

# **PERCEPTION OF MOTORCYCLE INFRASTRUCTURE, PROVISION AND USE IN ABUJA METROPOLIS**

**By**

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## **ABSTRACT**

Against the background of the banning of motorcycle use in Abuja metropolis, in Nigeria by the authorities, this study examined the peoples' perception on the acceptability of commercial motorcycle as a means of intra-city mobility in Abuja metropolis.

Questionnaire administration techniques were employed to extract information on provision and use of motorcycle for commercial purposes in Abuja metropolis.

Findings from the study revealed that the level of infrastructural provision for motorcycle in Abuja metropolis is zero. Even in the surrounding satellite settlements where the motorcycle operators were allowed to operate, the infrastructural facilities were not available.

Also the levels of accident do not relate to the total number of the motorcycles in use in Abuja city. In addition, majority of users prefer the continuous existence of commercial motorcycle in Abuja city.

Finally, recommendations were made on how best to handle issues of users' acceptability, infrastructural provision and motorcycle operation in Abuja city, the administrative capital of Nigeria, in terms of safety.

## **1 Introduction and Statement of Problem**

Two-wheel motorcycles as means of urban passenger transport in Nigeria has a wide range of appellations. These appellations are usually localized in various Nigerian States and Cities. These are: kabu-kabu in Sokoto, achaba in Bauchi, Jos, Yola last flight in Benin City, express or 'going' in Kafanchan, akauke or alalok in Cross Rivers and Akwa Ibom States.

Two-wheel motorcycles popularly called okada or express have become an important means of passenger transportation in most urban and semi-urban centres of Nigeria (Ogunsanya and Galtima, 1993.1). An estimated 70 percent of Nigerian cities with over 250,000 inhabitants rely on motorcycles for intra-city public transport services (Cervero 2000. 2)

Motorcycle (two wheeled machine) was designed to carry two persons, operator inclusive. It started as common mode of intra-city transport in the riverine areas of Delta, Edo, Cross-river, Rivers, and Akwa-Ibom States partly due to the water logged nature of these areas. However, this mode of transportation has spread to the cities in other parts of the country where it is now used for intra-city movement of people on commercial basis. The use of this mode as an intra-urban means of passenger movement became prevalent over the last ten years consequent upon the unfavourable economic condition. The assumption therefore is that this mode of transport, evolved as a public commercial transport within cities, in response to perceived demand.

Following the ban order on motorcycle use issued by Abuja authorities, the perception of the citizen in Abuja on the use of motorcycle within there cities becomes imperative. Thus there exists the need to examine the acceptability of motorcycle use within Abuja metropolis in order to establish effect of its usage as a vital link in intra-city mobility in Abuja and Nigeria as a whole.

It is against this background that this paper seeks to understand the usage of motorcycle as a commercial transport, including why and how do they operate. In addition do the community wants them or not

## **2 Objectives**

1. Examine the perception of motor cycle use in Abuja
2. Assess the factors responsible for the patronage of motor cycle services in Abuja as a public transport.
3. Assess the provision of Infrastructure provided for motorcycle use in Abuja
4. Suggest measures for improvement, for motor cycle use in Abuja city.

## **3 Study Area**

Abuja is the administrative capital of Nigeria. It is made up of six area councils. They are: Abuja Municipal Area Council, Kuje, Abaji, Gwagwalada, Bwari and Kwali.

With the movement of the seat of government from Lagos to Abuja, there were also massive movement of people along to increase the population already existing in Abuja. The economic activities in the city increased, as the influx of commuters from the satellite towns of Abuja and the neighbouring states due to shortage of housing facilities. This long distance movement also, brought about traffic congestion to Abuja against the background of segmented movement earlier planned for the city.

The transport system in Abuja became chaotic and grossly inadequate after the movement of the seat of government. As a result, private individuals engaged in uncoordinated public transport services. The authority did not make adequate arrangement for bus stops and motor parks which resulted to motorists using every available space as a bus stop or worse still, parking on the road to load and unload passengers, thereby causing traffic jam and congestion.

## **4 Study Methodology**

In order to achieve the objectives of the study the underlined four approaches would be used:

- (i) Data Retrieval
- (ii) Personal Interview
- (iii) Questionnaire Administration
- (iv) Observatory and Counting Survey

### **4.1 Data Retrieval**

Extensive study of literature on the subject matter, were undertaken.

## **4.2 Personal Interview**

Extensive discussions were held with relevant officials in:

- (i) Abuja FCT Minister's Office.
- (ii) Abuja Municipal Officials.
- (iii) Officials of the Local Government within Abuja and environs.
- (iv) Abuja Mass Transport Organization.
- (v) Federal Ministry of Works resident officials in Abuja.
- (vi) Private Organizations and Entrepreneurs whose enterprises generates large traffic within Lagos metropolis.

## **4.3 Questionnaire Administration**

Questionnaire surveys were used to obtain data on motorcycle use Abuja metropolis. The issues of interest among users and users' perception of these road motorcycle facilities were extensively studied. Questionnaires were administered on four hundred and eighty motorcycle operators as well as users, throughout the selected transit routes. This represents fifty percents of hourly traffic of commercial motorcycle operation in Abuja Metropolis.

## **4.4 Observatory Survey**

This was the most critical of all the data collection procedure. The road and motorcycle traffic complementary facilities survey involved both observatory and empirical counting of the motorcycle traffic facilities.

Information sought from various officials include issues relating to past attempts at solving problems of motorcycle use, current and future plans and various administrative problems that are being encountered in the process of solving the problems in Abuja city in particular and Nigerian cities in general.

## **6 Results and Discussions**

To operate motorcycle for commercial purpose in the city of Abuja requires possession of certain licenses. It is free entry and free exit. An operator can begin operation of

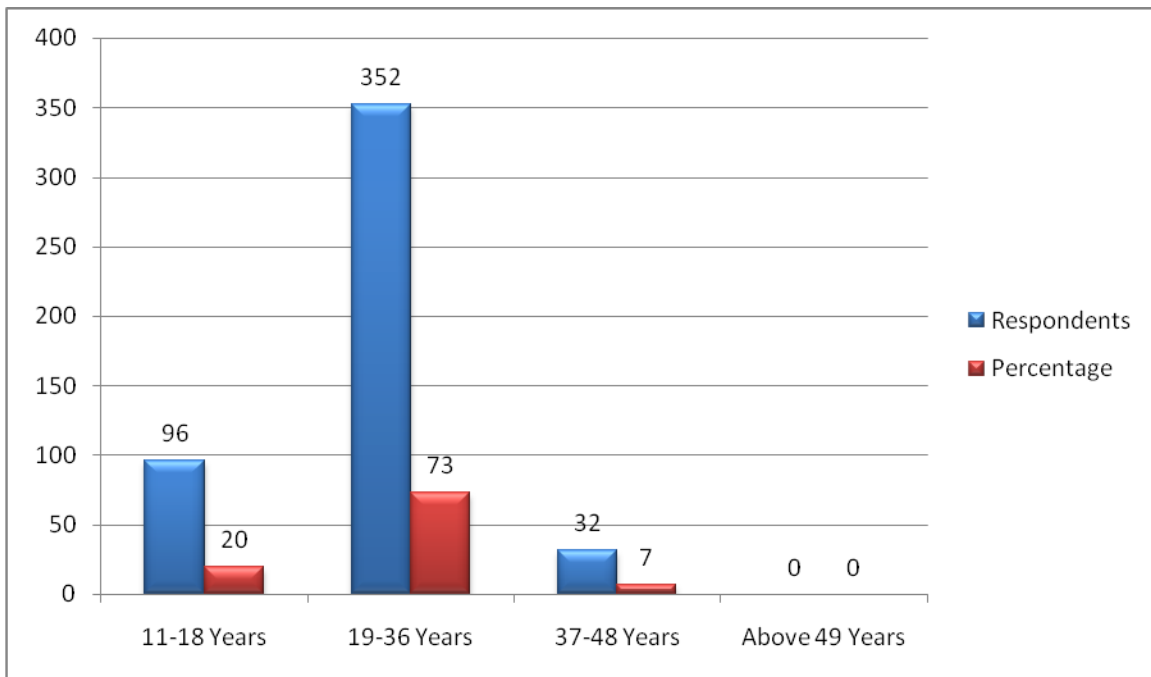
commercial motor cycle any time, any day, he so desire as long as he can rides and can buy a motorcycle. The main operational characteristics are as follows:-

### 6.1 Age of Motorcycle Operator

Table 1 Age of Motorcycle Operator

AGE OF OPERATOR	RESPONDENT	%
11 – 18 years	96	20
19 – 36 years	352	73
37 – 48 years	32	7
Above 49 years	-	-
Total	480	100

Fig 1. Age Range of Motorcycle Operators.



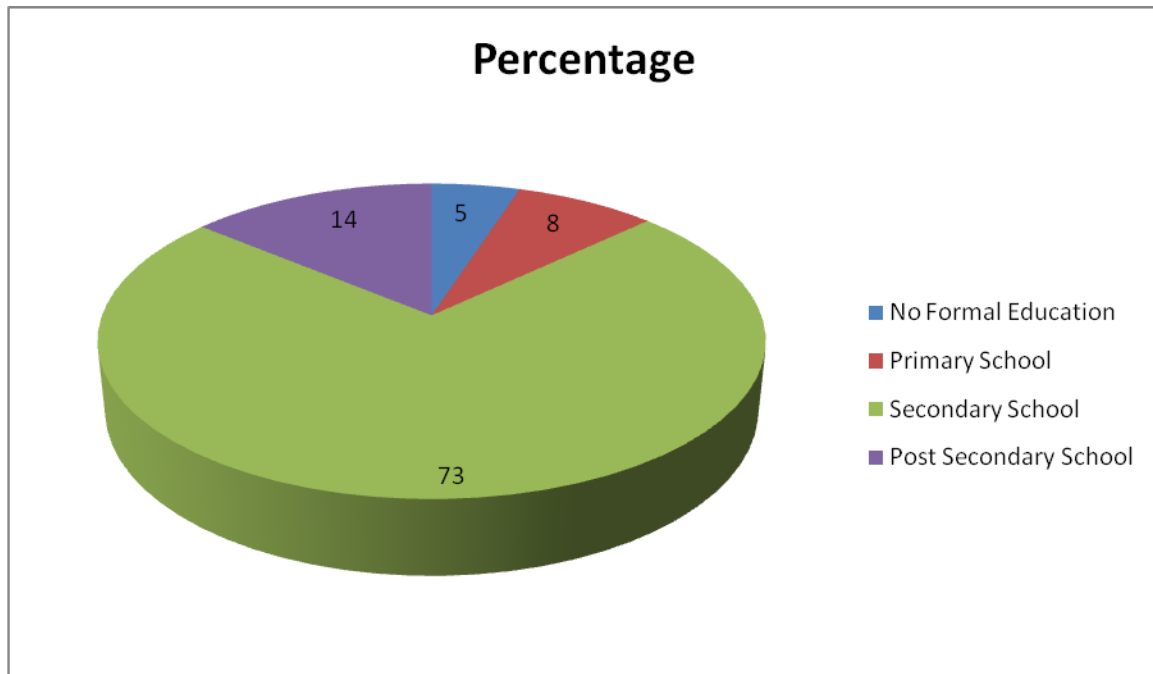
According to table1 revealed that majority of motorcycle operators' age ranged between 19 – 36 years [73%]. The legal age approved for a motorcycle operator is 18 years and above. Therefore deductions from table 1 revealed that 20% of motorcycle operators in Abuja metropolis are below the legal age limit. Therefore they are operating illegally.

## 6.2 Educational Level

**Table 2: Educational Level of Motorcycle Operators**

Educational Level Of Operator	Respondent	%
No formal Education	24	5
Primary School	40	8
Secondary School	352	73
Post Secondary School	64	14
Total	480	100

Fig 2 Educational Level of Motorcycle Operators



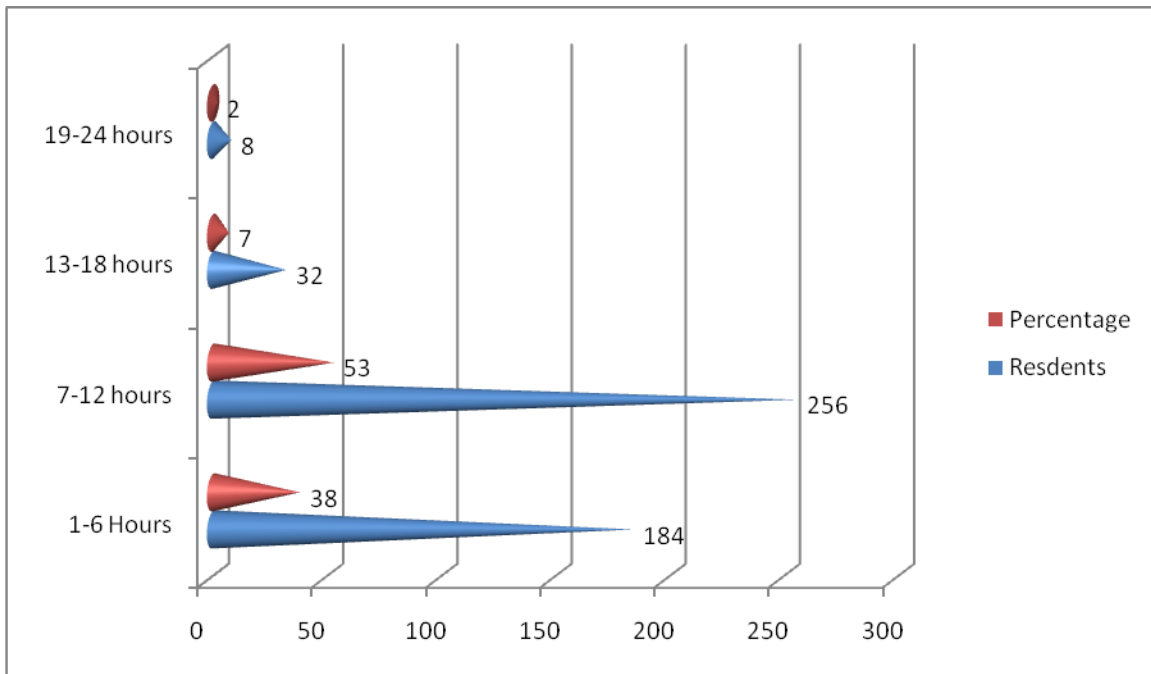
73% of motorcycle operator attended school up to secondary level while those with no formal education accounted for 5%. Post Secondary School Education accounted for 14% of respondents. This may be attributed to the high unemployment rate in the Nigeria in general and Abuja in particular.

### 6.3 Daily Operating Hours

**Table 3: Daily Operating Hours of Motorcycle**

Operating Hour	Respondent	%
1 – 6 hours	184	38
7 – 12 hours	256	53
13 – 18 hours	32	7
19 – 24 hours	8	2
Total	480	100

*Fig 3. Daily Operating Hours of Motorcycle on Commercial Basis.*



The period of operation of majority of motorcycle operators' were between 7 to 12 hours daily. In totality, 91% of these motorcycle operators worked from 1 to 12 hours daily. They operate from dusk to dawn as shown in Table 3. Consequently, the motorcycles were subjected to over-use. This is more so when considered with the 9% of operators that used motorcycles between 13 and 24 hours everyday.

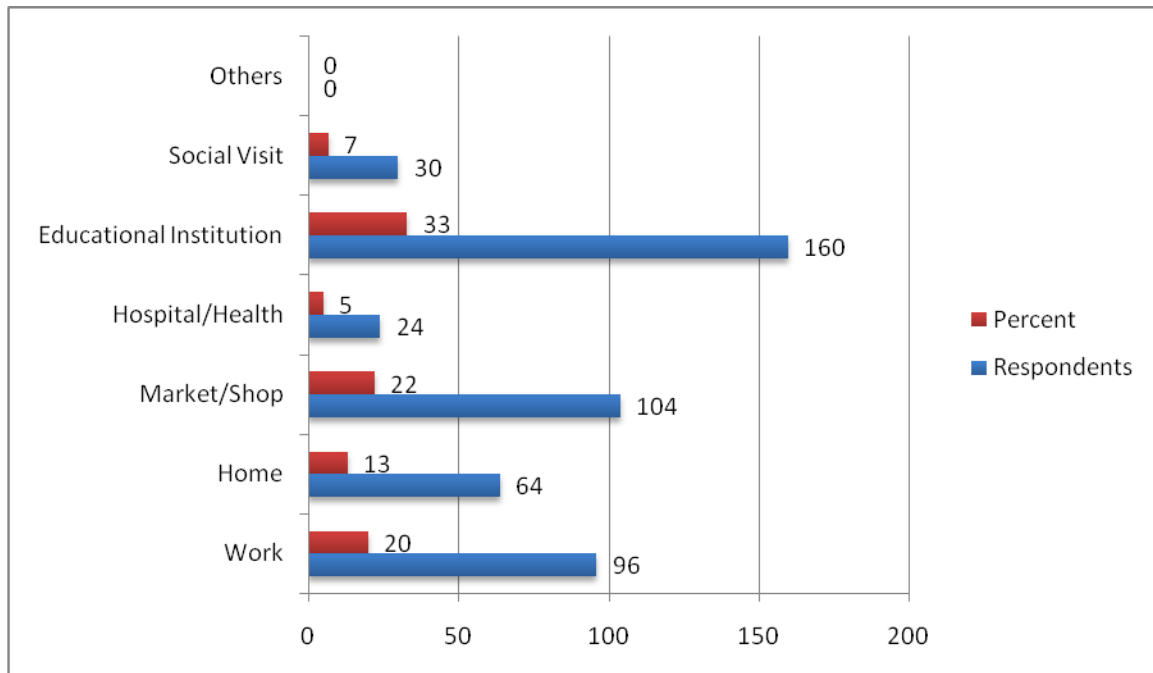
## 6.4 Journey Purpose

**Table 4 Journey Purpose of Motorcycle Users**

Journey Purpose	Respondents	%
Work	96	20
Home	64	13
Market/Shop	104	22
Hospital/Health	24	5
Educational Institution	160	33
Social Visit	32	7
Others	-	-
<b>Total</b>	<b>480</b>	<b>100</b>

Information from table revealed that majority motorcycle passengers used it for educational purposes. This is closely followed by those who used it to go to market and work at 22% and 20% respectively. Of significance is the fact that 13% of users return home after their daily sojourn with motorcycle.

**Fig 4 Journey Purpose of Users**





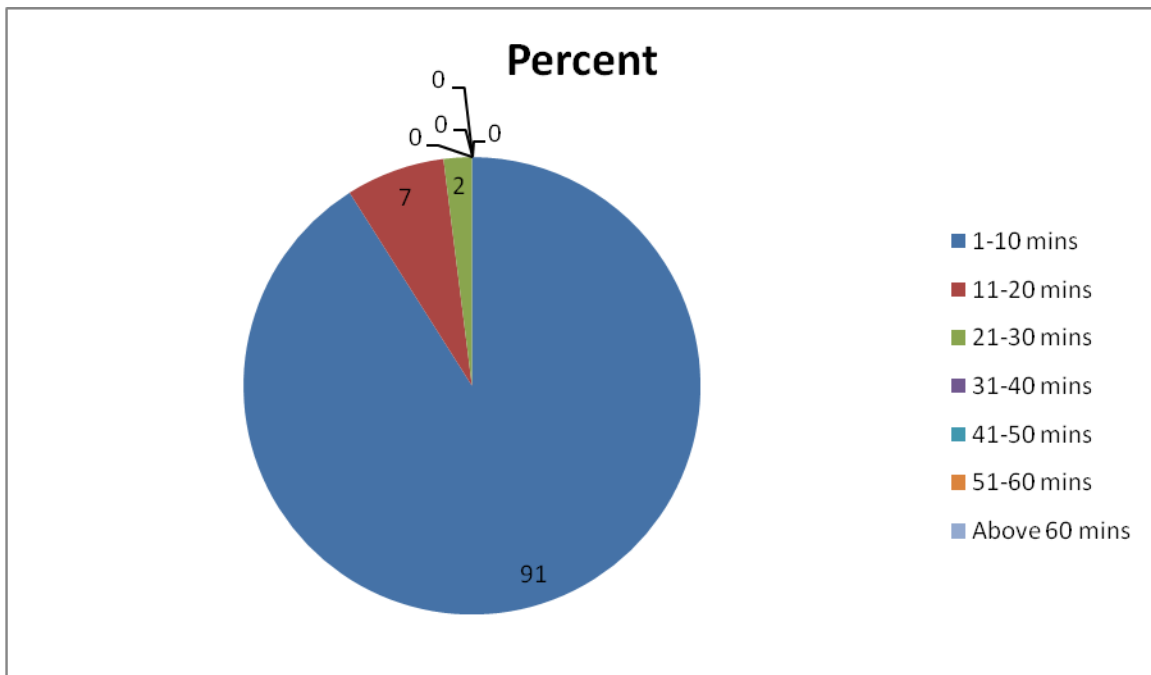
## 6.5 Waiting Time by Motorcycle Passengers

**Table 5. Waiting time of Motorcycle Passengers**

Waiting Time	Respondents	%
1- 10mins	440	91
11-20mins	32	7
21-30mins	8	2
31-40mins	-	
41-50mins	-	
51-60mins	-	
Above 60mins	-	
<b>Total</b>	<b>480</b>	<b>100</b>

91% of passengers wait between one and ten minutes maximum to board motorcycle for their journey. In essence because of the nature of the traffic, passengers do not wait for long before using motorcycle for their journey.

**Fig. 5. Waiting time of Motorcycle Passengers**



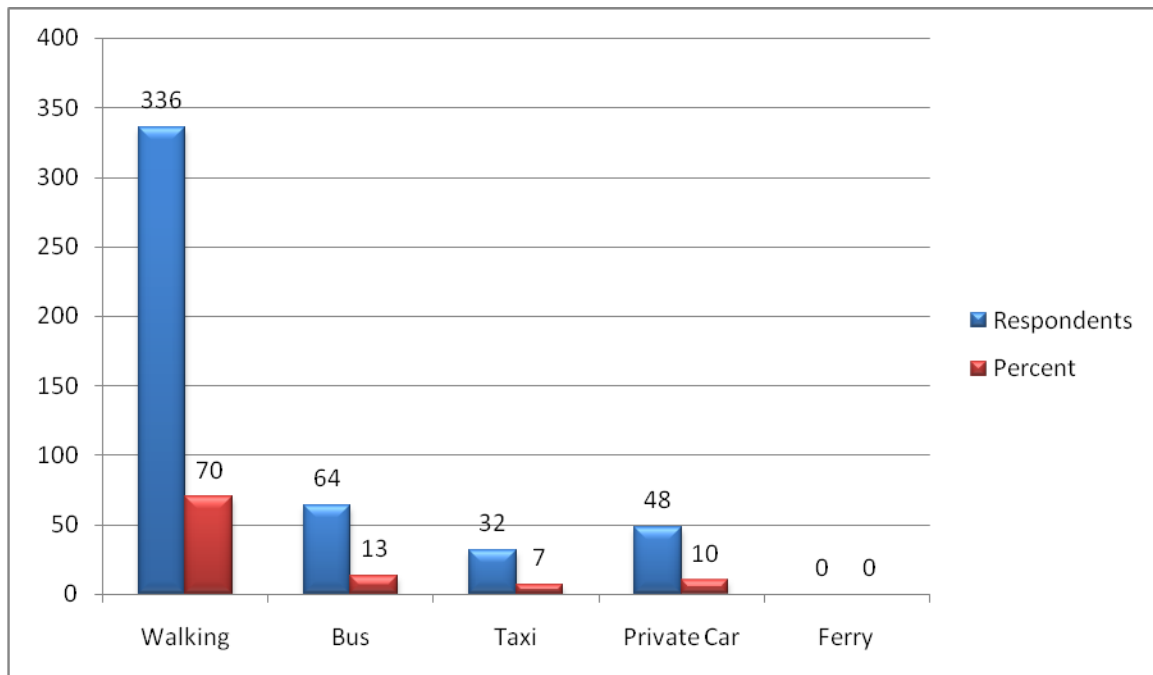
## 6.6 Means of Access

**Table 6. Means of Access before using motorcycle**

Means of Access before using motorcycle	Respondents	%
Walking	336	70
Bus	64	13
Taxi	32	7
Private Car	48	10
Ferry	-	-
Total	480	100

On means of access, majority [70%] walk to venue of boarding motorcycle for public transport. Of significance of the revealed information that those who take buses, taxis and cars end up using motorcycle before their final journey for the day.

**Fig. 6. Means of Access before using motorcycle**



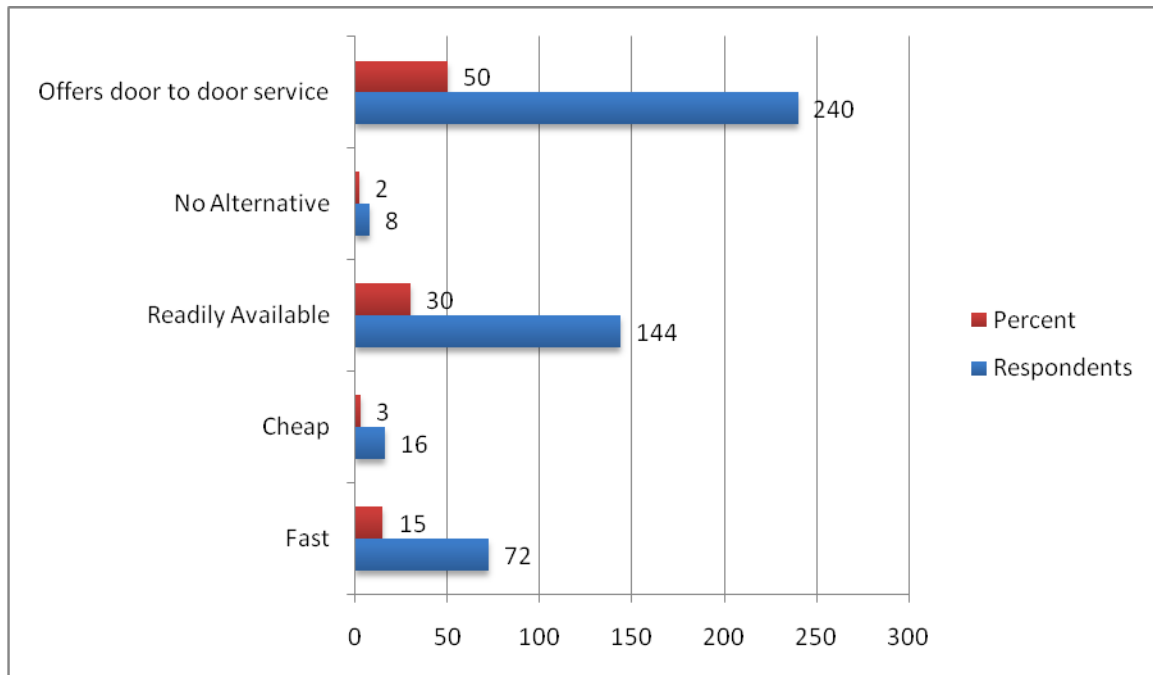
## 6.7 Motorcycle as Modal Choice

**Table 7 Patronage of Motorcycle as Modal Choice**

Patronage of Motorcycle as a Modal Choice	Respondents	%
Fast	72	15
Cheap	16	3
Readily Available	144	30
No Alternative	8	2
Offers door to door service	240	50
Others	-	-
<b>Total</b>	<b>480</b>	<b>100</b>

Majority of passengers use motorcycle because it offers doors service. This is closely followed by ‘readily available’, while 15% of them used it because they believe that it is fast.

**Fig 7 Patronage of Motorcycle as Modal Choice**



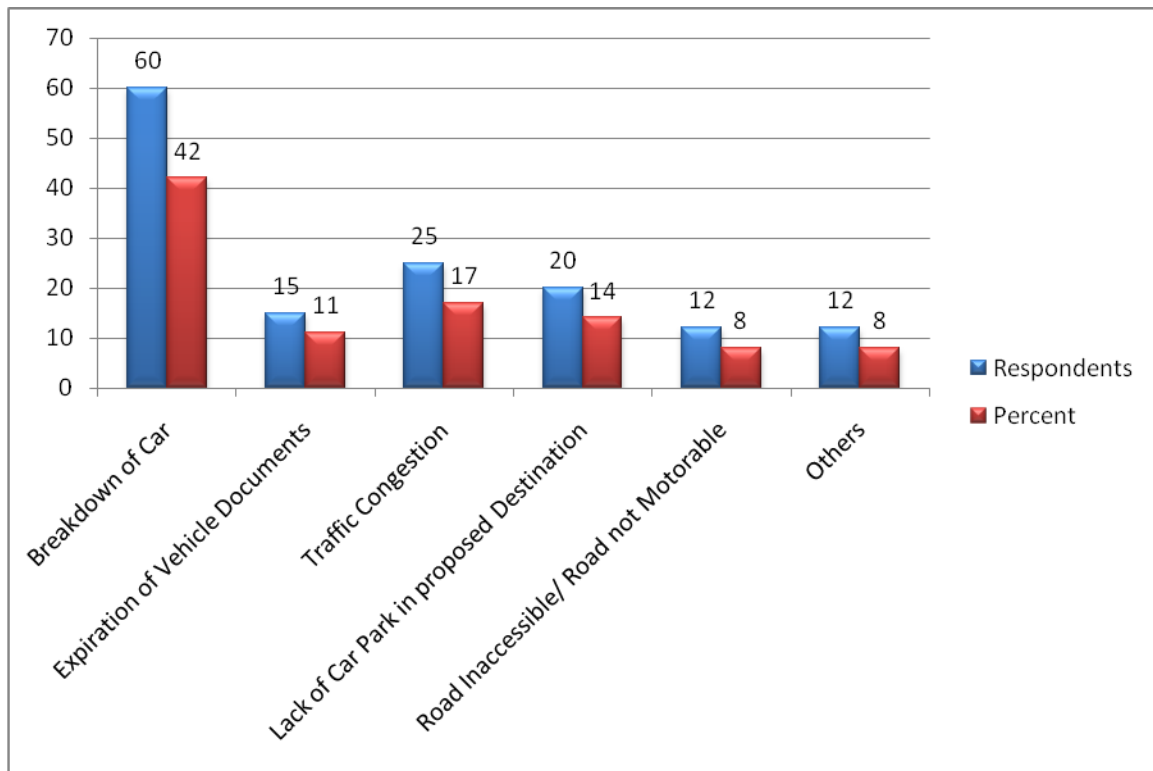
## 6.8 Reasons for using Motorcycle by Car Owners

**Table 8 Car Owners reason for patronizing Motorcycle**

Car Owners reason for patronizing Motorcycle	Respondents	%
Breakdown of Car	60	42
Expiration of vehicle Documents	15	11
Traffic Congestion	25	17
Lack of Car Park in proposed Destination	20	14
Road Inaccessible/Road not Motorable	12	8
Others	12	8
<b>Total</b>	<b>480</b>	<b>100</b>

On why car owners used motorcycle, 42% of them explained that it was due to breakdown of the of the car, while 17% and 14% complained that it was became of traffic congestion and parking problems at their destination.

**Fig 8 Car Owners reason for patronizing Motorcycle**



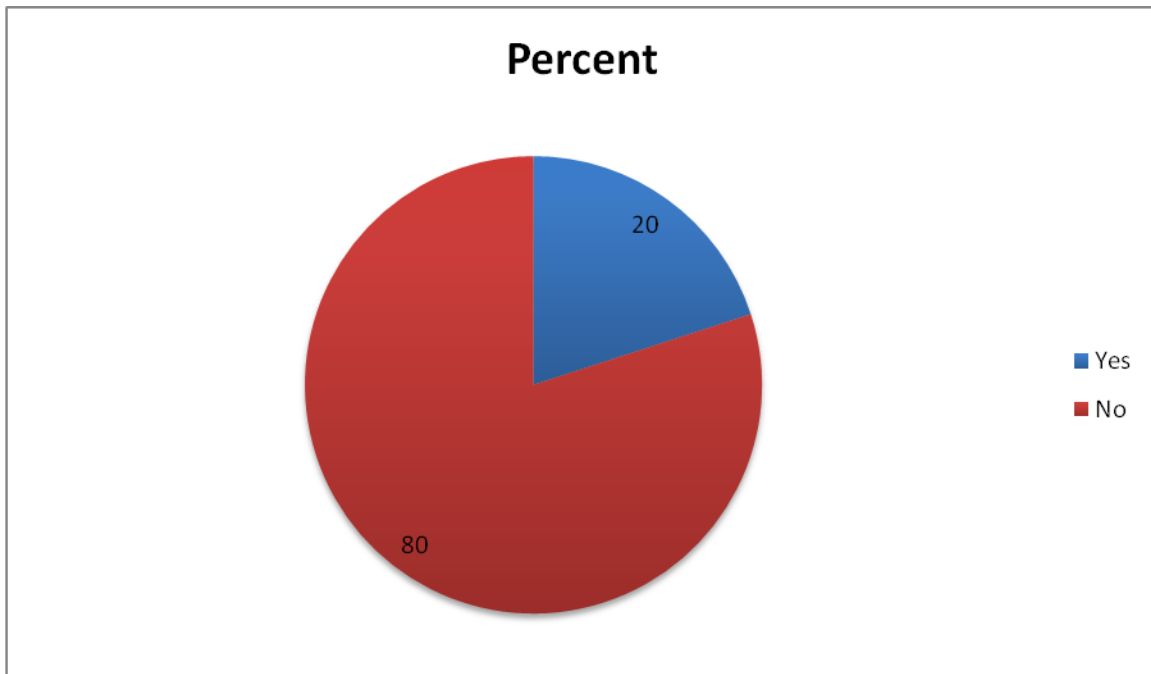
## 6.9 Acceptability of Motorcycle Usage

**Table 9 Banning of Motorcycle**

Banning of Motorcycle	Respondents	%
Yes	96	20
No	384	80
<b>Total</b>	<b>480</b>	<b>100</b>

On the issue of the ban imposed by the municipal authority on motorcycle use in the metropolis, 80% of respondent said it was a wrong policy, while only 20% agreed with government decision. Consequently banning of motorcycle usage in Abuja metropolis by the municipal authorities is not acceptable to majority of the citizenry.

**Fig 9 Banning of Motorcycle**



### 6.10 Problem Encountered

**Table. 10. Problem Encountered**

Problems Encounter By Users	Respondents	%
Safety	32	7
Frequent accident	88	18
High fare	16	3
Lack of Concentration	80	17
Over Speeding	264	55
Others	-	-
Total	480	100

**Fig10: Problems Encountered**

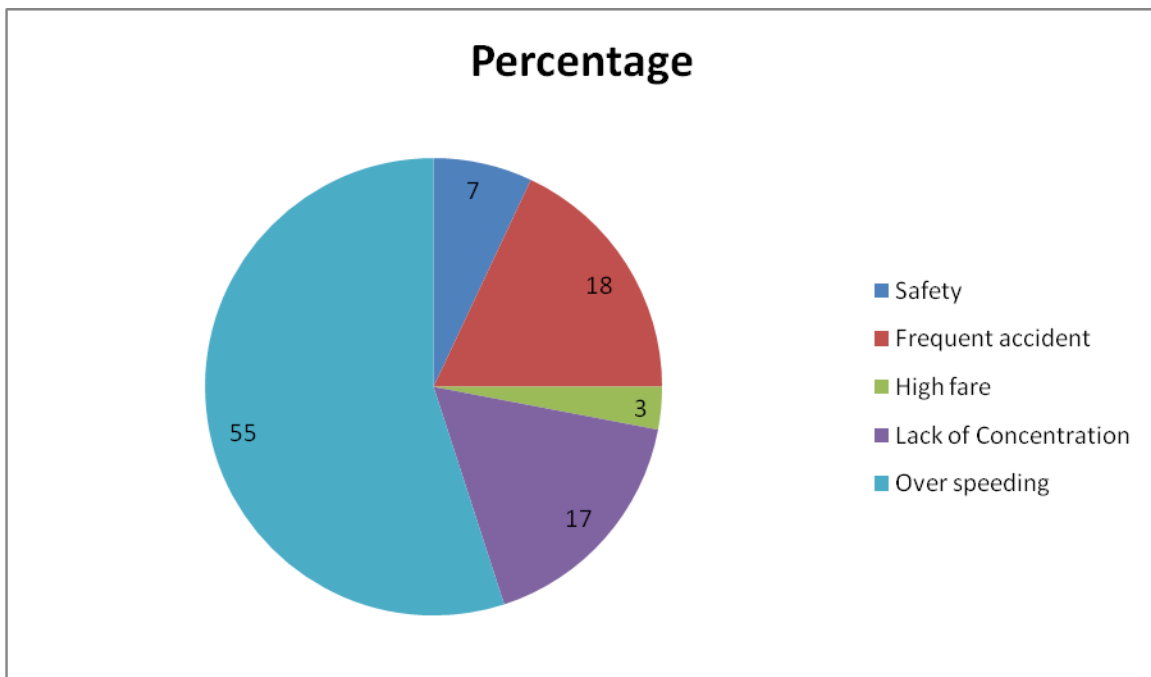


Table 10 showed that the main problem encountered by users of motorcycle in Abuja metropolis is over speeding with 55%. Frequent accident and lack of concentration by the motorcycle driver constituted 18% and 17% respectively. It is important to note that only 7% consider safety as a problem with motorcycle use. Fare issue was the lowest with 3%.

## 6.11 Infrastructural Provision

**Table 11 Motorcycle Traffic Facilities in Abuja Metropolis**

S/NO	Motorcycle Traffic Facilities	Number Available
1	Motorcycle Traffic Lane	None
2	Sidewalks for Pedestrian	None
3	Motorcycle Traffic Signs	None
4	Traffic Signals for Motorcycle	None
5	Pedestrian Zebra Crossing	Few
6	Overhead Footbridges for Pedestrian Crossing	None
7	Motorcycle Stops	None
8	Human Traffic Controller (Warders Police)	All Roads
9	Motor Cycle Ways	None
10	Parking Controls	None
11	Junction Controls	None
12	Pedestrian Walkways	Few Areas

- Most of the pedestrian zebra crossing are not there even the few ones that remain are not visible.
- No overhead bridge.
- There are no underground sub-ways.
- There is enough traffic control, but traffic control warders appear not fully trained for motorcycle traffic control.

## 6.12 Policy Implications

In essence, banning the use of motorcycle from Abuja metropolis is not acceptable to users. These passengers are citizens as well as voters. However, the infrastructural facility for motorcycle use in the metropolis is non existence. Motorcycle riders have to compete with road usage with motor vehicles and other road users. What the Government need to do is to provide road complementary facilities for motorcycle use rather than resort to banning the usage which the people did not want. The contentious issue is that since these facilities are public, the public sector financing is the

obvious source for procurement. This is because of the argument that, the capital requirement, pay back period and rate of return on the investment profiles of the provision of these facilities may not be very attractive to private investors.

Consequently, the call for private participation in the provision of these road complementary and motorcycle facilities arose as a result of shortages of these facilities to aid traffic movements on Nigerian roads.

Therefore, Private/ public partnership may be the practical solution to the problem of inadequacy of these facilities on Nigerian roads

## **7. Conclusion and Way Forward**

What is required is a good understanding of the operations of the motorcycle system, with a view to regulating their activities. What is therefore required is their integration into the National Transport System and making the mode safer for operators and passengers, rather than outright ban. Time will tell whether this decision can be sustained by successive government. Provision should be made for motorcycle lane along the existing routes to discourage conflict between the motorcycle traffic and motor vehicle traffic as presently experienced to reduce the rate of accident.

The use of motorcycle for commercial transport has come to stay. Therefore, government agencies can regulate their activities such as screening their entrance, and ensuring road worthiness of the motorcycles. They should also, ascertain the operators' competence (knowledge of Highway Code and road signs) and proper licensing.

The need to enlighten the public on the usage of motorcycles and how to caution motorcycle operators while on motion of unruly behaviours.

Reflective jackets with numbers should be inscribed at the front and rear of the jacket. This would assist in easy identification and can be used as crime preventive measure.

Government should regulate the speed of motorcycles by ensuring that the speed limits of both private and commercial motorcycle speed do not exceed certain level.

Passengers should be educated on the use of crash helmet, cap and head tie before wearing the helmet to avoid the spread of diseases which may be contacted from the use of helmet by several passengers who may have skin diseases.



Users should be enlightened on the dangers involved in carrying them with loads on the motorcycle. This often leads to accident as they easily lose control in case of any sudden stop or emergency.

Finally it is evident from this study that motorcycle use is a gap filler in urban passenger transportation in Nigeria. Therefore, its use is not acceptable to the people. What is required is more studies in motorcycle operation. This includes their mode of operation, use of alcohol by motorcycle operators, and traffic violation.

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