public domain to the private sector, which are usually not monitored. These private schools are really not equipped for the training of motorcycle riders. The general overhauling of the licensing system should be done collectively by the responsible agencies such as the Federal Road Safety Commission (FRSC), State Vehicle Inspection Offices and the Licensed Private Driving Schools.

Secondly, the results further confirm that traffic law enforcement is still below optimal. About 36% of the motorcyclists did not have a valid driver license; 84% did

not put on safety helmet; and most of the times operators carry more than one passenger at a time. There should be improvement in enforcement. The Federal Road Safety Commission (FRSC), State Vehicle Inspection Office and the Nigeria Police should deplore patrol resources effectively in order to ensure high compliance with traffic regulations. The enforcement agencies should also flush out corrupt officers among them who collect bribes to circumvent enforcement.

Thirdly, there is the need to control the overbearing influence of the Okada Union. Some of the members even believe that they do not require driver license; do not see the need to wear helmet; etc. to operate. The members of this union are mostly members of one political party or another, who are crucial in determining winners of elections. So most State governments who rely on them for support often turn their enforcement eye away from their unsafe attitudes. The State governments should enact laws on some of these safety issues to reinforce the National Regulations; and also remain apolitical in dealing with Okada unions.

## CONCLUSION

The paper has shown that compliance with traffic regulations by commercial motorcyclists is mixed. While there is total compliance with some rules such as minimum age limit, motorcycle capacity and number plate, there are varying degrees of compliance with others, especially with respect to driver license holding, crash helmet usage, Highway Code awareness and number of passengers carried per trip. The paper suggests the overhauling of the driver licensing scheme and improved enforcement by the agencies concerned. The role of public enlightenment should be explored using the commercial motorcyclist union as a rallying point given the negative influence of unions on compliance issues.

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