



SERVICE QUALITY TECHNIQUES AND TRAVELERS' SATISFACTION WITH NIGERIA'S TRANSPORTATION SERVICES: A CASE STUDY OF CROSS RIVER AND AKWA IBOM STATES.

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ABSTRACT

There is no unanimously supported evidence indicating that the service quality improvement measures taken by transportation companies in Cross River State and Akwa Ibom State have actually improved travelers satisfaction. This study was undertaken to verify the manner in which service quality techniques (service reliability, service tangibility and service empathy) affects travelers' satisfaction with transportation services in Cross River and Akwa Ibom States, Nigeria. A cross-sectional survey research design was used during the research period. The population of the study was 400 passengers obtained from six selected transportation companies through a purposive sampling procedure. The transportation companies were: Cross lines Transport Company, Akwa-Ibom Transport Company (AKTC), Calculux Cruise Plc., Peace Mass Transit (PMT), ABC Transport Company and God is Good Motors (GIG). Taro Yamene formula was adopted for the determination of the study sample size. Multiple Linear Regression techniques was used for data analysis, with the aid of Statistical Package for Social Sciences (SPSS) version 23. Analysis of this study revealed that service reliability, service tangibility and service empathy has a significant effect on travelers' satisfaction with transportation services in Cross River and Akwa Ibom States. The study concluded that service quality techniques is a crucial tool for customer (passengers) satisfaction with transportation services. Hence, transportation companies should adopt the modern service quality techniques to enhance customers' satisfaction with their services.

Keywords: Service quality techniques, Traveler's satisfaction, Transportation services, Cross River State, Akwa Ibom State.



1.0

INTRODUCTION

The services rendered by transportation companies are vital to the proper functioning of the Nigerian society because the smooth movement of people and goods within a country is fundamental to economic growth and sustainability (Chacon-Hurtado *et al.*, 2020). Transportation companies ensure that people and goods are available at destination where they are needed to perform critical functions such as manufacturing, distribution, leadership and sales in order to generate revenue and wealth for a nation. Also, transportation is a fundamental bridge that links communities and people thereby fostering unity, mutual exchange, and development (Lee and Yoo, 2016). Accordingly, Nwafor and Onya (2019), who argued that recognition of transportation companies operating in Nigeria is important because these companies provide transportation services within and between states as well as logistics services for individuals and businesses. However, Guivao *et al.* (2016) opined that the intensive competition in the transportation industry and the important requirement for transportation companies to satisfy and retain customers is the ability to consistently deliver high-quality service.

Service quality is the difference between the actual performances of service and perceived service. It is the result of the comparison between the actual performance of a service consumed and customers perceived or expected service. The quality of a service is high if the actual performance of the service meets or exceeds customers' expected or perceived service. According to Chama and Ejem (2021), service quality has become more than just an outcome of the comparison between actual and perceived service. To service oriented enterprises like transportation companies, hotels and deposit money banks, service quality has become a competitive strategy on the basis of which firms engage with their industry rivals in pursuit of competitive advantages (Ndem *et al.* 2026). Similarly, Ruzhan *et al.* (2018) maintain that, service quality is a strategic tool used by transportation companies to attract customer's patronage and loyalty over a long-run, provided the quality of service delivered is consistently high. In this study, the focus was on three (3) dimensions of service quality used by transportation companies, namely: service reliability, service tangibility and service empathy. Service reliability is the ability of service provider to consistently, accurately and effectively deliver service in such a way that meet with the consumer's requirement (Eyanam *et al.* 2018). Service tangibility is that type of service quality that can be seen or felt without actually purchasing the service, such as the state of the facilities used in offering the service to a customer (Sakhaei *et al.*, 2013). However, Service empathy refers to the provision of caring and individualized attention to customers (Waseem, 2015). Moreover, Transportation companies are striving to improve on these and many other dimensions of their services quality (Razhan *et al.* 2018).

According to Bhasin *et al.* (2019), in advanced countries, modern technologies, methods systems, personnel and structures are being put in place in the transportation services delivered to customers. Commercial transportation companies like God is Good Mobility (GIGM), ABC Transport Limited, Peace Mass Transit (PMT), Calculux Cruise Limited, Akwa-Ibom Transport Company Limited (AKTC), Cross Lines Limited, etc., in some instance make effort towards quality services delivered to customers (passengers) by putting modern mechanisms in place (Emeka, 2019). Observably, transportation companies are introducing fleets of luxury buses installed with functional air-conditioning systems and television set to provide comfort to passengers in transit. The process of ticket booking for travelers is made easy through the introduction of an online booking platform and a mobile application software where passengers can secure or obtain their travelling ticket from the comfort of their homes, thereby preventing booking delay (Emeka, 2019). However, there is no unanimously supported evidence that

affirms that the service quality improvement measures taken by transportation companies in Cross River State and Akwa Ibom State have substantially improved travelers satisfaction. Hence, this study was undertaken to verify the manner in which service quality techniques (service reliability, service tangibility and service empathy) affects travelers' satisfaction with transportation services in Cross River and Akwa Ibom States, Nigeria.

2.0

LITERATURE REVIEW

2.1 Theoretical framework

The study was centered on the expectancy disconfirmation theory of services quality as propounded by Oliver (1980). The theory suggests that expectations, coupled with performance, lead to post-purchase satisfaction. This effect is mediated through positive or negative disconfirmation between expectations and performance (Figure 1). If a product/service out performs expectation, post purchase satisfaction will result (positive disconfirmation). If a product/service falls short of expectations, the customer is likely to be dissatisfied (negative disconfirmation). Disconfirmation theory declares that satisfaction is mainly defined by the gap between perceived performance and expectations. The theory expectation and perceived performance are the main independent factors. Customer satisfaction is the collective outcome of customer's perception, evaluation, and psychological reaction to the consumption experience with a product or service (Liu and Khalifa, 2003). It leads to repeat purchase, loyalty, retention, positive word-of-mouth communication, and increases long term profitability for the organization and customer (Wirtz, 2003).

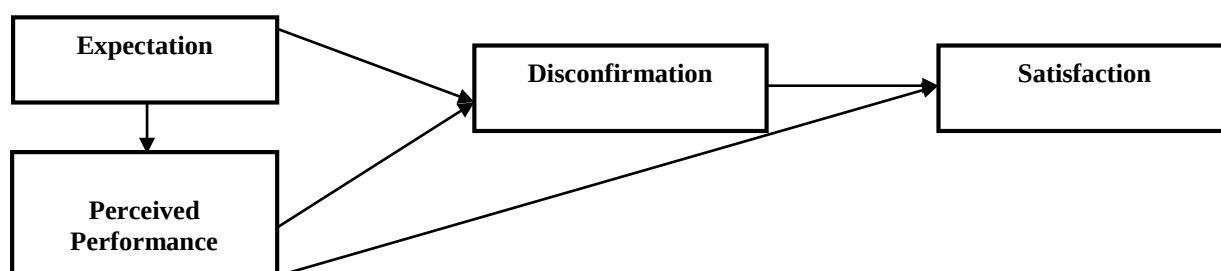


Figure 1. Expectancy disconfirmation theory (Oliver, 1980).

Expectation disconfirmation occurs in three (3) forms. The first, which is the Positive disconfirmation; occurs when perceived performance exceeds or is above expectations. Secondly, the Confirmation process; which takes place when perceived performance meets expectations. Thirdly, the Negative and positive disconfirmation; occurs when perceived performance does not meet and is below expectations. It is more probable for customers to be satisfied if the service performance meets (confirmation) or exceeds (positive disconfirmation) their expectation. On the contrary, customers are more likely to be dissatisfied, if service performance is less than what they expected (negative disconfirmation). Expectancy disconfirmation theory is criticized for limiting the parameter for measuring customer satisfaction to perceived service quality and actual service received. Expectancy disconfirmation theory is criticized for dwelling too much on customer expectation and desired while the cost of the expected service is overlooked. The theory is also criticized for encouraging customers to withdraw their patronage from service providers who could not meet customer's expectation at the first day of patronage. The relevance of the expectancy disconfirmation theory of services to transportation companies in Cross River and Akwa-Ibom State has a set of expectations from transportation companies. These expectations include

reliable transport service delivery; responsive service personnel; secure custody of passenger's luggage; safe transportation of passengers and goods; modernized transpiration facilities and comfortable transportation vehicles, among others. According to the theory of expectancy disconfirmation (Oliver, 1980), traveler's satisfaction with the services of transportation companies, such as God is Good Mobility (GIGM), ABC Transport Limited, Peace Mass Transit (PMT), Calculux Cruise Limited, Akwa-Ibom Transport Company Limited, and Cross Lines Limited are the outcome of the comparison between travelers expectations and actual services performance. This entails that positive disconfirmation (travelers satisfaction) occurs if actual transport service performance meets or exceeds travelers expectations. Conversely, negatively disconfirmation (traveler's dissatisfaction) occurs if actual transport service performance falls short of travelers expectations. This is illustration as shown on the diagram below (Figure 2):

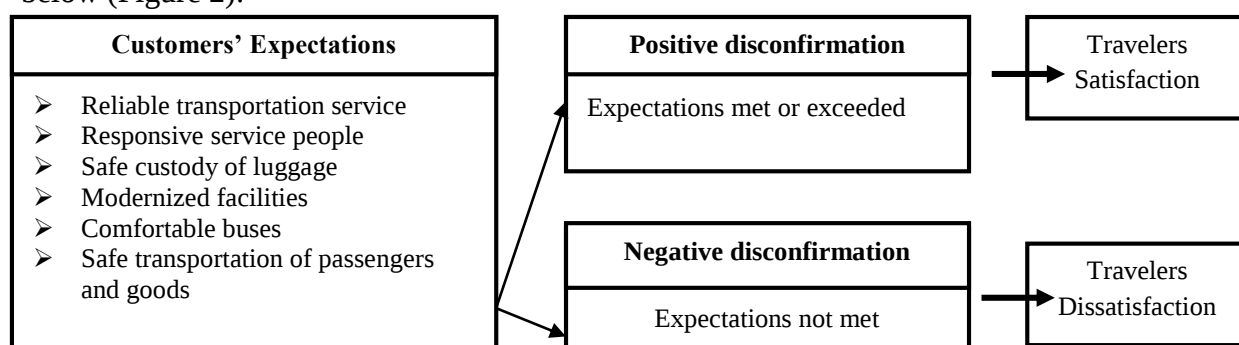


Figure 2. Application of the expectancy disconfirmation theory to the study (Oliver, 1980)

2.2 Conceptual framework

The study covered service quality and travelers satisfaction with (selected) transportation service companies in Cross River and Akwa-Ibom State. According to Anyadighibe (2014), the cause and effect relationship between the independent variable (service quality) and the dependent variable (travelers satisfaction), to that end, the service quality was decomposed into three (3) specific dimensions, namely; service reliability, service tangibility, and service empathy (Figure 3). The dependent variable, travels satisfaction was measured using travelers patronage, travelers repeat patronages and word-of-mouth recommendations. In the perspective of this study, service reliability entails the degree to which transportation companies can dependably and reliably deliver transportation services that meet traveler's desires. While, service tangibility focuses more on facilities used in offering the services. However, empathy is the kindness and individual attention given to travelers by transportation companies during service delivery (Niteeki *et al.* 2000). Through these dimensions, the study hypothesized that service quality has certain effects on travelers' satisfaction in Cross River and Akwa Ibom States. Accordingly, the conceptual model below (Figure 3) has been developed to represent the relationship between the independent variable and the dependent variable as hypothesized in the study.

2.2.1 Concept of service quality

Niteeki *et al.* (2000) defined service quality in terms of meeting or exceeding customer's expectations or as the expectation of service. Sarah *et al.* (2025) testified that service quality is a casual antecedent of customer satisfaction due to the fact that service quality is the variance between perceived performances of service meets or exceeds consumer's perceived performance of service. Consumers usually compare the actual service received to what they

expected from the services provider (perceived service) after the moment of service encounter. If the service performed meets or exceeds the expected service, quality service is said to have been delivered. But if the performed service does not meet the expectation, thus poor service has been delivered. The implication of high quality service delivery is that it helps to entice repeat purchases which may culminate in customer loyalty over time. Conversely, the implication of poor service delivery is customer dissatisfaction and spread of negative word-of-mouth, among other undesirable outcomes (Solomon, 2014).

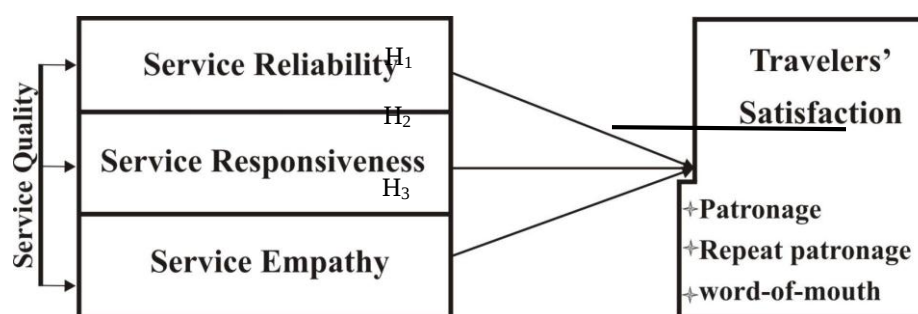


Figure 3. Conceptual model of the study (Niteeki *et al.*, 2000)

Offering consistently high-quality services is fundamental to growth, survival, and competitiveness in the service industry because, service in itself is intangible and can only be assessed after it is experienced. Therefore, service consumers expect certain features and conditions which indicate the quality of services they would receive. That is where service quality has an indispensable role to play. It is incontrovertible that one of the major determinants of customer's retention in the service industry is the quality of service delivery, which is why organizations in this industry are focusing more resources and attention to the quality of their services and how it can be improve sustainably (Umar and Jinai, 2012).

2.2.2 Transport and transportation

Transportation is the movement of goods and people from one place to another. Without transport the whole world would be stagnant and movement of goods and human beings would have been nearly impossible. Transportation is the movement of humans, animals, and goods from one location to another. Transport infrastructure consists of the fixed installations including roads, railways, airways, waterways, canals, and pipeline and terminals such as airports, railways stations, bus stations, warehouses, trucking terminals, and refueling depots (including fueling docks and fuel stations and seaports). The various means of transportation are grouped into four major parts; by land (road and rail transport); by sea (Canoe, engine boat, speed boat, ship, etc); by air (aero-plane, jets, helicopters, etc.); by pipeline (pipe laid on or under the ground). Road vehicles transportation; this include transportation by all sorts of vehicles such as cars, buses, trailers, tippers etc. People travel from one place to another through this means. However, it is assumed that cars travel faster than buses and the cost is higher than that of buses which is mostly used for commercial transportation. In Nigeria transportation companies use more of buses for commercial transportation than any other vehicle.



2.2.3 Concept of customer satisfaction

Customers derive satisfaction from a product or service based on whether their need is met effortlessly in a convenient way that makes them loyal to the firm. Hence, customer satisfaction is an important step to gain customer loyalty. Customer (passenger) satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectations. It is the number of customers, or percentage of total customers whose reported experience with a firm, its product, or its services (ratings) exceeds specified satisfaction goals. In a competitive market place where business compete for customers, customer satisfaction is seen as a key differential or/and increasingly has become a key element of business strategy (Kotler and Keller, 2010). In the view of Bellini *et al.* (2005) customer satisfaction is a metric used to qualify the degree to which a customer is happy with a product, service, or experience. This metric is usually calculated by deploying a customer satisfaction survey that asks on a five or seven-point scale how a customer feels about a support interaction, purchase, or overall customer experience, with answers between “highly unsatisfied” and “highly satisfied.” According to Bernazzani (2018), customer satisfaction is a reflection of how a customer feels about interacting with a brand, hence businesses and brands quantify this positive or negative feeling primarily using customer satisfaction surveys. These responses provide an idea of a firm’s average level of customer’s satisfaction along with a picture of customer loyalty, which predicts the likelihood of customer referrals. Daniel *et al.* (2014) observed that customer satisfaction is the degree to which a company’s customers are happy with their purchase or experience with the company. It indicates the fulfillment that customers derive from doing business with a firm. In other words, it is how happy customers are with their transaction and overall experience with a company. According to Swathi (2020), customer satisfaction is the measure of how the needs and responses are collaborated and delivered to excel customer’s expectation. It can only be attained if the customer has an overall good relationship with the supplier. In today’s competitive business environment customer satisfaction is an important performances exponent and basic differentiator of business strategies. Hence, the more customer is satisfied, the more is the business and the relationship with customer.

2.2.4 Service reliability and travelers’ satisfaction

Service reliability is the ability to perform the promised services dependably and accurately. Reliability means that the company delivers on its promises about delivery, service provision, problem resolutions and pricing. Customers/passengers’ want to do business with companies that keep their promises, particularly promises about the service outcomes and core service attributes. All companies need to be aware of customer’s expectations of reliability. Firms that do not provide the core service that customers think they are buying fail their customers in the most direct way (Warner, 2014). Service reliability basically emphasizes the degree to which a service provider is reliable and dependable and it can be manifested in the service quality and experience. These promises are either explicitly made; that is, through marketing communication messages by the service provider or implied; that is, from the customer’s perception of the service promised. Whether these promises are implied or expressly given, reliability is the measure of the service provider’s ability to meet them. The ability to meet or exceed promises is what makes it reliable and dependable.

According to Arlen (2008), reliability is doing what you said you are going to do when you say you were going to do it. Customers/passengers want to count on their providers how they value reliability. It is three times more important to be reliable than have shiny new equipment or flashy uniforms. The degree to which a service provider is reliable determines the degree to which customers want to interact with the service provider. Service reliability dimension refers

to how the company is performing and completing their promised service, quality and accuracy within a given set requirement between the company and the customer. Reliability is just as important as good firsthand impression, because every customer wants to know if their supplier is reliable and can fulfill the set requirements with satisfaction with the set time. A reliable service provider is one that has the capacity to effectively deliver the promised services as and when expected to customers. Timely and effectively delivery of services is an important ingredient in encouraging customer satisfaction and loyalty (Oluwafemi and Adebisi, 2018). As a service quality dimension, service reliability is so important that consistently delivery reliable and dependable services to customers is considered as the gateway to achieving customer satisfaction and encouraging customer retention over a long-term period (Iddrisu *et al.*, 2015). This premise is further affirmed by the study of Adeniran and Adekunle (2016) revealed that service reliability has a significant relationship with customer satisfaction in Nigerian airports. The premise is also supported by the study of Aremu *et al.* (2018) which found that service reliability had a significant positive relationship and influences on customer satisfaction in the Nigerian banking industry.

2.2.5 Service tangibility and travelers satisfaction

Service tangibility relates to the physical aspects or evidence of a service as well as the state of facilities used in offering. Hence, physical aspects of transportation service industry include; appearance of equipment and fixtures, physical facilities, materials associated with the service, appearance of personnel and communication materials, convenience of physical facilities, ambience of buses, parking space, layouts, etc (Daniel *et al.*, 2014). They added that, the appearance of the facilities and the convenience offered to the customer by the layout of physical facilities is also taken into consideration. The more customers appreciate the physical aspects of a service oriented companies, the higher the overall evaluation of service quality is (Bellini *et al.*, 2005). Bonn and Mathews (2007) also found out that the design of the physical setting and its associated sensory attributes can have a significant effect on customer satisfaction and on a customer's re-patronage decisions. The professional appearance of staff is an important means of tangibilizing the intangible service products. Furthermore, the tangibles of a service or service provider can be represented by the physical appearance of employees and other physical infrastructures. Kalcheva and Weitz (2006) found that the interior of a business environment has the potential to influence consumers' mood/states in both service encounters and point-of-purchase situations. Their study also revealed that, interior design of a bus correlated with customers' moods and it is an evidence to indicate that design-related factors of a bus can have powerful effects on customer's patronage behavior. According to Chama and Ejem (2021), the attributes of service quality variables such as service tangibility in the form appearance of physical facilities, equipment and employees influence customer's satisfaction of transportation services. Negi (2009) suggests that customer-perceived service quality has been given increased attention in recent years, due to its specific contribution to business competitiveness, developing satisfied, and loyal customers. This makes service quality a very important construct to understand by firms by knowing how to measure it and making necessary improvements in its dimensions where appropriate especially in areas where gaps between expectations and perceptions are wide. Douglas and Connor (2003), found out that consumer who has developed high perception of service tangibility has become more demanding and less tolerant of assumed shortfalls in service quality and identify the intangible elements (inseparability, heterogeneity and perishability) of a service as the critical determinants of service quality perceived by a customer. It is very vital to note here that, service quality factor such as tangibility is not only assessed as the end results but also on



how it is delivered during service process and its ultimate effect on consumer's perceptions (Douglas and Connor, 2003).

2.2.6 Service empathy and travelers' satisfaction

Service empathy means to provide care and individualized attention to customer. It entails how polite and caring a service provider is and its ability to provide individualized service attention to service customers. It measures how concerned, polite, caring, and focused a service provider is to the customer. An empathetic service provider is not just focused on making sales but on ensuring customer satisfaction through gestures of care and concern (Waseem, 2015). Empathy refers to the application of 'human touch' to the offer of services. A customer assesses the service provider on whether he or she is willing to go beyond the minimum requirements for good service delivery and can deliver something extra. Empathy means putting oneself in another's position. When a contact person empathizes, it means that he will deliver something based on what he could ordinarily expect from another person. If this expectation is ideal, he will provide quality service to the customer (Aremu, *et al.*, 2018).

In this competitive world, customers' requirement are rising day after day and it is the duty of the company to meet the demands of customers to the maximum else customer who do not receive individual attention will search elsewhere. In some countries, it is essential to provide individual attention to show the customer that the company does its best to satisfy his needs. Empathy in addition, increases the trust and confidence of the customers and at the same time, increases their loyalty (Warner, 2014). Empathy in service entails providing customers with care, individualized attention, personalized service and polite treatment by service provider. It gives customers the feeling of worth, value and creates the perception that this service provider cares for the customers' wellbeing. This is a basic ingredient necessary to improve customer satisfaction and retention by a service provider (Oluwole, 2017). Showing kindness and individualized attention to customers during service delivery is the hallmark of a successful service provider. Through the display of empathy in service delivery, the service provider demonstrates to the customers that the organization values and cares for the customer and is committed to satisfying their needs. Empathy also enables the service provider to treat and interact with customers in ways that encourage customer satisfaction. The foregoing viewpoint is corroborated by the study of Solomon (2014) revealed that empathy had a significant positive correlation and impact on customer satisfaction in the Kenyan airline industry.

2.3 Empirical review

Service quality and customer satisfaction has received a great amount of attention by researchers around the world who have conducted scores of studies aimed at statistically demonstrating the cause and effect relationship between service quality dimensions and customer satisfaction in a host of industries including banking, transportation, telecommunications and hospitality. This unit is devoted to reviewing some of these empirical studies in order to assess and explore the methodology findings and generalizations of previous researches. Hence, the following studies are the focus of the empirical review. In an empirical study carried out by Oyeobu *et al.* (2014) on an assessment of effects of service quality on performance of a Road Transport Company in Nigeria. They stated that, a review of literatures on service quality shows that no study has been carried out on its application in the Nigerian Transport sector hence the need for this research. To assess the situation, questionnaires were administered to customers of ABC Transport Plc. within its Amuwo Odofin Terminal, Lagos. A random and convenient sampling technique was used. The instruments used were questionnaires and personal interview. The questionnaires were developed by generating 30



items after a thorough understanding of conceptualization and operationalization of service quality. The data Analysis method used was descriptive and inferential statistics. Our findings in this study show that there is strong positive relationship between tangibles, reliability, empathy and customer satisfaction. However, the effect of assurance on customer satisfaction is very negligible. There is however a negative relationship between responsiveness and customer satisfaction. 99% of total success achieved in customer satisfaction is accounted for by tangibles, reliability and empathy. It was therefore recommended that staff should take time to assure commuters of their services which will lead to customer satisfaction. It is recommended that further study should be carried out to measure the effect of responsiveness on customer satisfaction.

Akeem *et al.* (2014) conducted a study on public transport service and passengers' satisfaction in Kogi State: an empirical investigation. The study was aimed at examining the effects of public transport service quality on passengers' satisfaction in Kogi State. The study examined the effect of perceived unreliability of transportation service, service frequency, fare level, comfortability, and perceived safety uncertainty on the perceived satisfaction of passengers in Kogi State. Research survey design was adopted. The sample size of the study was 362. Data were analyzed using descriptive and Binary Logit Regression Model. Findings show that perceived unreliability of transportation service, fare level, and comfortability significantly relate with the perceived satisfaction of passengers in Kogi State. The study concluded that there are some variables that the users of public transport service are considering for their satisfaction. The study recommended that drivers/transportation companies should ensure reliability of transportation service, moderate fare level, and boost comfortability (service tangibility) in order to achieve the satisfaction of passengers in Kogi State. Furthermore, Adeniran and Adekunle (2016) conducted a study on "Is service quality a correlate of customer satisfaction? Evidence from Nigerian Airports". The study aimed to determine the relationship between service quality dimensions (tangibles, reliability responsiveness, assurance, and empathy) and customer satisfaction in Nigerian airports. Primary data was obtained from 425 air passengers at Lagos, Abuja, Kano and Port Harcourt airports with the aid of a structured and closed-ended questionnaire. Data analysis was done using statistical tools such as regression analysis and descriptive statistics. Consequently, the findings of the study revealed that tangibles, responsiveness, empathy, assurance, and reliability had significant relationships with customer satisfaction in Nigerian airports. Hence, the study concluded that service quality is significantly related with customer satisfaction in Nigerian airports.

Finally, an empirical study carried out by Oluwole (2017) on critical factors determining public transport access level in Abuja federal capital territory of Nigeria. The study aims to investigate the key factors which determine access to public transport service in Abuja, the Federal Capital Territory (FCT) of Nigeria. Data were collected based on ten public transport access levels indicators namely: Safety, transport fare, bus availability, comfort level, speed on transit, delays at parks, bus stops and on transit highway, adherence to estimated arrival time/adherence to estimated departure time, reliability of bus schedules, and bus overloading. Data on these factors were collected from administration of questionnaires to 859 public transport commuters in 17 major road transport terminals across the FCT. The data were analyzed using the factor analysis, correlation, and regression method. The result shows that three factors namely, adherence to estimated departure time, fare charged by the operators, and reliability of bus schedules on routes together explained about 54% of the cumulative total variance, leaving the remaining 46% to seven other factors and residuals. The Spearman's rank correlation matrix for all the variables indicates that they were all positively correlated at various degrees. The standardized co-efficient of the regression analysis revealed that, bus service reliability is the

major determinant of public transport access level in the study area. In order to raise the current access level of commuters to public transport in FCT, operators must improve on the level of service in line with the three critical factors which the study has identified.

3.0 METHODOLOGY

This study was carried out within the month of June, 2025 to May, 2026. The research design adopted for the study was cross-sectional survey research design. This research design was appropriate for the study because the population of the study focused on selected transportation service companies in Cross River State and Akwa-Ibom State. The target population for the study included all passengers of selected transportation companies in Cross River and Akwa-Ibom State. The companies were Cross Lines Transport Company (CLTC), Akwa-Ibom Transport Company (AKTC), Calculux Cruise Plc (CCPlc), Peace Mass Transit Limited (PMT), ABC Transport Company (ABCTC) and God is Good Motors Limited (GIGM). From the records these Transportation companies, it was gathered that between 12,549 and 13,000 passengers patronize the six (6) companies on monthly basis.

The researcher employed the Taro Yamene (1973) formulae to statistically determine the sample size for the study, from the estimated population obtained, 400 (four hundred) passenger were considered through a purposive sampling procedure (Table 1), Including 65 from CLTC, 85 from AKTC, 70 from CCPlc, PMT 75, ABCTC 55, and 50 from GIG respectively. The instrument used to collect primary data was a 5-point Likert Scale of Strongly Disagree (SD=1), Disagree (D=2), Undecided (U=3), Agree (D=4) and Strongly Agree (SA=5). The data obtained were coded and entered into the Statistical Package for Social Sciences (SPSS version 23) for the reliability testing. The reliability result reveals that all measurement scales on the questionnaire produced a Cronbach Alpha coefficient that was greater than the benchmark of 0.7. Hence, the instrument was considered reliable and adopted for field administration and data collection in this study. The data was analyzed using the Multiple Linear Regression with the aid of Statistical Package for Social Sciences (SPSS) version 23. Regression model is given as:

$$Y = a + \beta x + e$$

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where:

X_1 and X_2 are the independent variables.

a is the Y- intercept.

b_i is the net changes in Y for each unit changes in X_i holding X_2 constant.

Table 1. Sample distribution

S/N	Transportation company	Sample size
1.	Cross Lines Transport Company (CLTC)	65
2.	Akwa-Ibom Transport Company (AKTC)	85
3.	Calculux Cruise Plc. (CCPlc.)	70
4.	Peace Mass Transit Limited (PMT)	75
5.	ABC Transport Company (ABCTC)	55
6.	God is Good Motors Limited (GIGM)	50
Total		400

Field survey, 2025.

4.0

RESULT AND DISCUSSION

4.1 Interpretation of results of hypothesis

The regression tables (Table 2, 3 and 4) shows service quality tools (service reliability, service tangibility, and service empathy) being evaluated for its ability to predict travelers satisfaction of transportation services in Cross River State and Akwa-Ibom State. Table A which is the model summary reveals that the relationship between both variables (0.768) is 76.8 percent (as seen in the R column). The adjusted R² value (0.591) signifies that up to 59.1 percent of travelers' satisfaction is increased by service quality technique (service reliability, service tangibility and service empathy) when other variables are held constant. The F-test (527.876 $p < 0.05$) of the relationship in Table B indicates that the overall prediction of the independent variable to the dependent variable is statistically significant, therefore, the regression model is a good fit for the data and provides sufficient evidence to conclude that service quality techniques (service reliability, service tangibility and service empathy) significantly influence travelers satisfaction with transportation services in Cross River State and Akwa Ibom State. Table C is the coefficients table, which provides the necessary information on the capability of service quality techniques to predict travelers' satisfaction with transportation services in Cross River State and Akwa Ibom State. This help us know which tool contribute significantly to the model. From the table, it can be seen that all three service quality techniques (service reliability, service tangibility and service empathy) significantly and positively influence travelers satisfaction with transportation services in Cross River State and Akwa Ibom State, as they all have p-values less than 0.05 significance level as well as positive t-values. Additionally, from the beta column it is seen that service tangibility made the strongest unique contribution to the model (Beta= 85.5 percent), followed by service empathy (Beta= 76.8 percent) and service reliability (Beta= 67.9 percent) respectively. Therefore, we reject the null hypothesis and conclude that service quality techniques (service reliability, service tangibility and service empathy) significantly influence travelers' satisfaction of transportation services in Cross River State and Akwa Ibom State.

Table 2. Model summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768 ^a	.591	.589	.85257

a. Predictors: (Constant), service reliability, service tangibility and service empathy

b. Dependent Variable: Travelers'

Field survey, 2025.

Table 3. ANOVA ^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	383.702	3	383.702	527.876	.000 ^b
	Residual	266.038	366	.727		
	Total	649.739	367			

a. Dependent Variable: Travelers' satisfaction

b. Predictors: (Constant), service reliability, service tangibility and service empathy

Field survey, 2025.

Table 4. Coefficients a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	1 (Constant)	.513	.104		4.943	.000
	Service reliability	.509	.049	.679	10.436	.000
	Service tangibility	.859	.027	.855	31.548	.000
	Service empathy	.770	.034	.768	22.976	.000

a. Dependent Variable: Travelers' satisfaction.

b. **Field survey, 2025.**

4.2 Discussion

The test of hypothesis revealed that service quality techniques (service reliability, service tangibility, and service empathy) has significant effect on travelers satisfaction of transportation services in Cross River and Akwa-Ibom State-Nigeria. The outcome of this study was supported in an empirical study carried out by Oyeobu *et al.* (2014) on an assessment of effects of service quality on performance of a Road Transport Company in Nigeria. They stated that a review of literatures on service quality shows that no study has been carried out on its application in the Nigerian Transport sector hence the need for this research. To assess the situation, questionnaires were administered to customers of ABC Transport Plc within its Amuwo Odofin Terminal, Lagos. A random and convenient sampling technique was used. The instruments used were questionnaires and personal interview. The questionnaires were developed by generating 30 items after a thorough understanding of conceptualization and operationalization of service quality. The data analysis method used was descriptive and inferential statistics. Our findings in this study show that there is strong positive relationship between tangibles, reliability, empathy, and customer satisfaction. However, the effect of assurance on customer satisfaction is very negligible. There is however a negative relationship between responsiveness and customer satisfaction. 99% of total success achieved in customer satisfaction is accounted for by tangibles, reliability, and empathy. It was therefore recommended that staff should take time to assure commuters of their services which will lead to customer satisfaction. It was recommended that further study should be carried out to measure the effect of responsiveness on customer satisfaction. In a similar study conducted by Kalcheva and Weitz (2006) they found that the interior of business environment has the potential to influence consumers' mood/states in both service encounters and point-of-purchase situations. The study also revealed that, interior design of a bus correlated with customers' moods and it is an evidence to indicate that design-related factors of a bus can have powerful effects on customer's patronage behavior. Bonn and Mathews (2007) found out that the design of the physical setting and its associated sensory attributes can have a significant effect on customer satisfaction and on a customer's re-patronage decisions.

The professional appearance of staff is an important means of tangibilizing the intangible service products. Furthermore, the tangibles of a service or service provider can be represented by the physical appearance of employees and other physical infrastructures According to an empirical study conducted by Akeem *et al.* (2014) on public transport service and passengers' satisfaction in Kogi State: an empirical investigation. The study was aimed at examining the effects of public transport service quality on passengers' satisfaction in Kogi State. The study examined the effect of perceived unreliability of transportation service, service frequency, fare level, comfortability, and perceived safety uncertainty on the perceived satisfaction of passengers in Kogi State. Research survey design was adopted. The sample size of the study was 362. Data were analyzed using descriptive and Binary Logit Regression Model. Findings



show that perceived unreliability of transportation service, fare level and comfortability significantly relate with the perceived satisfaction of passengers in Kogi State. The study concluded that there are some variables that the users of public transport service are considering for their satisfaction. The study recommended that drivers of transportation companies should ensure reliability of transportation service, moderate fare level and boost comfortability (service tangibility) in order to achieve the satisfaction of passengers in Kogi State.

5.0 CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Service quality is a casual antecedent of customer satisfaction, due to the fact that service quality is the difference between perceived performances of service meets or exceeds consumer's perceived performance of service. Consumers often compare the actual service received to what they expected from the services provider (perceived service) after the moment of service encounter. If the service performed meets or exceeds the expected service, quality service is said to have been delivered. But if the performed service is short of expectation it can be said that poor service has been delivered. The implication of high quality service delivery is that it helps to entice repeat purchases which may culminate in customer loyalty over time. Thus, the implication of poor service delivery is customer dissatisfaction and spread of negative word-of-mouth communication, among other undesirable outcomes. The study has established that service quality variables such as service reliability, service tangibility, and service empathy has significant effect on travelers' of transportation services in Cross River and Akwa-Ibom States.

5.2 Recommendations

The researcher recommended that transportations companies should adopt these service quality techniques (service reliability, service tangibility, and service empathy) as strategy to enhance travelers' satisfaction with the services they offer.

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5.2 Conflicts of interest

The authors had no conflict of any form throughout this research.



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