THE EFFECTS OF USING TRICYCLES FOR PUBLIC TRANSPORTATION IN IJEDE AREA OF LAGOS STATE

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ABSTRACT

This study looked at the effects of using tricycles as public transportation in the Ijede neighborhood of Ikorodu, Lagos State. In order to achieve this, the study examined the socioeconomic traits of the respondents in the study area, the operational traits of the tricycle as an informal public transportation, the service demand of tricycle operators, and safety concerns. Analysis of the study's data showed that the majority of the tricycle drivers operated their vehicles to support their families and because they were unemployed. The study also showed that law enforcement agency operations and the poor access road in the study area are significant obstacles encountered while dealing with extortion. Another difficulty was the issue of reckless driving by tricycle drivers who were attempting to avoid arrest by union and government officials, which frequently led to accidents. These lead to high operating costs, which are most readily apparent in maintenance expenses, task force dues paid to local governments, unions, touts, and enforcement agencies. The inferential statistical result using Pearson correlation value is 0.721 while N which is the number of operators interviewed is 80. The significant value is 0.000, which is less than 0.05 the level at which we are testing the hypothesis. Therefore, we reject the null hypothesis and concluded that there is significant relationship between the number of days operators work per week and their involvement in accident. Finally, taking cognizance of the human, mechanical and environmental problems attributed to tricycle operations as public transport, the tricycle business has contributed positively to the society as its helps to reduce unemployment rate, crime reduction, safety and save travel time of the citizen from origin to destination and also contribute to the Nigerian Economy.

KEYWORDS: ***Public Transport, Tricycle, Operators, Employment, Ikorodu***

1.0 INTRODUCTION

The structure and patterns of development, as well as the maintenance of socially acceptable levels of quality of life, depend on transportation. It is impossible to overstate the role of transportation in development. The process of moving people, products, and services from one point of origin to another point of destination is known as transportation (Okoko, 2006). Generally, public transportation can be defined as a method of moving people or products from one place in space to

another using either private or public transportation in exchange for payment. One of the elements that determines the structure and socioeconomic growth of a city is its public transportation system, which serves as the foundation of urban life (Raji, 2012). The significance of public transportation can be attributed to the fact that it gives those without access to a vehicle a means of transportation, aids in the creation and maintenance of livable communities by reducing traffic on the roads, and ensures long-term sustainability in terms of resource use and environmental impact (Badejo, 2010).

In addition, public transit is offered by the federal, state, local, or private sectors. In Lagos, the first wave of public transportation providers emerged not long after Nigeria's political independence. These include the 1976 collapse of the Isale Eko Bus services. Between 1970 and 1980, a great deal of transport companies and operators emerged. They include the Mainlanders Transport Corporation, Alimosho Line, and Ikeja Transport Corporation, all of which failed due to a lack of financial assistance from the government, qualified personnel to run their businesses, political meddling, and unbridled rivalry with paratransit providers. The primary means of public transportation used in the study area (Ijede, Ikorodu) is the tricycle, also known as a three-wheeler or Napeb. Its use as a form of public transportation is hampered by a number of issues, such as inadequate and subpar infrastructure, a mismatch between supply and demand, and an elevated accident rate. Also, the interconnected patterns like urban population growth and the quick, haphazard, and disorganized expansion of cities are what cause the issues. In the last forty years, Ijede, Lagos State, has seen a significant growth in population. This is because most emerging countries are experiencing a surge in urbanization and rural-urban migration. To this end, the paper focused on the achievement of the following goals: examine the operational characteristics of tricycles as informal public transport, assess the service demand characteristics of the tricycle as an informal public transport, and finally examine the safety concern and respondents' opinions on the operation of the tricycle as a public transport in the Ijede area of Ikorodu, Lagos state.

2.0 LITERATURE REVIEW

The three-wheeler (also known as tricycle) is one of the most practical forms of public transportation in developing nations like Nigeria. They are regarded as low-horsepower, two- or four-stroke vehicles authorized to transport two additional adults in addition to the driver. They have a canvas-covered frame with a rear-mounted engine and control similar to that of a motorcycle. Numerous Asian nations have three-wheelers, which go by various names, such as auto-rickshaws in India, tuk-tuks in Thailand, and trishaws or three-wheelers in Sri Lanka. In Nigeria, it is referred to as Keke NAPEP or Keke Marwa because it was created in 2001 as a Poverty Alleviation Programme or Strategy for job creation, particularly for unemployed youths, by the then-Lagos State Military Administrator, Buba Marwa. This has made the name more popular with the general public. Studies have shown that individual (private) and public transportation make up between 20% and 70% of the total demand for public transportation in different Asian cities. The estimate was 70% for Manila in the Philippines, 50% for Jakarta in Indonesia, 40% for Kuala Lumpur in Malaysia, and 21% for Bangkok in Thailand (Shimazaki & Rahman, 2005). In Buenos Aires, 54% of all journeys and 75% of public transportation trips are made by Microbus, a type of

informal public transportation (Dike, 2012). According to Barret (1985), 23% of journeys in Rio de Janeiro, 41% of trips in Sao Paulo, and 50% of trips in Calcutta were done by unofficial public transportation in 1980. More specifically, the number of tricycles in Sri Lanka is projected to be 342,286 vehicles, which accounts for 15% of the active motor vehicle fleet and about 6% of passenger kilometers (Amal, Mahinda & Darshini, 2010).

Furthermore, India produces around 500,000 tricycles annually, and about 80,000 auto-rickshaws, 250,000 in Mumbai, and more than 100,000 in Ahmedabad are used for public transportation (American Enterprise Institute, 2014). In India, auto-rickshaws are used for about one-fifth of daily personal travels. Also, in Japan, about 250,000 individuals commute to work daily on tricycles, whereas in Bangladesh, about 8 million people utilize tricycles and other types of bikes for public transportation (Replogle, 2004). However, in Nigeria Ajboye et al. (2020) and Saleh (2011) affirmed that just a small part of daily travels are still made on tricycles. Also, this mode of transportation is starting to be considered as a viable option in urban areas (Badejo, 2014 and Aiboye et al., 2020). Tricycles are taxi-like transportation methods that rely on relatively heavy, slow, and low-quality vehicles to deliver lesser-quality services than exclusive-ride taxis, albeit at far reduced costs. They typically complement established bus and rail networks rather than competing with them, in contrast to large vehicle services (Cervero, 2000). In addition, tricycles differ from other paratransit modes in that they do not use small or outdated vehicles for operation, offer low-quality services, or face intense rivalry.

3.0 MATERIALS AND METHODS

3.1 Methodology

The methodology adopted for this study is both qualitative and quantitative statistical methods and were sourced from primary and secondary data. The study was carried out to examine the use of tricycle as a mode of public transportation in Ijede area of Ikorodu Lagos State. A total of 80 operators of tricycle respondents were sampled through questionnaires administration. Samples were chosen based on the four (4) (table 3.1) recognized registered tricycle parks (table 3.1) in Ijede. Each of the parks was given twenty (20) questionnaires each. Data were analyzed using descriptive statistics and Pearson Correlation was used to establish the relationship between number of days operators work per week, their involvement in accident and safety.

Table 3.1: Distribution of Questionnaire

	Operators
Itamaga Bus Stop	20
Gbaga junction	20
Elepe junction	20
Ijede Bus Stop	20
Total	**80**

Source: Authors' Field Survey, 2022.

3.2 Study Area (Ijede, Ikorodu)

Lagos State is situated in Nigeria's south-western geopolitical region (Figure 3.1). It comprises five (5) divisions that are frequently referred to as IBILE (Ikeja, Badagry, Ikorodu, Lagos Island and Epe). These are the zones that comprise the development areas for the 20 local governments and 37 local councils. One of Lagos State's areas with the quickest growth is Ikorodu. It is situated in the

State's northeast. Additionally, it is bordered by Ogun State and is situated alongside the Lagos Lagoon. It is located about 36 kilometers north of Lagos. Ikorodu is bordered to the east by Agbowa-Ikosi, a town in the Ikorodu division of Lagos State, and to the south by the Lagos lagoon and a border with Ogun State. Ijede is one of Ikorodu's larger towns. The Ijede Native Authority, which had a District officer serving as its top executive, gave the village of Ijede its first taste of modern autonomy in management in 1937. Ijede Local Council received its justly due gazettal in 1952 under the defunct western region administration of late Chief Obafemi Awolowo. The arrangement persisted until 1976 when General Olusegun Obasanjo's military government amalgamated Ijede Local Council with Ikorodu Local Government. Ijede was separated from Ikorodu in 1980 under the administration of Lagos State Governor Chief Lateef Kayode Jakande as Ikorodu Constituency II into Irepodun Local Government, led by Chief Amusa.

However, under the rule of Gen. Ibrahim Babangida, Irepodun Local Government and Ikorodu Local Government were combined in 1985. But in 2003, the Lagos State Government, led by Senator Bola Ahmed Tinubu, added 37 new local council development areas (LCDA) to the 20 already existing ones, of which Ijede LCDA is one. From the old Ikorodu Local Government, Ijede was created. The Ijede LCDA consists of the following communities: Ijede, Egbin, Oke-Eletu, Ginti, Igbodu, Abule Eko, Igbopa, Ilupeju, Igbe Kapo, Igbe Ogunro, Igbe Oloja, Ayetoro, Ipakan, Iponmi, Ewu Owa, etc. Ijede LCDA is surrounded by the local governments of Igbogbo Bayakun and Ikorodu Central in the west, Imota Local Development Council in the east, and Ikorodu North LCDA in the north.

Presently, Ijede LCDA has 4 political wards: A, B, C, and D. Egbin, Ipakan, and Ebute Olowo make up Ward A, whereas Aledo, Oju Ayepe, Ayegbami, Etita, Oju Ogun, Itundesan, and Oko Mabude make up Ward B. Ward C is made up of Oke Oyinbo, Madan, Pacific, Welcome, Oko Ope, and Igbe, whereas Ward D is made up of Abule Eko, Igbopa, Oke Eletu, Gbodu, Igbodo Jabe, and Ilupeju. Also, the population estimates of Ijede Local Council Area is 1,600,000 according to the 2006 census. The people of Ijede are predominantly Ijebus but with other tribes like Igbo, Hausa and others residing in the community. There are many tourist attractions in the Ijede Local Council Development Area, including the Lagos Lagoon and Odoro Spring Water. Ijede also has a ton of lodging options and spas. Ijede currently has more than 80 private primary and secondary schools in addition to 4 state primary schools and 1 secondary school. Additionally, there are multiple privately owned hospitals in the LCDA as well as public health facilities (such the Ijede General Hospital and the Primary Health Centers at Oke-Eletu and Abule-Eko). In addition, Ijede has good arable land fertile enough to engage in massive mechanized farming as well as agricultural and agro allied businesses. For a serene environment, Ijede is one of the best places to look for comfort after a long busy and tedious working day to cool ones down. Also, relaxation centers within Ijede LCDA will be a memorable experience that will not be forgotten in a hurry. There is peace and tranquility in and around Ijede and the people are very accommodating.

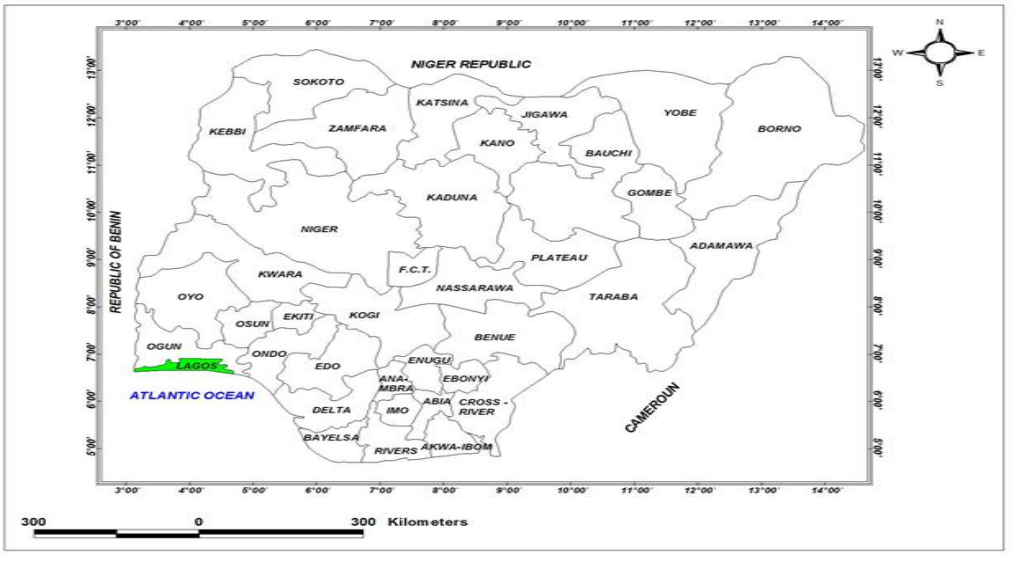

Figure 3.1: Map of Nigeria Showing Lagos State.
Source: Authors' Field Survey, 2022.

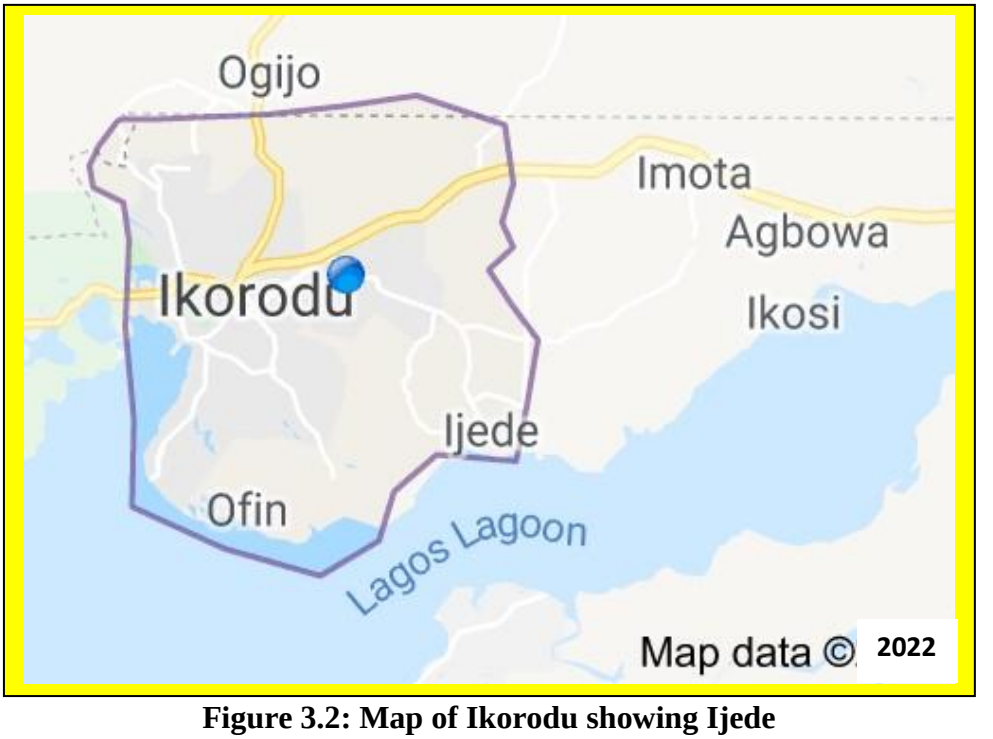

Figure 3.2: Map of Ikorodu showing Ijede
Source: Google Map, 2022.

4.0 RESULTS AND DISCUSSION

4.1 Demographic and Operational activities of Respondents

Analysis on the gender distribution in table 4.1 shows that out of 80 operators of tricycle, there is high proportion of male with 92.5% while 7.5% of the operators were female. According to the respondents' age distribution, 2.5% of them are under 18 years old, 67.5% are between 18 and 40, 21.3% are between 41 and 60, and 8.7% are above 61. Notably, the majority of commercial tricycle service providers are between the ages of 18 and 40. Also, the majority of the respondents have secondary education status, according to analysis of the respondents' educational status. In other words, 52.5% of those who ride commercial tricycles have completed secondary school; further analysis reveals that 16.3% of those who ride tricycles have completed university education; 13.7% of commuters have no formal education; and 17.5% have completed primary education. This suggests that the tricycle drivers in the studied area possess a high degree of education.

In addition, the study found out that majority of the tricycle rider in the study area own the tricycle which they are riding. 78.7% owns the tricycle they are riding while 21.3% responded that they are not the owner of the tricycle. Also, the study also showed that the primary source of funds used by tricyclist to purchase their tricycles is personal savings and this accounted for 47.5%; 32.5% obtained their funds from cooperatives; 16.3% obtained loans; and 3.7% obtained their funds through other channels, such as gifts from friends and government elected officials. Again, according to the study, 58.7% of respondents purchased their tricycles on hire purchase, while 41.3% are paying for them on a daily, weekly, or monthly repayment plan. Also, the majority of commercial tricyclists had learned some sort of talent prior to working in the transportation industry. 52.5% of the riders had skilled occupations, 21.2% had no employment, 3.8% worked for the government, and 1.3% were laid off or retired. The table below also revealed that bad road is a major problem affecting the operation of tricycle within the study area with 97.5% of the respondents agreeing with the problem while 2.5% of the respondents stated that bad road is not really a problem. The respondents also acknowledged that the situation is worse off during rainy season.

Moreover, the study showed that extortion from governmental agencies is a significant issue to deal with because each rider has a certain official that he or she must bribe on a daily basis in order to improve and provide them the ability to operate freely without interference. 100% of respondents agreed with this. Once more, the survey showed that governmental enforcement is not a significant issue for them and just serves to minimize the number of trips they make each day. While 33.2% of the operators disagreed, indicating that the enforcement is a problem for their activities, 66.8% of respondents had no issue with the government's enforcement techniques.

Table 4.1: Demographic and Operational activities of Respondents

	Description		Freq.	%
1	**Gender**	Male	74	92.5
		Female	6	7.5
		Total	**80**	**100**
2	**Age Distribution**	Below 18	2	2.5
		18 years- 40 years	54	67.5
		41 years – 60 years	17	21.3
		61 years and above	7	8.7
		Total	**80**	**100**
3	**Education Status**	No Formal Education	11	13.7
		Primary Education	14	17.5
		Secondary Education	42	52.5
		Tertiary Education	13	16.3
		Total	**80**	**100**
4	**Commercial Tricycle Ownership**	Yes	63	78.7
		No	17	21.3
		Total	**80**	**100**
5	**Main Sources of Finances used in acquiring the Tricycles**	Personal Savings	38	47.5
		Co-operative	26	32.5
		Loan	13	16.3
		Other (Gift)	3	3.7
		Total	**80**	**100**
6	**Agreement on the payment of tricycles by the commercial tricyclist**	Hire Purchase	47	58.7
		Daily, Weekly, Monthly Balance	26	32.5
		No Response	7	8.8
		Total	**80**	**100**
7	**Commercial Tricyclists' Previous Occupation before Joining the Business**	Unemployed	34	42.5
		Skilled Acquired Job	42	52.5
		Civil Servant	3	3.8
		Retrenched/Retired	1	1.2
		Total	**80**	**100**
8	**Bad Road**	Yes	78	97.5
		No	2	2.5
		Total	**80**	**100**

9	**Extortion by Police Officers**	Yes	80	100
		No	0	0
		Total	**80**	**100**
10	**Enforcement by government officials**	Yes	55	66.8
		No	25	33.2
		Total	**80**	**100**
11	**Union members harassment**	Yes	80	100
		No	0	0
		Total	**80**	**100**
12	**Operators' Involvement in Tricycle Accident**	Yes	33	41.3
		No	47	58.7
		Total	**80**	**100**
13	**Causes of Accident for Tricyclists Who Have Been Involved in Accident**	Collided with a Vehicle	16	48.5
		Hit a Pedestrian	8	24.2
		Crash Alone	5	15.2
		Hit an Object	4	12.1
		Total	**33**	**100**
14	**Number of Hours Commercial Tricycle Riders work in a Day**	1-4 Hours	3	3.7
		5-8 Hours	28	35.0
		9-12 Hours	43	53.8
		13-16 Hours	5	6.2
		Above 17 Hours	1	1.3
		Total	**80**	**100**

Source: Authors' Field Survey, 2022.

Furthermore, the study's findings indicate that union harassment is on the rise and that it is a serious issue given that the majority of union members are unchecked. As an illustration, increasing ticketing fee being charged and union leader's tricycle making multiple journeys without queue. The respondents (100%) agreed on the subject matters. This study also found out that 41.3% of commercial tricycle riders have been involved in accident while 58.7% have not been involved in tricycle accident within the study area. Moreover, out of the 80 respondents only 33 tricyclists claimed to have been involved in a form of accident or the other. Collision with other vehicles is the main causes of accident for tricycle riders in the study area. As shown in the study, 48.5% of the respondents who were involved in accident collided with other vehicles; 24.2% hit pedestrians; 15.2% crashed alone, while 12.1% hit an object (s).

Meanwhile, to understand the factors that the determine the level of acceptance of tricycle as means of transportation in the study area, the number of hours that commercial tricyclists work each day was looked at. Also, this helps to

understand the availability as well as the reliability of the mode of transportation. According to table 4.1, 53.8% of commercial tricycle drivers work between nine and twelve hours per day, 35.5% between five and eight hours per day, 6.2% between thirteen and sixteen hours per day, 3.7% between one and four hours per day, and 1.3% over seventeen hours per day. As a result, it can be inferred that commercial tricycles will likely be available all day long given how much time they spend operating in the research area.

4.2 Test of Hypothesis: An Examination of the Relationship between Number of Days Operators Work Per Week and Operators Involvement in Accident

This section examines the connection between the number of days an operator works each week and their involvement in accidents. Pearson Correlation analysis is used to test the hypothesis which is formulated and displayed in table 4.2 which contains the correlation's findings.

Hypothesis:

H_0: There is no significant relationship between number of days operators work per week and their involvement in accident

H_1: There is significant relationship between number of days operators work per week and their involvement in accident

Table 4.2 Correlations between number of days operators work per week and operators involvement in tricycle accident

		Number of days operators work per week	Operator's involvement in accident
Number of days operators work per week	Pearson Correlation	1	.721
	Sig. (2-tailed)		.000
	N	80	80
Operator's involvement in accident	Pearson Correlation	.721	1
	Sig. (2-tailed)	.000	
	N	80	80

Source: Author's Field Survey, 2022

From the table 4.2 above, we can see the results of the correlation analysis between number of days operators work per week and their involvement in accident. The Pearson correlation value is 0.721 while N which is the number of operators interviewed is 80. The significant value is 0.000, which is less than 0.05 the level at which we are testing the hypothesis. Therefore, we reject the null hypothesis and accept the alternate hypothesis which says there is significant relationship between the number of days operators work per week and their involvement in accident.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

Transport is one of the most ubiquitous activities in any society because individuals want to move between activity areas frequently or sometimes, at affordable rates and times, and with some assurance of a certain level of comfort and safety. Rapid national development depends on the transportation sector. The declining economic fortunes in Nigeria have impacted almost every economic sector, including urban public transit. According to the study, the majority of tricycle business owners started their operations as a last resort since they had no other options, and as a result, they lacked adequate training in tricycle operation. If there were alternative opportunities, these operators would have long since quit the tricycle business, but unemployment seems to be the main driver behind their decision to remain in the business. Moreover, the bad road in the area is one of the major problems encountered by operators most especially during the rainy season in which other modes of transportation will avoid plying through the route, at this instance the users are left with no other alternative than to make use of tricycle which is safer and affordable for them. The reckless attitude of some tricycle rider is also a discouraging factor as well safety measure that is highly abused, but unfortunately the tricycle is the only readily available mode of public transportation in Ijede.

Based on the major findings in the study, the following recommendations are provided.

1. Napeb or tricycle rider should endeavour to have their entire document in order to avoid police extortion and union official harassment,
2. Operators should be guided to adhere to the required speed limit.
3. Lastly, government needs to take a serious look at the deeper economic implications of the business
4. The third suggestion is with a view to ensuring that the country does not just become a dumping ground for Tricycle manufacturers in Asia but that the indigenous Nigerian economy makes the best of the international trade relationship.

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