

Accident-Prone Practices of Commercial Motorbike Riders in Cameroon's Major Urban Areas

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Abstract

Commercial motorbike transport in Cameroon's urban areas has become an important activity employing young males but many riders have adopted behaviours that make the activity accident-prone. The objective of this study is to demonstrate the vulnerability of this gainful activity in urban areas of Cameroon to accidents as well as the violation of regulations that characterize the heightened rate of accidents or the risk of accidents resulting thereof. This study makes use of questionnaires administered to at least 50 bike riders in each subdivision of the 10 regional headquarters of Cameroon as well as selected stakeholders to draw on the data used for an analysis. In all, 1898 commercial bike riders were interviewed. By use of tables, diagrams and Chi-Square Test, this study demonstrates that the daily nature of the activity and the high degree of risks and violations of vital rules such as the non-respect of traffic signs, overloading, absence of insurance, absence of riding permits, youthful age of some riders, consumption of alcohol and drugs in the course of the activity, etc. are factors that make the activity accident-prone. Based on these findings, the paper concludes on the premise that the high accident risk level perpetrated by commercial bike riders in Cameroon's urban areas is especially the result of the low compliance of riders to existing regulations.

Keywords

Accidents, Non-Compliance, Risk, Commercial Motorbike Transport

1. Introduction

Beginning from the mid-1980s and stretching up to the mid-1990s, Cameroon,

like many other countries in sub-Saharan Africa went through a severe economic crisis. The consequence of this crisis was a significant reduction in recruitment into the public service and the closure of many state-owned and private enterprises (Natang, 1991). In order to help the country, come out of this crisis, the Bretton Woods Institutions prescribed the implementation of a Structural Adjustment Programme (SAP). The implementation of this SAP led to the liberalization of the economy leading to massive retrenchments from the public service and the collapse of many para-public and private enterprises. The outcome was massive unemployment, under-employment and poverty. Despite the implementation of measures to reduce the negative social effects of the SAP through the Programme's Social Dimension component, life became very difficult, resulting in social upheavals and lawlessness. The civil disobedience that followed led to the collapse of the public transport company, SOTUC which was created in 1973, and the prevention of the movement of township taxis by angry mobs and the gradual rise in commercial motorbike transport (Amougou, 2010). Though clandestine from the start, this activity gained importance under the state of lawlessness and poor road infrastructure, especially in peripheral urban neighbourhoods and many rural areas.

From the beginning, the first commercial motorbikes were not easily distinguished from those used for personal transport. Their use for commercial reasons was not foreseen and there was no text regulating the activity. This activity started in the northern towns of Maroua, Garoua, and Ngaoundere where it was easy to acquire cheap motorbikes from neighbouring Nigeria, and gradually spread to other parts of the country, especially Douala, following the civil disobedience operations of the 1990s (Kaffo et al., 2007).

Since its inception, this activity has continued to gain ground and has become a key means for the transportation of goods and persons in both urban and rural areas. Commercial motorbike transport (commonly known in Cameroon as "Okada or Benskin transport"), has become a source of enormous risks both to transporters, passengers and other road users. These risks are linked to the fact that many of the close to 100,000 commercial motorbike riders enumerated by Inter-Council Fund for Mutual Assistance, FEICOM, in 2016 work under clandestine conditions and do not respect rules laid down by the state. The various risks posed by this activity examined in this study include the non-respect of traffic signs, non-use of helmets, riding while drunk, riding under the influence of drugs, use of the telephone while riding, listening to music while riding, absence of a riding permit, non-possession of insurance policies, long working hours, non-respect of the limit of the number of persons to be transported at any moment, etc.

2. Brief Review of Literature

The introduction of commercial motorbike transportation accompanied by the many benefits and risks has attracted the attention of many writers. A brief re-

view of this increasingly abundant literature is presented here. The near absence of the application of existing texts to regulate the activity is often cited as the key cause of many of the problems associated with the sector such as assaults, theft and numerous accidents. According to Ngaroua et al. (2016), Commercial motorbikes are at the origin of many accidents due to the non-respect of the highway code, excess speed and overloading. A study carried out in the Ngaoundere Regional Hospital of the Adamawa region of Cameroon revealed that 25.4% of the patients were victims of accidents, mostly made up of male commercial motorbike riders. Legs and heads are the most affected parts of the body. Some studies have emphasized the role of this activity in polluting the air and in creating urban disorder. Others have placed importance on the activity's contribution to reducing youth unemployment, providing income for other investments and facilitating access to difficult-to-access urban neighbourhoods and villages.

3. Data and Methods

3.1. Source of Data

Data for this study were obtained from a survey conducted in all of Cameroon's ten (regional) capitals in March 2018. The target populations were commercial motorbike riders in the ten regional headquarters (Yaoundé, Douala, Bamenda, Buea, Bertoua, Ngaoundere, Bafoussam, Ebolowa, Garoua and Maroua), council authorities, officials of the Ministry of Transport and Motorbike Trade Union Leaders.

Data were collected using two separate questionnaires. The first was administered to mayors or their representatives, members of the commercial motorbike riders' trade unions and officials of the Ministry of Transport. The aim of this questionnaire was to come out with the number of motorbike riders, their work zones, their membership of trade unions and measures taken to reduce urban disorder and non-compliance with road safety measures as well as accidents caused by commercial motorbike transportation.

Another questionnaire was administered to a number of commercial motorbike riders chosen from each subdivision in each regional headquarters. About 50 riders were interviewed in each sub-division. Questions asked focused on the following six key sections: socio-economic characteristics, employment situation within the activity, their employment history, insecurity associated with the activity, compliance (or absence of compliance) with road safety measures and involvement in accidents, and impacts of the activity on their lives and future plans concerning the activity.

3.2. Data Entry and Analysis

The data collected were captured using SPSS v29. After entry, the data was transformed into tables or represented on diagrams such as bars and pie charts. Their frequencies were transformed into percentages. In order to verify the correlation between practices such as the consumption of alcohol and drugs,

over-loading, riding under the age of 18, non-respect of traffic signs and involvement in road accidents, the Chi-Square Test of Independence was performed. This test enabled the classification of the practices into three categories: those highly associated, with a significant level of less than 5%, those moderately significant with significance levels of between 5% and 10% and those with non-significance levels.

3.3. Problem Statement

The consequences of non-compliance to road safety measures by commercial motorbike transporters are severe, leading to a high number of injuries and fatalities, as well as property damage. These accidents also result in significant financial burdens on the healthcare systems and companies. Furthermore, they have profound negative impacts on families and communities, causing emotional distress and loss. It is essential to raise awareness about the importance of adhering to road safety measures in order to reduce road accidents and deaths. The problem of non-compliance with road safety measures and the heightened number of road accidents by commercial motorbike riders in Cameroon has become critical and requires immediate research in order to provide evidence-based guidance.

3.4. Objectives of the Study

The general objective of this study is to demonstrate the vulnerability of commercial motorbike transport in urban areas of Cameroon through the violation of road safety measures to accidents. Specifically, this study seeks to:

- Present the levels and variations of non-compliance to road safety measures by commercial motorbike transporters in the different urban areas of Cameroon;
- Investigate the relationship between non-compliance with road safety measures and the occurrence of road accidents;
- Provide evidence-based recommendations to policymakers and stakeholders to address non-compliance with road safety measures and improve road safety outcomes.

3.5. Research Question

This study is based on the following question:

- What are the non-compliance practices with road safety regulations of commercial motorbike riders in Cameroon and how are they linked to the occurrence of road accidents?

3.6. Limitations of the Study

This study focuses on the contributions of certain behaviours of commercial riders and their liability for accidents. Other factors not linked to their behaviours such as road-worthiness systems (lights, brakes), type of motorcycle, engine power and maximum carrying capacity are basic aspects of road safety that data collection for this study did not incorporate. This study was therefore una-

ble to determine the contribution of the vehicle and other road factors to the high level of road accidents associated with commercial motorbike transport in Cameroon.

Data collected via self-reporting are likely to be subject to social desirability. Commercial motorbike transport is a gainful economic activity and as a result, there is a limit to which reported responses on the risks associated with it can be considered accurate.

4. Socio-Demographic Characteristics of Respondents

At the end of the data collection exercise, 1898 commercial motorbike riders were interviewed and their socio-economic characteristics are shown in **Table 1**.

Table 1. % Distribution of commercial bike riders by socio-demographic characteristics.

Variables and Modalities	No. of Respondents	%
Age		
15 - 24	504	26.9
25 - 34	909	48.5
35 - 44	328	17.5
45+	135	7.2
ND	22	1.2
Marital Status		
Single	685	36.1
Cohabiting	485	25.5
Married	698	36.8
Divorced/separated/widowed	22	1.2
ND	8	0.4
Level of Education		
None	353	18.6
Primary	779	41.0
Secondary, first cycle	419	22.1
Secondary, Second cycle	253	13.3
Tertiary	63	3.3
ND	31	1.6
Region of Origin		
Adamawa	132	7.0
Centre	205	10.8
East	73	3.8

Continued

Far North	291	15.3
Littoral	58	3.1
North	164	8.6
North West	251	13.2
West	508	26.8
South	119	6.3
South West	41	2.2
ND	56	3.0
Religion		
Christian	1192	62.8
Moslems	566	29.8
Others	82	4.3
NB	58	3.1
Status within the household		
Household Head	1516	79.9
Other status	369	19.4
ND	13	0.7

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

The Commercial motorbike transport sector in Cameroon is essentially a male activity. Most of these transporters are aged 25 - 34. Close to 80 percent of them are household heads. The West region holds the first position in terms of origin of commercial moto-taxi transporters, representing more than a quarter of the total number of interviewees. These transporters have varied educational backgrounds but more than 7 out of every 10 of them have either primary or secondary education (**Table 1**).

5. Practices That Make the Commercial Motorbike Sector Accident-Prone

Despite many efforts made by the State to control this activity, the commercial motorbike transport sector in Cameroon has remained largely clandestine. Many riders do not have the necessary papers required for the practice of this activity. A great majority of them are either ignorant about the Highway Code or simply refuse to respect it. Many commercial bike riders carry out their activity while drunk or after consuming drugs. These practices have caused commercial motor-

bike transport, especially in urban areas to become a source of multiple accidents.

5.1. Low Degree of Respect of Legal Provisions Regulating the Activity

In order to reduce the many accidents that commercial motorbike riders cause or fall victim to on a daily basis, the government came out with the following laws: all commercial motorbike riders must be duly registered, have an insurance policy, possess a riding permit, be above 18 years, have a helmet for himself/herself and another for the passenger, and have an identification number issued by the council authority of the area where the activity is carried out. These provisions are largely not respected (**Table 2**).

The non-respect for laid-down legal provisions for commercial motorbike riders such as the obligations to have a riding permit and an insurance policy or helmets for riders and clients is common. For example, about 10% of the riders were younger than the minimum age of 18 and a great do not have an insurance policy, a riding permit and an identification number (**Table 2**).

Riders who have not gone through official training institutions are more likely to cause acts that lead to accidents than those who have gone through this training. Riders, who are very young, below 18, are equally a source of risk to themselves and their clients because they are not often trained, very likely to be involved in excessive speeding and the non-respect of the Highway Code.

The use of helmets by both riders and their clients helps to reduce the damaging effects of accidents on the head. Unfortunately, about three-quarters of these commercial bike riders do not use helmets as well as up to 95.8% of their clients. They are thus at a high risk of serious head and brain damage in case of accidents.

A valid insurance policy is of great importance in the case of accidents that often result in injuries or deaths. With more than two-thirds of riders practicing the activity without an insurance cover, many riders including their clients and their families will have no compensations in the case of accidents. This is indeed

Table 2. Distribution of commercial motorbike riders (%) by non-respect of legal provisions.

Requirement	Degree of Non-respect (%)
Riding Permit	72.6
Insurance	63.1
Being at least 18	10.4
Registration Number	34.7
Identification Number	43.8
Non-use of helmets	72.1
Non-use of helmet by clients	95.8

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

a great risk. The non-possession of an insurance policy often goes along with the absence of a registration number (Table 2).

5.2. Overloading

Overloading is another practice that exposes commercial motorbike riders and their clients to the risks of accidents.

Commercial motorbike riders are authorized by law to transport only one person at a time. This rule is respected only by a tiny percentage. A vast majority, 7 out of every 10 riders transport on average two persons at a time (Table 3). In Ngaoundere and Garoua, some riders reported that they sometimes transport as many as 5 persons especially children to and from school. Overloading reduces the ability of the rider to properly control his or her motorbike thereby, increasing the possibility of an accident. In case of an accident, the insurance policy covers only one passenger and the extra passenger (s) is/are not covered.

5.3. Long and Exhausting Working Hours

Some commercial motorbike riders work for many hours a day. This long working time and the near absence of sufficient rest lead to fatigue and increase the possibility of accidents.

On average, riders work for ten hours daily and six days a week. While about 8 out of every 10 riders work only in the day, close to 9% work both day and night. Many do not have an annual leave. They work in the rain and under the sun. During the end-of-year festive period, some of them reported that they worked for 14 hours daily and all days of the week (Table 4).

5.4. Non-Respect of the Highway Code

Many commercial motorbike riders in Cameroon are either ignorant of highway rules or have decided not to respect them. A key indicator of the non-compliance to the Highway Code by commercial motorbike riders is the degree of non-respect of traffic signals (Table 5).

Only a tiny proportion of commercial motorbike riders (less than 15%) respect traffic signs (Table 5). The non-respect of traffic lights often leads to accidents most of which can be very fatal. The significant number of commercial

Table 3. Distribution (%) of commercial riders by the average number of passengers transported at once

Average Number Person(s) Transported at a time	%
1	3.8
2	71.8
3	24.7

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

Table 4. % Distribution of commercial bike riders by annual leave, number of weekly work days and average number of daily working hours.

	%
Annual Leave	
Yes	36.8
No	63.2
Average Number of hours of work per day	
5 - 9	34.2
10 - 14	65.8
Time of work during the day	
Mostly in the day and evenings	82.2
Both Day and night	8.9
Varying time of work	8.9
Number of days of work per week	
4	4.5
5	24.8
6	62.2
7	8.5

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

Table 5. % Distribution of commercial motorbike riders by non-respect of traffic lights.

Degree of Non-Respect of Traffic Signal	Frequency	%
Never	1288	32.1
Sometimes	336	82.3
Always	274	14.4
Total	1898	-----

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

Table 6. Distribution of commercial motorbike riders (%) by alcohol consumption during work hours.

Urban Area	% of Riders who Consume Alcohol During Work Hours
Ngaoundere	6.9
Yaoundé	10.4
Bertoua	7.3
Maroua	3.4

Continued

Douala	9.2
Garoua	15.0
Bamenda	2.7
Bafoussam	26.4
Ebolowa	6.8
Buea	19.3
Total	10.6

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

motorbike riders who do not respect traffic light signs translate the enormous risks associated with this mode of transport.

5.5. Consumption of Alcohol during Working Hours

Alcohol consumption during working hours poses a serious risk as alcohol reduces self-control resulting in reduced ability to avoid accidents. This study shows that a significant proportion of commercial motorbike riders reported that they sometimes consume alcohol during work periods.

Alcohol consumption by commercial motorbike riders during work hours is common in all regional capitals of Cameroon in varying degrees. While it is lower than 3% in Bamenda, it is more than 26% in Bafoussam. On average, close to 11% of commercial motorbike riders consume alcohol during work time (Table 6). The risk of accidents occurring due to the influence of alcohol on commercial motorbike riders is present in all major urban areas of Cameroon in varying degrees.

5.6. Riding While Drunk

Ridding while drunk is extremely very dangerous. When drunk, riders become less likely to respect traffic signs, have reduced control over themselves and their bikes and become more liable to be involved in overspeeding and non-respect of the Highway Code. Many accidents in Cameroon stem from riding in a drunken state. The instruction, “When you drink don’t drive and when you drive, don’t drink” underlines the evil influence of alcohol consumption on the ability to drive safely.

The 2% of urban commercial riders who ride in a drunken state have significant variations by urban area. While it is almost non-existent among riders in Bamenda, Garoua, Maroua, and Bafoussam, it is a major concern for those in Buea and Bertoua (Table 7).

5.7. Consumption of Tramadol and Other Drugs

Tramadol is one of the drugs consumed by young people in Cameroon including

Table 7. % Distribution of commercial motorbike riders by riding while drunk.

Urban Area	% of Riders who Ride while Drunk
Ngaoundere	2.6
Yaoundé	2.1
Bertoua	3.3
Maroua	0.7
Douala	2.4
Garoua	0.0
Bamenda	0.0
Bafoussam	0.7
Ebolowa	2.0
Buea	6.2
Total	2.1

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2017.

commercial motorbike riders. The Consumption of tramadol can cause slow and shallow breathing in its users, which in turn can lead to fainting, dizziness and confusion. These risks are heightened when the consumption of tramadol is accompanied by the consumption of alcohol. Tramadol consumption by commercial motorbike riders is, therefore, a key cause of frequent accidents.

On the whole, close to 8% of commercial bike riders consume tramadol and other drugs. While this situation is mild in many towns, it is a major concern in Maroua where slightly more than 50% of commercial motorbike riders consume this and other drugs (**Table 8**).

5.8. Manipulation of Cell Phones While Riding

In addition to voice calling, activities such as texting while riding, web browsing, playing video games, or phone use in general can also increase the risk of an accident. In Cameroon accidents due to distracted driving are increasing. One of the leading causes of accidents in Cameroon and in many other parts of the world is distracted driving, especially the use of cell phones while riding.

The fact that more than 22% of commercial motorbike riders use cell phones while riding is still worrisome (**Table 9**). The ideal situation is that, in order to reduce the risks associated with distracted riding, no one should use a cell phone while riding. The use of cell phones while riding is unevenly spread among the major urban areas of Cameroon.

5.9. Listening to Music While Ridding

While listening to music when driving may actually be positive as it keeps the

Table 8. Distribution of commercial motorbike riders (%) by the consumption of tramadol and other drugs while riding.

Urban Area	% of Consumers
Ngaoundere	7.1
Yaoundé	2.2
Bertoua	2.0
Maroua	51.7
Douala	3.7
Garoua	8.6
Bamenda	2.0
Bafoussam	2.7
Ebolowa	0.7
Buea	5.5
Total	7.5

Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

Table 9. Distribution of commercial bike riders by frequency of use of cell phones while riding.

Frequency of Use of Cell Phones while Riding	%
Never	77.6
Sometimes	19.5
Often	2.9
Total	100

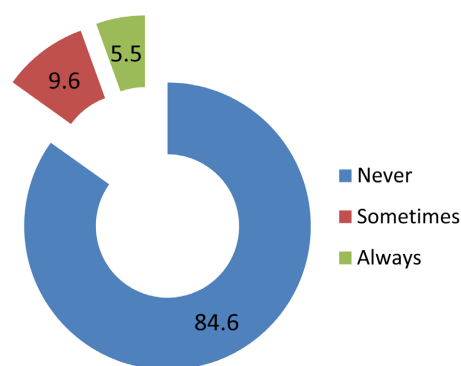
Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

rider alert, studies have shown that listening to music especially loud music while riding can reduce reaction time by up to 20%. In this way, it can be an important cause of accidents.

About 15% of urban commercial motorbike riders still listen to music in the course of their activity. This indicates that the risk of distraction by listening to music while riding is still quite high (**Figure 1**). The ideal situation is that no commercial motorbike rider listens to music while working.

This general picture hides enormous differences in the frequencies of listening to music while riding among commercial motorbike riders in the different urban areas (**Figure 2**).

The proportion of commercial motorbike riders that listen to music while riding varies significantly among Cameroon's major urban areas. It is as high as about 51% in Buea and as low as less than 1% in Maroua (**Figure 2**).



Source: Survey on commercial motorbike riders in regional capitals of Cameroon, BUCREP, 2018.

Figure 1. % Distribution of motorbike riders by listening to music while riding.

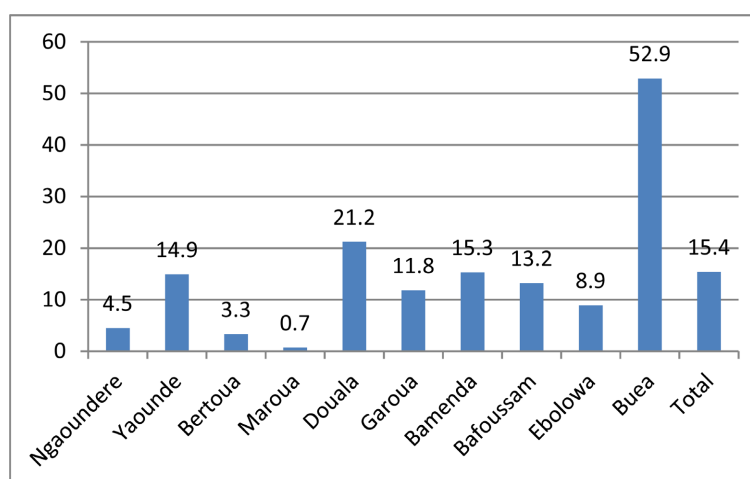


Figure 2. Distribution of commercial bike riders (%) by listening to music while riding.

6. Test of Association between Commercial Motor Riders' Non-Compliance with Road Safety Measures and Road Accidents

In order to establish the relationship between some practices of commercial motorbike riders and the occurrence of accidents, a Chi-Square Test of Independence between these was performed. A summary of the results (P-values) of the association between these two aspects is presented in **Table 10**.

From P-values derived from the Chi-Square test for independence, the different practices of commercial motorbike riders in Cameroon that make them vulnerable to accidents can be classified into three categories.

-The first category comprises practices that are highly significant to the occurrence of accidents. In this category, we have the manipulation of cell phones while riding, non-respect of traffic signals, consumption of alcohol and drugs during work hours. In this category, the P-value ranges from 0 to 5% or 0.00 to 0.05 with 0.00 being the highest.

-The second category includes factors with low significance (between 5 and

Table 10. Results of chi square test of independence of riders' non-compliance with road safety measures and road accidents.

Variable	N = 1848	Occurrence of Accidents (%)			P-Value
		No accident reported N = 1047	Light injuries N = 552	Serious consequences N = 448	
Age					0.087
15 - 24	26.8	25.8	26.4	32.1	
25 - 34	48.4	47.2	51.9	45.5	
35 - 44	17.6	19.1	14.8	17.1	
45+	7.2	7.9	6.8		
Consumption of drugs					0.007
Yes	7.6	8.1	5.0	11.0	
No	92.4	91.2	95.0	89.0	
Number of Persons transported at once					0.000
1	3.8	4.1	3.6	3.8	
2	71.8	75.9	67.2	62.7	
3	24.7	20.0	29.2	34.0	
Consumption of Alcohol during work					0.000
Yes	10.5	7.1	14.4	16.0	
No	89.5	92.9	85.6	84.0	
Possession of Riding Permit					0.215
Yes	27.5	26.0	30.1	27.5	
No	72.5	74.0	69.9	72.5	
Taking Annual Leave					0.62
Yes	36.8	34.5	40.2	38.7	
No	63.2	65.5	59.8	61.3	
Non-respect of Road Signals					0.000
Never	68.1	75.1	59.2	59.2	
Sometimes	17.7	14.6	21.5	21.8	
Often	6.7	3.8	9.9	11.9	
All the times	7.5	6.6	9.3	7.1	
Listening to Music while Riding					0.070
Never	85.2	86.4	59.2	59.2	
Sometimes	9.3	8.7	21.5	21.8	
often	3.2	2.7	9.9	11.9	

Continued

All the times	2.3	2.2	9.3	7.1
Manipulation of telephone while riding				0.000
Never	77.9	81.3	76.1	67.6
sometimes	19.3	15.8	21.8	28.3
Often	2.8	2.9	2.2	4.1

10%). Age (with P-value of 0.087 and listening to music while riding (with P-value of 0.070 are the only factors in this class.

-The last group of factors with P-values above 10%. These factors show very little or no association with the occurrence of accidents. These include failure to take an annual leave, non-possession of ridding permits and use of helmets by clients and riders (**Table 10**).

7. Discussion of Findings

The objective of this study is to demonstrate the vulnerability of this gainful activity (commercial motorbike transport) in urban areas of Cameroon to accidents. The violation of regulations by commercial motorbike riders is responsible for the heightened rate of accidents or the risk of accidents resulting thereof. The degree of non-compliance of commercial motorbike riders in urban Cameroon is very high. More than 50 percent of riders in this male-dominated activity reported the violation of at least one of the regulations and this exposes both the rider and their clients to accidents. This represents a high degree of non-compliance which is in fact higher than what has been noted in Nigeria ([Johnson, 2012](#); [Ogunkeyede & Osungdade, 2019](#)). This study reveals that 54.7 percent of riders have been involved in accidents with outcomes ranging from minor injuries to serious injuries, disabilities and even death. This is a signal that non-compliance with rules governing commercial motorbike transport is the key cause of accidents.

The Chi-Square Test of Independence used for this study shows a very strong correlation between practices such as over-loading, manipulating a telephone while riding, consumption of drugs and alcohol, non-respect of traffic signals and risks of traffic accidents. Studies have shown that compliance with traffic rules is low in the absence of police officers during interventions ([Holland & Conner, 1996](#); [RoSPA, 2004](#)). Reinforcement helps to change attitudes towards poor road use and riders and drivers are less likely to violate traffic regulations and laws when they know that they can be caught and punished. This will reduce the rate of practices that lead to traffic accidents. The low rate of respect for traffic rules and behavioural codes by commercial motorbike riders in Cameroon can be largely attributed to low enforcement of road safety measures due to the low number of police officers deployed on roads and corruption. There is a

need to significantly increase the number of law enforcement officers, especially during rush hours, periods of end-of-year festivities and periods of school reopening.

Two areas of particular concern are distracted riding, and riding while manipulating the telephone. This practice which is very common with young people is a common cause of traffic accidents. Correlational analysis for this study shows a high link at less than 1 percent significant level and distracted riding. Special punishment and fines should be levied against people who practice distracted riding. Campaigns against distracted riding should especially target youths who despite regulations forbidding people below 18 who practice the activity despite prohibition by the law. Youths below 18 have been found to have low compliance levels and are usually more vulnerable than others to be involved in road accidents.

The frequency of practices that make commercial motorbike transporters vulnerable to road accidents varies appreciably in urban areas of Cameroon. This variation is linked to economic, social and governance differences. In urban areas of the Northern region of Cameroon (Maroua, Garoua and Ngaoundere) with higher school drop-out rates and higher poverty rates (NIS, 2014), practices such as riding under age (below 18), over-speeding, consumption of drugs and alcohol are most common.

This study has equally revealed a high level of correlation between consumption of alcohol and drugs by riders which is highly associated with traffic accidents. The consumption of drugs and alcohol reduces self-control and increases rider's vulnerability to accidents. Mass campaigns such as "don't drink and drive" and "drug consumption is bad for everyone" are important in enhancing riders and community awareness towards road safety, and can greatly help reduce the occurrence of road accidents. Frequent tests for alcohol and/or drug consumption while riding need to be intensified.

Poor road safety practices increase the vulnerability of commercial motorbike riders to injuries during accidents. A study carried out in Tanzania showed that motorcycle crashes accounted for 54.3 percent of victims with head injuries, 52.9 percent with fractures and 51.2 percent for multiple injuries. A majority of these victims (80.2 percent) had no helmets (Boniface et al., 2016). This brings into focus the need to enforce the use of helmets by both riders and their clients in Cameroon and elsewhere.

Coordinated approaches are needed to improve the way commercial motorbike transporters ride and behave in order to reduce vulnerability to accidents. This must include aspects such as continuing the provision of road safety education and enforcement of road safety measures to change attitudes towards poor road use and prevent unlawful, dangerous, and irresponsible behaviours among commercial motorcyclists that lead to accidents. This education is necessary because riders, especially those who may not have received proper training or education on road safety and traffic laws may not be aware of them.

8. Conclusion

This study has shown that commercial motorbike activity which sprang up in an unexpected manner in Cameroon in the 1990s has become very difficult to control. Many efforts by the government to regulate the activity have not actually produced the required results. Evidence of these failures include the fact that more than 70% of riders do not own a riding permit, more than 60% do not own an insurance policy and many young people below the required age of 18 are involved in the activity. A significant number of these commercial bike riders do not obey traffic signs. Many consume alcohol during working hours and a good number of them ride while drunk or after consuming tramadol or other drugs. The consumption of tramadol and other drugs by commercial motorbike riders during work periods is quite serious in the town of Maroua where more than 50% of riders are involved. Commercial motorbike riders in major urban areas in Cameroon are involved in distracted riding as some of them manipulate cell phones or listen to music while riding. These practices make commercial motorbike transport risk-prone. Because of this high level of non-compliance to road safety measures, 7% of the 1898 respondents have been involved in accidents with very serious consequences for the victims. Many reasons account for the heightened level of non-compliance with road safety measures by commercial motorbike transporters in urban Cameroon, such as insufficient training, low policing of roads, corruption, near absence of alcohol and drug tests administered to riders, complacency by some law enforcement officers and ignorance of basic regulations that govern the activity; etc. In order to reduce the frequency of accidents caused by commercial motorbike riders, continuous efforts should be made by the government, municipal authorities and bike riders' syndicates to make sure that rules laid down to regulate the activity are respected. Continuous emphasis needs to be placed on sensitization against behaviours that put their lives and those of their clients at risk.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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