DETERMINING THE SOCIO-ECONOMIC CHARACTERISTICS AND USERS' PERCEPTIONS OF INTRA-URBAN PUBLIC TRANSPORT SYSTEM IN AYANGBUREN PARK, IKORODU, LAGOS STATE

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ABSTRACT

This study aimed at examining the socio-economic characteristics and users' perceptions of public transport system from Ayangburen Taxi Park, Ikorodu, Lagos State, Nigeria. The data used were generated from the primary source. The study used the total number of passengers in ten round trips of a particular day for the sample frame. The sample size for this study was 10% of the sample frame which translated to 124 completed questionnaires. The sampling procedure entailed the identification of the motor park, selection of the cabs through the designed method and conduction of the survey directly with the passengers in order to obtain the relevant data in accordance with the structured questionnaire. Data were analysed through the descriptive (frequency tables) and inferential analyses (spearman's rank correlation coefficient). The inferential model revealed that, there is a positive statistical significant relationship between education, age, cost and comfort. Besides, there is a negative statistical relationship between age and employment of respondents. The study concluded with pragmatic strategies such as the provisions of more cabs, fare subsidies among others in order to provide a more sustainable public transport system in the study area.
Keywords: Public Transportation, Users' Perceptions, Passengers' Travels

INTRODUCTION

One third of the world population lived in urban areas in 1975 (World Bank, 2008). By 2000, the population living in urban areas had increased to approximately fifty percent and it is estimated that by 2025, two thirds of world population would be living in urban areas (World Bank, 2008). Most of the rapid urbanization changes are taking place in cities of developing world particularly in Africa where urban population is growing at unprecedented rate. The continent currently is experiencing an average growth rate of 4.5% per annum (UNCHS Habitat, 2008). For example urbanization growth rate for Kenya, Tanzania and Zimbabwe in the eighties were 7.7%, 6.6%, and 5.9% respectively. This growth in population is a result of a combination of both natural growth and rural urban migration. Urban areas are perceived to offer a better quality of life and to provide employment opportunities. Mobility is fundamental in breaking isolation and thus strengthens an individual's capital base. Clearly, for the urban transport system to contribute to economic and social development, it has to be reliable, demand responsive, efficient and affordable.

The transport system comprises three major components namely: the vehicle commonly referred to as the carrying unit, the path which the transport terms is called the way and the passengers which also encompasses the member on board. According to the World Bank (1975), transport or transportation is the movement of people and goods from one location to another. Modes of transport include air, rail, road, water, cable, pipeline and space. Terminals in transportation may be used for both interchange of passengers and cargo and for maintenance. Vehicles travelling through these terminals may include automobiles, bicycles, buses, trains, trucks, people, helicopters and aircraft. Operations on the other hand deal with the way the vehicles are operated, and the procedures set for this purpose include financing, legalities and policies. In the transport industry, operations and ownership of infrastructure can be either public or private, depending on the choice of the owners and stakeholders. In line with the foregoing, this study investigated the users' perceptions of intra-urban transport services using the users based method. It also analysed the relationships between the socio-economic characteristics and users' perceptions of the public transport services.

Badejo (2002) and Oyesiku (2002) define transport as one of the elemental factors for any land use development pattern. It forms intrinsic part of settlement development needed to open up regions and provides access to natural resources. It also promotes inter-communal trade and mobilizes territorial defence. Peter (1982) in his study on transport and society submits that transport usually stimulates and enhances productive use of human development of any society. It can be established that public transport provides the mobility required for inter-tribal, international and finally inter-continental exchange and trade (UNCHS Habitat, 2001)

Transportation Development

Transport development is an inventive infrastructure in relation to the process of socio-economic development. It facilitates development of growth pole and centres and should be such as fore runner in developmental process of any nation (Oyesiku, 2002). It should provide social base for the take off of any economic development process. It will increase liveability, serviceable connectivity, interaction and transformation, and ensure change as these have been initially identified by Mabogunje (1986) and cited by Badejo (2002) that the transportation system problem is the major disorder affecting land use development pattern. The consequence emanating from the problem of transportation system includes economic, social and environmental. Unprecedented rate of development of various routes in most urban cities continuously resulted into considerable rate of growth pattern, such growth has been in momentum since and further large portion of the area have been seriously developed in most cities. It is therefore, very essential at this point, so that more quantitative measures will be put in place in ensuring better organized public transportation system in such emerging urban cities.

Public Transportation

Public transport, public transportation, public transit or mass transit is the process of moving persons and goods from one place to another which also involves the service which enables people, firms and various other entities to carry on activities at site selected for these in separate locations. The above definition is generally taken to include rail and bus services, wider definitions might include scheduled airline services, ferries, taxicab services etc. Public transport modes include buses, trolleybuses, trams and trains, 'rapid transit' (metro/subways/undergrounds etc) and, ferries. Intercity public transport is dominated by airlines, coaches, and intercity rail. High speed rail networks are being developed in many parts of the world.

Most public transport in developed and developing countries runs to a scheduled timetable with the most frequent services running to a headway. Share taxi offers on demand services in many parts of the world and some services will wait until the vehicle is fill up before it get started. Para transit is sometimes used in areas of low demand and for people who need a door to door service. Urban public transport may be provided by one or more private transport operators or by a transit authority. Public transport services are usually funded by fares charged to each passenger. Services are normally regulated and possibly subsidized from local or national tax revenue. Fully subsidised, zero fare services operate in some towns and cities. For historical and economic reasons, there are differences internationally regarding use and extent of public transport. While countries in Old World tend to have extensive and frequent systems serving their old and dense cities, most cities of the New World have more sprawl and much less comprehensive public transport.

The term public transport is preferred in the British axles and most common wealth countries, whereas public transportation, public transit and mass transit are used most often in North America. The term is less likely to include long distance forms of public transportation, such as long distance or commuter rail and roads, intercity buses or intercity railway (Onakomaiya, 1992). Public transport is usually regulated as a common carrier and is usually configured to provide scheduled service on fixed routes on a non reservation basis, although taxis provide an Ad-hoc form of flexible public transport, responsible transport provides pre-bookable form of public shared transport. Taxicabs and other vehicles for hire are generally fully flexible (Adeniji, 1985). The majority of transit passengers are travelling within local area or region between their homes and places of employment, shopping or schools.

In many part of the world, private transport dominates. Many towns and cities around the world are investing in public transport initiatives to increase the attractiveness and usage of public transport. Examples are the trams in Brussels (Belgium), Amsterdam (Holland), Metro in Paris (France) and the underground in England. Public transport can offer significant advantages in areas with higher population densities if it is effectively utilized. The road based public transport risks being slower than private vehicles if it gets held up in general traffic congestion. Compounding upon this, scheduled transport vehicles have to make frequent stops

to board additional passengers and an individual trip may require one or more transfers. Routes are also often circuitous to increase the area serviced by the system. Therefore transport authorities wishing to increase the attractiveness and use of public transport often respond by establishing or expanding dedicated or semi-dedicated public transport lanes, traffic signal priority, and other measures. A population public transport mode in the emerging cities like Lagos is the (BRT) Bus Rapid Transit is a broad term given to a variety of transportation systems that through improvements to infrastructures, vehicles and scheduling attempt to use buses to provide a service that is of a higher quality than an ordinary bus line. Each BRT system uses different improvement, although many improvements are shared by many BRT systems. The expression is mainly used in North America, in Europe it is often called Bus Way, and while elsewhere one may speak of quality bus or simple bus service while raising the quality (Mobedreola, 2004).

Passenger transport may be public, where operators provide scheduled services, or private. Among the existing modes of transport in Nigeria, the road mode has enjoyed a great deal of attention from successive administration. This becomes interesting if it is realised that the road sub-sector had an average share of 60.9% of the total sectoral allocation to transport sector from the first to the forth plan periods. In fact, beyond the forth plan period, a cursory look at the transport infrastructural investment also revealed that road mode constitute more than 85% of the total Nigerian transport assets.

The implication of this is that the road mode becomes the prime mover of people, good and services across the entire landscape of the country. According to Onakomaiya (1992), the road mode account for about 90% of all internal movement of goods and persons in Nigeria. Despite the remarkable development of the road modes, a lot of effort is required in the provision and maintenance of road infrastructure in Lagos in particular. The increasing population and poor economic situation in the country make intra and intercity movement of people and goods rely heavily on the road mode of public transportation which is largely in the hand of the private sector (Oyesiku, 2002).

Ikorodu is located in the eastern part of Lagos State as Ayangburen Taxi Park is located in Ikorodu Motor Park, Lagos, Nigeria. The taxi park has been in existence since 1984 and is located at Ikorodu garage, within Ikorodu Central Local Government Area. The park operates under the supervision of Lagos State Taxi and Cab Operator Association. There are about 31 vehicles on average operating in the park, with carrying capacities of four passengers per vehicle. Each driver pays tax to the Lagos State government through the headquarters of taxi and cab operators association. This amounted to the sum of N3,750.00, which has been increased in December 2010 to N4,000 per annum. The drivers also buy tickets worth of N100 that gives them the licence to operate every day. The park started operation with about fare of 50kobo per trip but the present fare for the operation is N50 (from Ikorodu to Igbogbo) and N40 (from Ikorodu to Ebute).

METHODOLOGY

This study adopted a survey design. Data used for this study were obtained through primary source. The primary data collected were on the socio-economic characteristics and users' perceptions of the public (cab) transportation system. The study adopted the total number of passengers in each cab for single round trip of a particular day as the sample frame. The average capacity for a cab on these routes is four (4) passengers per cab and there were 31 cabs in the motor park on the average. The pilot survey showed that, an average cab travels 10 times daily (ten round trips), which puts the entire average number of passengers at 1240 for a particular day, since the cabs must be fully loaded before travel. The sample size is 10% of the sampling frame which translates to 124 questionnaires; this represented the total number of respondents (passengers) that were interviewed. The sampling technique used for this study was the judgemental sampling method. The sampling procedure entailed the identification of the motor park, the selection of the cabs at the motor park and conducting the survey using a structured questionnaire. This was conducted on passengers until a sample size of 10% was achieved. Descriptive and inferential analyses were used for data analysis. The descriptive analysis entailed the use of frequency tables in order to get a general understanding of the socio-economic characteristics and users' perceptions of the public transportation system. The inferential analysis entailed the use of spearman's rank correlation coefficient in order to inquire into the relationships between the socio-economic characteristics and users' perceptions of the public transportation system.

RESULTS AND DISCUSSION

Table 1: Gender of Respondents

Gender of Respondents		Frequency	Percent
Male	59	47.6	
Female	65	52.4	
Total	124	100.0	

Source: Field Survey 2011

Table 2: Age Distribution of Respondents

Age Distribution	Frequency	Percent
<20	15	12.1
20-29	37	29.8
30-39	24	19.4
40-49	22	17.7
50-59	19	15.3
60+	7	5.6
Total	124	100.0

Source: Field Survey 2011

Table 3: Level of Education of Respondent

Level of Education of Respondents	Frequency	Percentage
Primary	3	2.4
Secondary	36	29.0
Tertiary	73	58.9
Technical	9	7.3
Uneducated	3	2.4
Total	124	100.0

Source: Field Survey 2011

Table 4: Employment Status of Respondent

Employment Status of Respondents	Frequency	Percentage
Formal	31	25.0
Informal	40	32.3
Retired	7	5.6
Unemployed	9	7.3
Students	37	29.8
Total	124	100.0

Source: Field Survey, 2011

Table 5: Marital Status of Respondent

Marital Status of Respondents	Frequency	Percentage
Single	52	41.9
Married	66	53.2
Divorced	3	2.4
Separated	3	2.4
Total	124	100.0

Source: Field Survey, 2011

Table 6: Monthly Income of Respondent

Monthly Income of Respondents	Frequency	Percentage
<7500	31	25.0
7500-15000	21	16.9
15001-22500	34	27.4
22501-30000	15	12.1
30001-37500	6	4.8
37501-45000	7	5.6
>45000	10	8.1
Total	124	100.0

Source: Field Survey, 2011

Table 7: Occupation Categories of Respondent

Occupation Category of Respondents	Frequency	Percentage
Student	37	29.8
Company Worker	9	7.3
Self Employed	34	27.4
Civil Servant	22	17.7
Retiree	10	8.1
Others	12	9.7
Total	124	100.0

Source: Field Survey, 2011

Table 8: Safety of Service

Safety of Service	Frequency	Percent
Good	9	7.3
Fair	103	83.1
Poor	12	9.7
Total	124	100.0

Source: Field Survey, 2011

Table 9: Comfort of Service

Comfort of the Service	Frequency	Percent
Good	30	24.2
Fair	81	65.3
Poor	13	10.5
Total	124	100.0

Source: Field Survey, 2011

Table 10: Reliability of the Service

Reliability of the Service	Frequency	Percent
Good	28	22.6
Fair	90	72.6
Poor	6	4.8
Total	124	100.0

Source: Field Survey, 2011

Table 11: Accessibility of the Service

Accessibility of the Service	Frequency	Percent
Good	40	32.3
Fair	84	67.7
Total	124	100.0

Source: Field Survey, 2011

Table 12: Cost Efficiency of Service

Cost Efficiency of Service	Frequency	Percent
Good	85	68.5
Fair	39	31.5
Total	124	100.0

Source: Field Survey, 2011

Table 13: Correlations of Socio-Economic Characteristics and Users' Perceptions

	age	level of education	Marital status	monthly income	safety of service	comfort of service	reliability of service	accessibility of service	cost efficiency of service
gender									
age	1.000								
level of education	.181(*)	1.000							
employment status	-.555(**)	.031							
Marital status	.784(**)	-.010	1.000						
monthly income	.770(**)	.221(*)	.663(**)	1.000					
safety of service	-.179(*)	.116	-.179(*)	-.096	1.000				
comfort of service	.326(**)	.183(*)	.092	.200(*)	.323(**)	1.000			
reliability of service	.012	-.124	.017	-.135	.145	.110	1.000		
accessibility of service	-.035	.075	.021	-.104	.162	.488(**)	.385(**)	1.000	
cost efficiency of service .	214(*)	-.002	.418(**)	.190(*)	.085	-.097	.267(**)	.244(**)	1.000

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Gender of Respondents: As shown on table 1, the study revealed that the male respondents were 47.6%, while the female respondents were 52.4% respectively. This implies that there were more female than male during the interview in the study area.

Age Distribution of Respondents: Table 2 depicts that 12.1% of the respondents were less than 20 years, 29.8% were between ages 20-29 years, 19.4% were between ages 30-39 years, 17.7% were between ages 40-49 years, 15.3% were between ages 50-59 years and 5.6% were above 60 years. This revealed that majority of the respondents were between ages 20-49 years.

Level of Education: From table 3, the study revealed that, the level of the education of the respondents were primary 2.4%, secondary 29.0%, tertiary 58.9, technical 7.3%, and uneducated were 2.4% respectively. This implies that the majority of the respondents have above the secondary education (secondary, technical and tertiary).

Employment Status of Respondent: The study showed on table 4 that the employment status of the respondents were formal 25.0%, informal 32.3%, retired 5.6%, unemployed 7.3%, and students were 29.8% respectively. This revealed that majority of the respondents were employed in an informal organisation.

Marital Status of Respondents: The study shows on table 5 that the single respondents were 41.9%, the married were 53.2%, the divorced 2.4% and the separated 2.4%. This reveals that majority of the respondents were married.

Monthly Income Level of Respondents: From table 6 the study depicts that 25.0% of the respondents received less than N7500, 16.9% received between N7500-N15000, 27.4% received between N15001-N22500, 12.1% received between N22501-N30000, 4.8% received between N30001-N37500, 5.6% received between N37501-N45000 and 8.1% received above N45000 as their income respectively. This implies that majority of the respondents received between N7500-N30000 as monthly income.

Occupation Category of Respondents: The study showed on table 7 that the occupational category of the respondents were students 29.8%, company workers 7.3%, self employed 27.4, civil servants 17.7%, retiree 8.1%, and others 9.7%. This implies that majority of the respondents were students.

Passengers Perceptions about the Service

Safety of the Service: As shown on table 8, the passengers' perceptions about the safety of service of the taxi park revealed that it was good by 7.3%, fair, 83.1%, while 9.7% percived as poor. This implies that majority of the respondents perceived the service as fair in terms of safety.

Comfort of Service: The study showed in table 9 that the passengers perceived the comfort of the service as good 24.2%, fair 65.3% and poor 10.5%. This implies that majority of the respondents perceived the comfort of the service as fair.

Reliability of the Service: Table 10 revealed that 22.6% of the respondents perceived the reliability of the service as good, 72.6%, fair and poor as 4.8% respectively.

Accessibility of the Service: From table 11, the study depicts that 32.3% of the respondents perceived the transport service as good and fair as 67.7%. This implied that majority of the respondents perceived the accessibility of the service as fair.

Cost Efficiency of the Service: The study revealed on table 12 that 68.5% of the respondents perceived the cost efficiency of the service as good while 31.5% perceived the cost efficiency of the service as fair. This implied that majority of the respondents perceived the cost efficiency of the service as good.

Correlations of Socio-Economic Characteristics and Users' Perceptions of Public *Transport System:* As shown on table 13, there is a positive statistical significant relationship between education and comfort, which reveals that the higher the level of education, the higher the comfort of users. There are positive statistical significant relationships between age and cost as well as comfort, which reveals that the older the users of the service, the higher the fare. This can be as a result of the high demand. Also, the longer the patrons use the park, the more the comfort. This suggests that other passengers give preference to the elderly and this tends to improve their comfort. Besides, there is a negative statistical relationship between age and employment of respondents. This suggests that the higher the age of passengers, the lesser the available jobs.

CONCLUSION AND RECOMMENDATIONS

This study has examined the users' perceptions of intra-urban transport services using the users based method. It also analysed the relationships between the socio-economic characteristics and users' perceptions of the public transport services. It was established by the study that there is no regularity in the overall perceptions of the users of public transport system in the study area. This study therefore recommends that the adjourning roads should be rehabilitated by the concerned government. Cost of usage should be appropriately subsidized by the Local and State governments for the purpose of sustainability. The security issue of the parks should be approached by the park association's officials in order to ensure safety. The issue of comfort of users should be well taken by the administrative officers of the park. This in turn will definitely improve the level of patronage of users in the study area. This however suggests that the facilities in the study area should be well maintained.

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