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ASSESSMENT OF AIRPORT SERVICE QUALITY IN NIGERIA

Ugo James Chinonso[1] and Ejem A. Ejem[2]
Department of Transport Management Technology,
Federal University of Technology, Owerri, Nigeria
Email[1]: jamesugo2@gmail.com, Email[2]: ejemflagospel@yahoo.com

ABSTRACT*: The study assessed the airport service quality (ASQ) in Nigeria using the SERVQUAL Model from both the perspectives of the airlines and air transport passengers as major consumers of airport services in Nigeria. Using the Nnamdi Azikiwe International Airport (NAIA), Abuja and Murtala Muhammed International Airport (MMIA), Lagos; as case studies, we used questionnaire as survey instrument to elicit the service quality expectations and perceptions of airlines and air passengers in both airports. SERVQUAL model was used to determine the airport service quality which was subsequently compared. The results of the study indicates that from both perspectives of the airlines and air passengers, the airport service quality (ASQ) in both airports are low and cannot meet the service quality expectations of both airlines and passengers. However, the results show that the MMIA, Lagos offers higher quality of airport services than NAIA, Abuja.*
KEYWORDS: service quality, airline, airport, passengers, Nigeria

INTRODUCTION

The theory of consumer behaviour suggests that consumers drive is always geared towards utility maximization. Utility in this sense is the ability of a product and /or service to satisfy the needs of consumers. The total satisfaction (total utility) derived from the consumption of the services and/ or goods is a correlate of and depends on the quality of service and/or goods (Aleksandra, 2017). The maximization of the utility derivable or extent of satisfaction derivable from the consumption of goods and services is a correlate of the quality of service or goods offered. For intangible products, service as produced in service organizations such as airports and seaports, we talk about the quality of service.

According to Oxford Advanced Learners' dictionary, the term quality refers to the standard of an object of reference in comparison with similar objects or things. It is therefore a measure of the standard an object, goods and/or service is perceived, expected to have or has and which differentiates it from or equates it with that of similar of substitute goods and services in the economy. Adeniran et al (2018) notes that the quality of service refers to the standard ascribed to service by the service consumers and which elicits consumer loyalty or disloyalty to the service type and brand. In the case of airport service quality, Stopford (2008) defines an airport as a place at which the transfer of passengers and cargo to and from airways and air routes occurs. The transfers are made to and from airplanes. The airport may be handling only the transfer of passengers(passenger port) or cargo in which case it is a cargo airport, or a combination cargo/passenger airport (handling the transfer of both passengers and cargo).Airports thus

represent terminals and nodes where air transport services are provided to consumers of aviation as a mode of transportation. Thus, airport basically provide aviation terminal services to both public and private aviation service consumers and terminal operators such as airlines as air transport service providers offering the actual air lifting (transport) of passengers and freight (air freight) to consumers for profit, cargo handling companies, road transport operators, passengers and a host of other public agencies and private organizations operating in the airports. While the airlines provide the actual transportation services to and from airports as afore mentioned, they depend on the airports as modes and terminals for harnessing resources for flight operations and for terminal services. Airports thus, while serving the passengers and shippers, also provide terminal and regulatory services and are not involved in actual flight operations. The implication is that the quality of the services offered by airports also influences quality of the services offered by the airlines operating within the airport environment (Ines, Julije and Zdenka, 2008; Udo, 2018). It is important to note that passengers, shippers, airlines, and public agencies in the airports constitute the bulk consumers of airport services. Thus, airports service quality can be assessed as it concerns the airport users. It can be viewed as the attribute of the services offered by airports to ably meet the standard acceptable to and/or expectations of the airport users as consumers of airport services (Jafar, Sobhan and Neda, 2016).

Airport service quality is defined as the perceived rating or judgment, that airport service consumers place on the consumed services by comparing their expectation about airport services with the services they actually perceived to receive (Gronroos, 1984, Amy and Amrik , 2003). However, the services customers actually receive or perceived to receive is dependent on the level of satisfaction derived from the consumption; we thus define airport service quality as the judgment or rating that airport service consumers develop and/or place on consumed services by comparing their expectation about services with the actual satisfaction derived (Apostolos, Petros, and Dimitris, 2013). Agnes (2002) argued that although evaluation of service quality will help airport customers to form an attitude towards airports as service providers, customer satisfaction is not obvious and satisfaction level is based on how well the delivered service meets customer's expectation. The implication is that airport service quality like service quality in other sectors is a dependent variable; dependent on two key variables namely: (i) Expectation of airport service consumers (customers), and; (ii) Perceived/actual airport services consumers received from the airport (which is measured based on utility and/or satisfaction rate). Jafar et al (2016) posits that when the expected service is higher than perceived service, service is said to be of low quality; and when service expected is less than perceived service, overall service quality is considered to be high. Thus, we define airport service quality as the gap (difference) between expectations from airport services and the perceived services by consumers of airport services. Airport service quality is best assessed from airport customers' perspectives.

Since some airports too are public corporations and sources of revenue to the government while some airport terminals have been privatized and/or concessioned to profit oriented private organizations; innovative management strategies demands that the demand for airport services and/or usage must be anticipated and projected to increase. Competition for patronage should also be the basis for airport development and growth. This requires that the airport in order to achieve higher anticipated demand for airport services, passenger, freight and air traffic must have

produced and offend qualitative service, qualitative enough to satisfy and/or maximize the utility of airport service consumers. Inability of any airport terminal to offer qualitative service to the service consumers may tend to shrink the demand for passenger travels and air freighting through the airport terminals as well as reduce revenue yields, create feelings of dissatisfaction among users and dampen the public image of the airport. This may not only affect the airport and the management negatively, it will also have a back lash effect on the airlines operating through the airports as demand for passengers travels and air freighting may suffer diminishing returns in this era of competitive business strata. In a competitive setting therefore where there exist multiple airports competing for passenger and cargo (freight) traffic to handle and airlines to participate in aviation service provision to the Nigeria population; there is need for airports to provide higher quality of service; higher in standard than those of competing airports. The ability of airport to provide a quality of service that maximizes service consumers satisfaction above those of competing airport will stand her out as a better choice for air travels and elicit loyalty from the consumers of airport services to the benefits of the airports, the airlines operating from the airports and other service providers within the location of the airport..

In Nigeria currently, there exist about four (4) key international airports handling international as well as domestic flights and passengers. These include: the Murtala Muhammed International Airport (MMIA), Lagos; Aminu Kano International Airport, Kano; Nnamdi Azikiwe International Airport (NAIA), Abuja; and Port-Harcourt International Airport. The other airports handle domestic flights originating and ending within Nigeria. Statistics of passenger demand for services and airport usage in the International Airports over the years is skewed in favour of the Murtal Muhammed International airport, Lagos and the Nnamdi Azikiwe International Airport, Abuja. The preference of the two airports by airport service consumers (airlines and passenger) over the others may be influence by the quality of service being rendered in the airports among other things like Government regulations. Most studies of airport service quality in Nigeria in the past focused more on passenger's perspectives with gross disregard to airlines as major consumers of airport services too. Understanding the service quality offered in the airports is therefore from both perspectives is a basic requirement for improving performance on the part of the airport authorities, and a decision metrics for choice between alternative airports for air travelers. Also positioning Nigeria as an aviation hub in the West African sub-region will suffer setback in a situation that the service quality remain poor in comparison with that of airports in neighboring West African States; thus the only basis for improving the current performance of the available international airports in Nigeria with regard to service quality, is the understanding of the current level of airport service quality. The current study is therefore cast to assess and compare the airport service quality rendered in the International Airports in Nigeria using NAIA Abuja and MMIA Lagos, Airports as case studies and basis for service quality improvement. From the perspective of the airlines, this is to be carried out from the perspectives of both the airlines operating in the airports and the passengers that travel via it as consumers of the bulk of airport services in Nigeria.

REVIEW OF RELATED LITERATURE

Service quality is the perceived rating or judgment, that service consumers place on the consumed product by comparing their expectation about services with the services they actually perceived to

receive (Gronroos, 1984. But the services they actually receive or perceive to receive is dependent on the level of satisfaction derived from the consumption; we thus define service quality as the judgment or rating that service consumers develop and/ or place on consumed services by comparing their expectation about services with the actual satisfaction the derived. Airport service quality is therefore the judgment or rating that airport service consumers (air passengers, airlines) develop and/ or place on consumed airport services by comparing their expectation about services with the perceived/actual satisfaction derived. Adeniran et al (2018) argued that although evaluation of service quality will help customers to form an attitude towards service provider, customer satisfaction is not obvious and satisfaction level is based on how well the delivered service meets customer's expectation. The implication is that service quality is a dependent variable; dependent on two key variables namely: expectation of customers, and; perceived/actual services consumers received from the organization (which is measured based on utility and/or satisfaction).

Gronoros (1984) posits that when the expected service is higher than perceived service, service is said to be of low quality; and when service expected is less than perceived service, overall service quality is considered to be high. Grononos (1984) notes that service quality is a significant differentiator and competitive weapon possessed by frontline service providers and organizations and which marks such organizations out as leading service providers with higher demand for service consumption than other service providers in the same or similar line of trade and/ or service. Aleksandra (2017) state that service quality improvement by firms is a tool for attainment of frontline strong position in a given market and for distinguishing the services of a given firm from those of rival firms providing similar lines of service products. Thus improving service quality for airport services by airport authorities enables such an airport to capture larger market share of the passengers demanding for air transport services within the market location over and above rival airports competing for the same air passenger traffic. This suggest that airport service quality has a relationship with the customer satisfaction such that the value attached to the quality of service by airport users as consumers of airport services to the services offered by airport authorities as producers of airport services serves as a measure of the quality of service consumed and offered. By implication, while the airport authorities may assign a possibly high valued to the quality of services they offer based on cost into the production of the services; it is best to assess the quality of airport services from the passengers perspectives as it is only the consumers of products that can best rate the level of satisfaction they derived from the consumption of such services; from the perspective of the airport service consumers therefore, service quality has direct relationship on the level of utility derived and as such consumer satisfaction and perspectives should be the basis for its measurement rather than on the cost input into service production. We may thus define airport service quality as the valued assigned by airport service consumers to the various airport products and services based on the level of utility derived from the consumption of such services. It is the level and extent (perceived or actual) at which the services offered by airport are able to meet and satisfy the taste and needs of the airport users as consumers of airport services.

It is import to note that service quality serves as tool for differentiation among and between the products and services of firms; leveraging customer satisfaction and value by firms; market share improvement and profitability projection; as well as for developing marketing, corporate and

operating strategies (Gronroos, 2000). Quality according to Parasuraman et al., (1985) is a subjective concept and it is difficult for the customer to evaluate service quality than product quality. There exist three key features of services which seeks to render the concept of service quality an abstract and elusive concept. These include: intangibility, heterogeneity and inseparability. However, since the consumers of services pay financial considerations in terms of service costs and taxes in order to get service just as in purchase of tangible products; it becomes rational that consumers of service must rate and /or at least be able to rate the quality of the services consumed based on their expectations before services and satisfaction after services are consumed. In this regard, Ghauri (2004) gave five determinants which service consumers particularly consumers of airport services consider in evaluating airport service quality. These include service quality determinants such as reliability, responsiveness, empathy, tangible and assurance. These supports the opinion raised in the SRVQUAL model. Ghauri (2004) further states that the perception of customers and evaluation of service quality may be different for different consumers' of airport services due to different needs and wants. This is so because what is satisfactory for one consumer of airport services may be unsatisfactory for another consumer. Where all consumers of services are satisfied by the quality of service, the level of satisfaction and /or utility may differ (Ghauri, 2004).

Due to rapid change in needs and wants as well as privatization and concessioning contracts which has evolved as best practices for both seaports and airport management in the globalized World; firms, airline and even airports are motivated to develop consistently enduring standards for measuring the quality of services that they offer. The practice of measuring service quality on regular basis is to help evaluate and analyze the needs and requirements of customers. These measures will also facilitate firm to provide service quality that encounters customer expectations, by improving all determinants of service quality. Several researchers have in the time past suggested various models for measuring service quality. For example Kang, (2006), Gronroos (1990) and parasuraman et al., (1985) note that service quality is based on multiple dimensions. There is however no agreement on what the exact nature and content of these dimensions is or should be (Brady and Cronin, 2001).

One may opine that a standard model for measuring service quality must include the key dimensions of outcome quality, process quality and service environment as suggested by the various authors reviewed earlier. Seth and Desh (2006) wrote that a Gap model of service quality measurement referred to as the 'SERVQUAL' model has received adequate support and wide acceptance from researchers in various fields of the service industry. The skeleton of the SERVQUAL model captures and provides for consumer expectations and perceptions encompassing statements for five key identified service quality dimensions having been reduced from a set of about ten correlated attributes as identified thus: Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding the customer and Tangible. These set of ten determinants of service quality were later refined to have only five high order dimensions which subsume previous ten as shown Table 1.

Table 1: Five Service Quality Determinants/Attributes

Determinant	Description
Reliability	ability to deliver or perform the promised services dependably and accurately
Responsiveness	Willingness to help customers and provide prompt services.
Assurance	Concerned with the knowledge and courtesy of employees and their ability to inspire trust and confidence.
Empathy	Caring and paying individualized attentions/services to each customer.
Tangible	Physical features of service as appearance of equipment, facilities, personnel and communication material.

Source: Modified from Parsuraman et al., (1988)

This skeleton may be adapted and some more service quality dimensions beyond the generally identified five added to fit the need of the specific industry. Seth and Desh (2006) note that SERVQUAL is a valid and reliable model enabling service providers to understand the customer's expectations and perceptions about service quality and thus improve services. According to Seth and Desh (2006), SERVQUAL also consist of a multiple item scale that consists of 22 statements which measures customer expectations and perceptions along five dimensions of reliability, assurance, tangible, empathy and responsiveness earlier identified. SERVAQUAL in its conceptual model operates on the principle that customer's perception of service quality is the outcome of the gap between customer's expectations and perceptions. Parasumna et al., (1985) developed the Gap model of service quality to identify where gap exist and to what extent such gaps exist. The five gaps are as identified in Table 2.

Table 2: Definition of Gaps 1 to 5

Gap	**Description**
Gap 1	Gap between the expectations of service consumers and management perceptions about those expectations
Gap 2	Gap between customer's expected standards and specifications of service and management's perceptions of customer's expected service standards.(specification gap)
Gap 3	Gap between service quality standards and actual service delivered to customer. (Service performance/delivery gap)
Gap 4	Gap between actual service delivered and service quality organization promised to deliver. (Communication gap)
Gap 5	Gap between customer's expected and perceived services.(perception gap)

Source: Modified from Parsuraman et al., (1988)

The gaps are service quality and aids service organizations to determine the sectional areas where performance is inadequate, lacking or poor. This will enable service firms to make a priority to improve those service characteristics features where expectations are high or performance is inadequate. In situations where service gaps is positive and expectations are exceeding the perceptions, service firm can review service characteristics that they currently oversupply and may choose to redeploys input resources into those service features which are performing below expectations. The Gap five (Perception gap) identified above remain key drivers behind SERVQUAL methodology of service quality measurement. Reevs and Bednar (1994) discussed in Kang (2006) described quality as an excellence, value, conformity to specification and meeting customer expectation. They opine that excellence in service delivery entails the provision to service consumers of a desired satisfied service by knowing the demands of the consumers and providing services that adequately satisfies the demands. Value entails gaining utility that meets the price paid for the consumption of service such that the service consumer is willingly influenced to accept the service for the economic value or the price paid for its purchase. Conformity to

specification and meeting customer expectations entails developing such a service system, that ensures error-free operations and delivering the desired and satisfied operation output.

The principle of quality management system proposes that the establishment of the quality management system in an organization provides a priority control over the organization's activities with continues improvement in its performance. Thus the essence of the quality management system is to ensure a sustainable performance system that maximally satisfies the needs of service consumers. Quality management system are thus mainly implemented to enhance the organization's work force and its abilities to provide services according to the consumers' expectations and optimizing the resources in terms of value for money (VFM). According to Sousa and Voss (2002), quality management system provides key assurance in achieving the goals and objectives of an organization listed in its policy and strategy. It offers reliability, diligence and satisfaction with regards to process, procedures, equipment, etc and relates with all other activities beginning from consumer's perceptions to consumer's expectation for satisfying their needs.

Two key offshoots of the quality management are the Quality control (QC) and Quality Assurance principles (QS) which all aim at guaranteeing that the services offered by organizations meet determined standards acceptable as adequate for public and/or consumer consumption and satisfaction. While quality control is related to regulating and improving of product and services qualities to ensure that it meets or satisfies identified satisfactory end result; quality assurance is process-oriented which identifies whether the process that was carried out is applicable to meet desired objective. Quality control is a commitment to quality to ensure that examination of quality is applicable to specified standards and to ensure that the current system of service delivery follows the planned actions (Sousa and Voss, 2002). Quality assurance is the assurance of total efforts involved in planning, organizing, and directing and controlling service quality and/or in production system with the objective of providing the service consumer with a service of appropriate quality (Sousa and Voss, 2002). Quality assurance thus is a systematic approach to pursuit of service quality that determines whether the expected demands of the service consumers are satisfied in line with their expectation. Innovations and value added techniques are used in implementing quality assurance strategies which must outfit to the service consumers satisfaction. Thy proposed that the reason for quality assurance is to conformance service and process with given requirement and standards.

Gaps model of service quality was developed by American authors, A. Parasuraman, Valarie A. Zeithaml and Len Berry, in a research study conducted between 1983 and 1988. The model identifies the principal dimensions (or components) of service quality and proposes a scale for measuring service quality (SERVQUAL) and suggests possible causes of service quality problems. They originally identified ten dimensions of service quality, but after testing and retesting, some of the dimensions were found to be auto correlated and the total number of dimensions was reduced to five, namely - reliability, assurance, tangibles, empathy and responsiveness. These five dimensions are thought to represent the dimensions of service quality across a range of industries and settings. Thus, service quality can be conceptualized as a simple equation: **SQ = P- E.** Where; **SQ** is service quality, **P** is the individual's perceptions of given service delivery, **E** is the individual's expectations of a given service delivery.

When the service consumers' expectations 'E' is greater than their perceptions "P' of received service, service quality is deemed low (Kang, 2006). When perceptions exceed expectations then service quality is high. The gap model of service quality identifies five gaps that may cause service consumers' to experience poor service quality. In this model, gap 5 (gap between expected and perceived service) is the service quality gap and is the *only* gap that can be directly measured. Thus the SERVQUAL model was designed to specifically capture gap 5.

Udo (2018) measured service quality of Nigerian airlines. The study adopted the use of primary data obtained based on passengers' responses to a well-structured questionnaire on a five likert scale regarding expectations and perception of quality of service offered by the airlines to investigate airlines quality of service to domestic passengers in Nigeria using process stages with a number of service quality attributes each. Using about twenty identified service quality attributes, the study analyzed the data obtained using simple percentile, simple averages and measures of dispersion statistical tool and statistical analysis software to compute the means and standard deviation of expectations and the perceptions of passengers. Comparison was carried out between the expectation and perception to determine the gap or service quality. The study found that a negative perceived service quality (gap) in all the twenty service quality attributes and seven process items tested. It was also found that the overall general average perceived service quality of airlines was -1.00. The indication is that expectations of airline service quality exceeded expectations exceeded perceptions in all the twenty service quality attributes and implies that passenger are dissatisfied with the quality of service offered by airlines in Nigeria. This is indicative that poor service quality is being offered to consumers of air transport services by airlines in Nigeria.

In a similar but different study, Adeniran and Fadare (2018) carried out a study on the Assessment of Passengers' Satisfaction and Service Quality in Murtala Muhammed Airport (MMA2), Lagos, Nigeria: Application of SERVQUAL Model. Using the SERVQUAL model, the study adopted the use of primary data generated via questionnaire and the SERVQUAL model to evaluate passenger satisfaction and service quality in the domestic terminal of the airport. The study reveals that there is need to improve the standard of facilities for the physically impaired at the domestic wing of the Murtala Muhammed Airport (MMA2). The findings of the study also shows that passengers are satisfied with the reliability service attribute of service quality while they are not satisfied with other service quality attributes. The study however did not consider the international wing of the airport and could not measure gap or service quality but was limited to measurement of passengers satisfaction as it relates to service attributes to influences service quality. Arnoldina and Viktorija (2013) did a study that evaluated the airport service quality Greece by considering the problems associated with improving the quality of airport services provided to airlines taking into account the changes in consumer needs. From the airlines perspective of airport service quality, the study used primary data compared the SERVQUAL method and other methods of determining airport service quality from the perspectives of airline operators as consumers of airport services. The study proposed a system of criteria designed for assessment of the quality of airport services provided to airlines based on the findings of the study. It however did not consider the passengers as consumers of airport services and the study did not sample the available assessment methods

for airport service quality modeling from passengers' perspective nor did it determine quality gaps based on expectations and perception.

Adeniran and Fadare (2018) also measured the relationship between passengers' satisfaction and Service Quality in Murtala Muhammed International Airport, Lagos, Nigeria with a view to determine how passenger satisfaction in the consumption of airport services is related to the service quality offered by airport operators. Using primary data generated from questionnaires administered to a sample of three hundred and eighty-four (384) passengers from both international and domestic wing of the airport and correlation analysis method, the study found the existence of about 71.1 percent positive correlation between service quality and passenger satisfaction in the airport. The study also revealed a strong positive relationship between passengers' satisfaction and airport service quality. This signifies that high service quality leads to passengers' satisfaction. It is recommended improvement in airport service quality in order that a corresponding high passengers' satisfaction rate can be achieved to develop passenger loyalty to airport services.

Abdul and Nasruddin (2016) examined the manufacturers' satisfaction on logistics service quality: operational, relational and national culture in Malaysia. The objectives of the study were to investigate on what makes the users of logistics service satisfied among the collectivist societies. Qualitative research method was adopted, whereby the main data were collected by using primary methods of face-to-face interviews using semi-structured interviews. The study used as case studies four logistics service providers and three logistics service users (manufacturers) who were interviewed. Data obtained were transcribed and analyzed by identifying the theme and patterns with the aim to understand the preset and emerging theories. The findings showed that in achieving customer satisfaction in Malaysia's context, operational technical ability within the logistics service quality (LSQ), such as timeliness and service condition, is a basic element contributing to satisfaction subject to influence of cultural values. The emerging elements provide the key insights on the elements and sub-elements which lead to satisfaction in the context of Malaysian logistics service users. Rather than the organization's performance-related factors, the results revealed that within the Malaysian national cultural context, there are influences of cultural elements towards customer satisfaction (Abdul and Nasruddin, 2016).

Lastly Azman and Yusnizal (2016) carried out a study on service quality as a predictor of customer satisfaction and customer loyalty. The study was aimed at examining the correlation [between service quality and customer satisfaction as well as the correlation between service quality and customer loyalty. The study used self-report questionnaires gathered from patients at army medical centers in West Malaysia for to generate primary data. Smart PLS path model analysis was used to analyze the data obtained and the results shows that service quality dimensions, namely tangible, reliability, responsiveness, assurance and empathy were significantly correlated with customer satisfaction and customer loyalty. The study concluded that the capability of service providers to appropriately implement the quality dimensions in providing services has enhanced customer satisfaction and customer loyalty in the organizations sampled.

From the empirical literature reviewed; it is obvious that some researches have been carried out dealing on the concept of service quality in the aviation and transport logistics sector in many parts

of the global. In Nigeria for example, Udo (2018) measured service quality of Nigerian airlines. From passengers perspective the study measured gap between expectations and perception using the SERVQUAL model but did not consider passenger dispositions to airport service quality. Adeniran and Fadare (2018) study on the Assessment of Passengers' Satisfaction and Service Quality in Murtala Muhammed Airport (MMA2), Lagos, Nigeria: Application of SERVQUAL Model; examined the relationship between service quality and passenger satisfaction in the domestic wing of the MMIA, Lagos. The study however did consider airlines as consumer of airport services whose opinion could count airport service quality modeling. The study of Arnoldina and Viktorija (2013) who evaluated the airport service quality Greece by considering the problems associated with improving the quality of airport services provided to airlines taking into account the changes in consumer needs, considered and captured the opinion airlines on airport service quality as consumers of airport services. The study however failed to compare the both the positions of airlines and passengers as consumers of airport services. In order to form a concrete, correct and serious position on the quality of service offered in airports in Nigeria, both positions of the airlines and passengers as airport service consumers must be determined and the extend of agreement and/ or disagreement of these opinions be determined even though the two parties may be consuming different forms of airport services which share the same and/or similar attributes. This is so far lacking in literatures and forms part of the literatures gap which this study seeks to objectively fulfill. With the advent of airport terminal concessioning contract as seem operational Lagos MMIA at present, competition between airports and airlines for passenger traffic is imminently a serious case for consideration and since studies have determined a positive relationship between passenger satisfaction, loyalty to service brand and service quality, there is need to compare the airport service quality between major Nigeria airports in order that service quality improvement drives and airport competition can be motivated from the view point of maximizing passengers satisfaction. This is the second gap identified in the literatures reviewed which the study seeks to objectively close.

MATERIALS AND METHODS

The study is designed to assess the airport service quality in Nigeria. It used survey design approach in which the NAIA and MMIA were used as case studies to examine the airport service quality in Nigeria. Adopting a airport service consumers' approach (airlines and passengers perspective), survey questionnaire were administered to the airlines and passengers as airport service consumers in each airport. The aim of the survey is to gather data on the opinion of the, and rating of the airport service quality by the airlines and passengers as consumers of the airport services. Having earlier identified the objectives and research questions to be addressed by the study, The SERVQUAL model and gap analysis, were used to analyze the data and provide answers to the research questions.

This research relied entirely upon primary sources of data for the study. The data used for the study was sourced from primary sources (survey); since the study is a qualitative study on airport service quality, questionnaires were distributed to respondents as a means of generating the data used for the study. Questionnaire was used as data collection instrument to generate data on customer expectations and perception of the airport service quality in NAIA and MMIA in Nigeria from

passengers and airlines perspectives in line with the SERVEQUAL model. To carry out the survey, questionnaire method was used as the instrument of data collection and questions were structured in line with the model question of the SERQUAL model and randomly administered to the management staff of the randomly selected airlines in each airport and passenger. The average of the responses from the airlines and passengers on their expectations and perceptions of airport service quality in the airports were determined. Their responses on the major component attributes that influence airport service quality was on taken. The study population consists of the NAIA and MMIA with each having a daily passenger traffic flow of 1400 and 2200 respectively and totals of 20 airlines and 29 airlines operating local and international flight services. The average passenger traffic is thus 1800 per airport per day for purposes of determining sample population for interview. The entire airlines operating in each airport and the daily passenger strength form the population of the study from which samples were selected and questionnaires administered.

Sampling Techniques

The study adopted purposive random (non-probability) sampling method. This is most appropriate for the research due to time limitation for respondents to fill out the questionnaire. To determine the appropriate sample size for large (infinite) population and uncertain number of population, judgment was made about the confidence level and the maximum error allowance. The equation below was applied (Zikmund, 1999). Sample size the passenger for each airport was determined. Thus the number of questionnaire that need to be administered and responses collected from passengers is 324 questionnaire responses from both airports making it an average of 162 questionnaires in each airport. However, it is important to explain that only about 70% (i.e. 114 respondents) passengers completed and properly filled and returned their questionnaires in NAIA and about 67% (108) from MMIA, Lagos.

For the airlines, the NAIA and MMIA have 21 and 29 airlines respectively operating international and local flights. The researcher randomly chooses 20 airlines from each airport and sampled the opinion of the operational and management staff. The sampled population was purposely determine to come the operational and management staff of airlines and 60 questionnaires were issued in each airport to randomly selected staff of 20 airlines obtained by modifying the sampled size obtained in the finite population sample. Thus 60 questionnaires will be administered and responses collected from each of the randomly selected 20 airlines in NAIA and MMIA respectively. Questions were calibrated to enable the respondents to rate on a 10 points linkert scale the percentage airport service quality expectations and perceptions of the airlines based in line with the SERQUAL model.

Method of Data Analysis: The gaps model of service quality (SERQUAL Model)

The SERVQUAL model identifies the principal dimensions (or components) of airport service quality and proposes a scale for measuring service quality (SERVQUAL). The five attributes of service quality, namely - reliability, assurance, tangibles, empathy and responsiveness as explained in the theoretical review were adopted and passengers and airlines were made to rate the percentages of the significance of each service quality attribute in determining their individual perceptions of airport service quality using questionnaire. Also the percentage expectations and perceptions as measures of airport service quality of individual respondents (passengers and

airlines) were obtained from questionnaires administered. The service quality gap model which measures compares the expectations with the perceptions is used to determine the gap which represents the airport service quality (SERQUAL). Thus, sample equation for airport service quality (SERVQUAL) as used in the study therefore is:

$$\mathbf{SQ = P- E}$$

Where; **SQ** is service quality, **P** is the individual's perceptions of given service delivery and **E** is the individual's expectations of a given service delivery.

When the service consumers' expectations 'E' is greater than their perceptions "P' of received service, service quality is deemed low. When perceptions exceed expectations then service quality is high.

Difference of Means Test

The difference of means method is used to compare the airport service quality in NAIA and MMIA. It will equality be used to compare the airport service quality (Gap between expectations and perceptions) of passengers and airlines. We use the formula stated below to determine the existence of a significant difference or otherwise between the airport service quality in NAIA and MMIA:

$$\bar{X_1} - \bar{Y_1} = (1n\sum X_1 = 1nX_1) - (1n\sum X_1 = 1nX_1)$$

Where:
$\bar{X_1}$ = average airport service quality of NAIA based passengers responses.
$\bar{Y_1}$ = Mean airport service quality of NAIA based on airlines responses.
n = Number of responses (sample size) of the study.

Similarly for MMIA,

$$\bar{X_2} - \bar{Y_2} = (1n\sum X_2 = 1nX_2) - (1n\sum X_2 = 1nX_2)$$

Where:
$\bar{X_2}$ = average airport service quality of MMIA based passengers responses.
$\bar{Y_2}$ = Mean airport service quality of MMIA based on airlines responses.
n = Number of responses (sample size) of the study.

Results and Discussion

Table 3: Result of Gap Analysis of airport service Quality based on Service Quality Expectations and Perceptions of Airlines in NAIA, Abuja

Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Gap	-31.17021	60	11.43093	1.66737
pre-serviceexpt	87.7660	60	8.95693	1.30650
post-servicepercpt	56.5957	60	9.61805	1.40294

Samples Correlations

	N	Correlation	Sig.
pre-serviceexpt & postservicepercpt	60	.244	.098

Test Significances

	Differences	t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference			
	Upper			
postservicepercpt. - preserviceexpt	-34.52646	18.694	59	.000

Source: Authors' computation 2020

The gap analysis result was carried out to determine the existence of gap (differences) between airlines pre service quality expectations and post service perceptions in the airport. The result shown that from the responses of 60 airline staff, the mean pre service quality expectations on the airlines is 87.76, and a mean post service quality perception of 56.65. By implication, the airline's airport service quality expectation from the airport authority is 87.7% while the post service airport service quality (service quality perception) about 56.56%. The result shows a mean service quality or gap of -31.17% with a standard deviation of 11.43 and standard error of 1.66. This indicates a low service quality since the negative coefficient of service quality (SQ) indicates that airlines post service perception of quality is less than pre service expectation. Thus we infer that the airport service quality (SQ) in Nnamdi Azikiwe International Airport, Abuja is low (-31.17%) from the perspective of the airlines as airport service users. A t-stat of 18.69 and p-value of 0.00 at 59 degrees of freedom indicate that there is significant gap between pre service quality expectations and post service perceptions.

Table 4: Gap analysis of Air Transport Passengers service quality expectations and perception of airport Service quality in NAIA, Abuja

Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Gap	-20.06667	113	15.78228	
preserviceexpt	77.5000	113	14.45331	1.86591
postservicepercpt	57.4333	113	15.55784	2.00851

Samples Test

	Mean Differences			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
				Lower
postservicepercept – preserviceexpt,	-20.06667	15.78228	2.03748	15.98967

Test of Significance

	Mean Differences	t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference			
	Upper			
preserviceexpt – postservicepercpt	20.14366	9.849	59	.000

Source: Authors' computation 2020

The gap analysis result was carried out to determine the existence of gap as a measure of airport service quality between air transport passengers' pre-service quality expectations and post service perceptions in Nnamdi Azikiwe International Airport, Abuja. The result shows that from the responses of about 113 air transport passengers in the airport, the mean pre service quality expectations on the passengers is 77.50%, and the mean post service quality perception is 57.43%. By implication, the mean airport service quality or gap of -20.06% with a standard deviation of 15.78 and standard error of 2.03. Thus we infer that the airport service quality (SQ) in Nnamdi Azikiwe International Airport, Abuja from the perspective of the air transport passengers as major consumers of airport services is low (-20.06%) since post service perceptions is less than pre service expectation. By implication, the management of the airport has over the years been unable to meet up the service quality expectations of both the air transport passengers and the airlines as major consumers of airport services. While the service quality gap in the airlines expectation is 31.1%, the service quality gap in the expectation of the air transport passengers is 20.06%. It is therefore expected that the airport authority should improve the quality of services it currently offers to both airlines and air transport passengers by improving the major component service quality attributes. Airlines however seems to have enjoyed higher levels of airport service quality than air passengers over the years, though they parties consume possibly differing kinds of airport services.

Table 5: Result of Gap Analysis of Airlines Service Quality Expectation and Perception in Murtala Muhammed International Airport, Lagos

Descriptive Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Gap	24.5666	58	7.4864	.9664
lagairlinepre	91.9167	58	7.36987	.95145
lagairlinepost	67.3500	58	9.96745	1.28679

Samples Test

	Differences			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
				Lower
lagairlinepost - lagairlinepre	24.56667	7.48641	.96649	22.63272

Significance Test

	Differences	t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference			
	Upper			
lagairlinepre - lagairlinepost	26.50061	25.418	59	.000

Source: Authors' computation 2020

The gap analysis result aimed at determining the existence of gap (differences) between airlines pre service quality expectations and post service quality perceptions in Murtala Muhammed International Airport and shows a mean airport pre service quality expectations of 91.91% and

mean post service quality perception of 67.35% with standard deviations of 7.36 and 9.96 respectively. The mean gap which shows the airport service quality (SQ) of Murtala Muhammed International Airport, Lagos from the Perspective of the airlines is -24.56% with a standard deviation of 7.48. This indicates an unsatisfied service quality gap of 24.56%. This when compared with the result of airport service quality in Nnamdi Azikiwe International Airport indicates that the airlines operating in Lagos has higher expectations of airport service quality and equally receives higher quality of airport services than airlines operating in NAIA, Abuja. This is possibly as a result of the concessioning of some airport terminals leading to improved private sector participation and consequent improvement in service quality. We thus infer that MMIA, Lagos provides low quality of airport services to the airlines, but the level of airport service quality in Lagos is higher than what is obtainable by airlines in NAIA, Abuja.

Table 6: Airport Service Quality (SQ) in MMIA Lagos: Air Transport Passengers Perspective

Descriptive Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Gap	-21.6667	108	11.1866	1.4419
lagpassgerpre	86.1667	108	11.94502	1.54210
lagpasspost	64.5000	108	12.30612	1.58871

Samples Test

	Mean Differences			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
				Lower
lagpassgerpost - lagpassngerpre	-21.66667	11.18665	1.44419	18.77685

Test of Significance

	Differences	t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference			
	Upper			
lagpassgerpre - lagpassngerpost	24.55649	15.00	59	.000

Source: Authors' computation 2020

The gap analysis result was carried out to determine the airport service quality (SQ) in MMIA, Lagos, from the perspective of the air transport passengers. The result shows the existence of gap (differences) between air transport passenger's pre service quality expectations and post service perceptions in Murtala Mohamed International Airport, Lagos, Nigeria. Based on expectations and perceptions of the passengers sampled, the mean pre service quality expectations of the passengers is 86.17% with a standard deviation of 11.94 while the mean post service quality perceptions of the passengers is 64.50% with a standard deviation of 12.30. The result indicates an average service quality (SQ) or gap of -21.67% with a standard deviation of 11.18. A t-stat of 15.003 and p-value of 0.00 implies the existence of significant gap (differences) between pre service quality expectations and post service quality perceptions in favour of pre service quality expectations. By implication, the management of the airport has over the years been unable to meet up with the service quality expectations of the air transport passengers as major consumers of airport services

by an average of about 21.67%. Comparing the positions of airlines and air transport passengers on airport service quality in Murtala Mohammed International airport, Lagos, indicates that while the mean service quality (SQ) or gap in the airport is 21.67% from the perspective of air transport passengers, it is 24.56% from the perspective of the airlines. It is therefore clear that the airport authority over the years has failed to meet the service quality expectations of both the air transport passengers and airlines as consumers of airport services. The airport authority should as a result improve the quality of services it currently offers to both airlines and air transport passengers by improving the major component service quality attributes.

Justification of the Study and Research Implications

From the foregoing, it is evident that most studies on airport service quality in Nigeria in the past were limited to study of airport service quality from the perspectives of air passengers, airlines service quality from the perspectives of the air passengers' as consumers of airport services. For example, Studies by Udo (2018), Adeniran and Fadare (2018a) and Adeniran and Fadare (2018b); all assessed airport service quality from passenger's perspective using the SERQUAL model. But is clear that air passengers are sole consumers of airport services, rather they constitute only one section of airport service consumers while airlines constitute another component. There is therefore a gap in literature such that, there is no empirical information on level of airport service quality in Nigeria airports, derived from both the perspectives of airlines and air passengers as consumers of airport services. Since both air passengers and airlines constitute the major consumers of airport services, a fair measurement of airport service quality in the airports must be based on the perspectives of both groups. Thus the novelty of this study is justified by the fact that it bridges the literature gap as identified above and provides empirical evidence and justification of airport service quality in the major international airports in Nigeria, assessed from both perspectives of air passengers and airlines as consumers of airport services.

The research implication of the result of the study and contribution to the body of existing knowledge in measurement of airport services quality is that, a holistic approach to the study of airport service quality based on the SERQUAL Model must be approached from both the perspectives of the air passengers and airlines as major consumers of airport services.

CONCLUSION

The airport service quality (ASQ) in Nigerian airports from both perspectives of airlines and passengers as major stakeholders and consumers of airport services is currently low as evidenced in the findings of the study; indicting that the service quality expectations of the airlines and passengers are not being adequately met. MMIA, Lagos however currently provides higher level of ASQ than NAIA, Abuja.

Table 7: Summary of Airport Service Quality Characteristics of NAIA, Abuja and MMIA, Lagos: Airlines and Passengers Perspectives

Airport	Perspective(s)	Mean expectations	Mean perceptions	SQ(gap)	Remarks
MMIA, Lagos	Airlines	91.91	67.35	-24.56	Significant
	passengers	86.17	64.50	-21.62	Significant
	Average SQ	-	-	-23.09	Significant
NAIA, Abuja	Airlines	87.76	56.58	-31.17	Significant
	Air Passengers	77.50	57.43	-20.06	Significant
	Average SQ,	-	-	-25.62	Significant

Source: Authors' computation 2020

It is recommended that airport authorities in both airports should focus adopt measures to improve the quality of services offered to both air passengers and airlines. However, Federal Airports Authority as the administrator of Federal airports in Nigeria should take measures to improve the quality of service in Nnamdi Azikiwe International Airport which offers far lower airport service quality than MMIA, Lagos.

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