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Service Quality and Passengers' Satisfaction of Airline Operations in Nigeria

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Abstract

The study evaluates passengers' satisfaction with the service quality of international airlines at Murtala Muhammed International Airport, Lagos, Nigeria. The study randomly selects 4 out of 27 international airlines operating at the airport for the survey. A purposive sampling technique was employed to select 100 respondents in each of the airlines since the study population could not be ascertained. A structured questionnaire was administered on the passengers when waiting to board the aircraft to elicit information on their travel characteristics and perceived satisfaction with the services rendered by the airlines using a five-point Likert scale. The data collected on passengers' satisfaction with the airline's service quality was analyzed using the servqual model while multiple regression model was used to predict the effect of service quality dimensions on passengers' satisfaction with the airlines. The result of the servqual model shows that the passenger satisfaction rating of reliability dimension (0.66) is the highest followed by responsiveness (0.52), empathy (0.52), tangible (0.41), and assurance (0.36) has the least rating. Similarly, the result of regression model reveals that the coefficients of four dimensions reliability (β = 0.683; $p \leq 0.01$), empathy (β = 0.656; $p \leq 0.01$), responsiveness (β = 0.409; $p \leq 0.01$) and tangible (β = 0.364; $p \leq 0.01$) had statistically significant influence on passengers' satisfaction of the airlines. The study concludes that service quality influences passengers' satisfaction with international airline operations in Nigeria. The study recommends useful policy actions aimed at improving service quality to allow airlines to enjoy continuous loyalty and patronage by the passengers.

Keywords: Service quality; Passengers' satisfaction; Servqual model; International airline.

1. Introduction

Air travel has become a major part of the world's transportation system and an important service industry. Service quality is considered an important dimension of competitiveness (Lewis, 1989). The provision of excellent service to the satisfaction of customer is a major challenge facing the contemporary service industry (Hung *et al.*, 2003). In a dynamic and competitive environment like air transport industry, airlines must continuously identify important organization's strategic values and transform them into improved performance results (Brink and Berndt, 2008). Airlines must strive to render quality and innovative services distinct from other airlines. This has made airline service provision to be customer centred in an attempt to retain customer loyalty and control a sizable share of the aviation market with the tool of service quality. The quality of service rendered by the airlines determines the level of passengers' satisfaction. Therefore it is important for an airline to understand a passenger's expectations before the experience begins to the likely assessments when it is over to gain a higher level of service satisfaction (Berry *et al.*, 2002).

Service quality perceptions result from a comparison of customer expectations with actual service performance (Parasuraman *et al.*, 1985). Customer satisfaction is the customer's feeling that a service has barely met or exceeded expectations. Air travellers base decisions on flight to board on the quality of services provided by airline in terms of perceived safety, service value and past experiences (Asiegbu *et al.*, 2012). The level of service quality influence airline competitive advantages in passengers' patronage and profitability (Teikake, 2012). The offering of high quality service has become an important marketing tool for the airlines to overcome increasing competitive pressures, boost the image and survival of the airline business.

The existing studies confirm that service quality influence passengers satisfaction of airline operations in different countries of the world (Baker, 2013; Namukasa, 2013; Teikake, 2012; Zamri and Rahim, 2012). The result of studies conducted in Nigeria indicates that domestic airlines have poor service quality while international airlines have good service quality (Ayantoyinbo and Ajiboye, 2010; Dike, 2013; Ikeogu, 2013) and quality of service is not considered a major factor determining passengers' patronage of the airlines. The studies did not indicate whether the good service quality observed in international airlines affects the level of passengers' satisfaction. This identified gap

necessitates the need for this present study. This study intends to evaluate passengers' satisfaction with service quality of international airlines at Murtala Muhammed International Airport, Lagos, Nigeria.

2. Literature Review

Service quality is the ability of an organization to determine customer expectations correctly and to deliver the service at a quality level that meet customer' expectations (Brink and Berndt, 2008). Also, Alok (2013) defines service quality as the extent to which the service, service process and service organization can satisfy the expectations of the customer. Furthermore, Zeithaml *et al.* (1996), define service quality as the extent to which the service meets or exceeds the customers' expectations on a consistent basis. This suggests that customers do not evaluate the quality of a service solely as a one-time experience but upon sustained and continuous usage of the service. Parasuraman *et al.* (1985), posits that three characteristics of services intangibility, heterogeneity and inseparability are important in understanding of service quality. First, most services are intangible, hence cannot be counted, measured, inventoried, tested and verified in advance of sale to assure quality. Second, the heterogeneous behaviour of personnel make the performance of duty not uniform in quality as what the firm intends to deliver may be entirely different from what the consumer receives. Third, the inseparability of production and consumption of services imply that quality occurs during service delivery in the form of interaction between the consumers and representative of the organization. These characteristics make it difficult for organizations to understand how consumers perceive their services and evaluate quality.

Satisfaction or dissatisfaction with a service is influenced by prior expectations regarding the level of quality (Sigala, 2004). It is a judgment that a product or service feature provides a pleasurable level of consumption related to either under or over fulfilment (Budiono, 2009). Customer satisfaction is a cognitive response to a purchase experience after a product or service has been purchased or consumed. It forms the basis upon which consumer's perceptions are formed about firms' services. The foundation of any successful business is based on satisfied customers who are loyal and willing to repeat purchases. Satisfaction depends on numerous factors and there is quite a number of literature on this subject. The behavior of personnel, frequency of services, reliability of services and waiting time are important factors affecting customer satisfaction (Islam *et al.*, 2014). Also, friendly, courteous, knowledgeable and helpful employees are important factors enhancing customer's satisfaction of service (Hokanson, 1995). Businesses with vision for success invest in developing and implementing programs that aims at bringing satisfaction to its customers. However, measuring customers' satisfaction could be very difficult task because it is an attempt to measure human feelings (Agbor, 2011).

Service quality and customer satisfaction have been conceptualized as a distinct but closely related constructs (Siddiqi, 2011). The level of service quality delivered by organizations determines customer satisfaction (Kassim and Abdullah, 2010). The organization must ensure it provides services that meet or exceed customers' expectation to cause behavioral change favorable to the company. The relationship between service quality and customer satisfaction has been debated overtime by authors. The two constructs have positive relationship (Beerli *et al.*, 2004) with two opposing perspectives. Some researchers argue that customer satisfaction leads to service quality (Kumar *et al.*, 2009; Nwachukwu and Ejiofor, 2003; Rust and Oliver, 1994). On the contrary, Eboli and Mazzulla (2012) and Parasuraman *et al.* (1988) argue that customer's satisfaction is a determinant measure of service quality. The foregoing suggest that there is a general agreement on the distinctiveness of service quality and customer satisfaction from a conceptual point of view but the operationalization of customer satisfaction differs (Sureshchandar *et al.*, 2002).

The servqual model was developed by Parasuraman *et al.* (1985) to measure service quality. The model is based on measuring the perception gap between the perceived service quality and the expected service quality. The servqual model originally identified ten dimensions of service quality used by consumers to compare expectation (desired service) with perception (perceived service). Parasuraman *et al.* (1988), reduced the original 10 dimensions (tangibility, reliability, responsiveness, assurance – communication, credibility, security, competence, courtesy and understanding the customer access) to five (tangibility, reliability, responsiveness, assurance and empathy). These dimensions measure the expectations of customers concerning a service and perceived levels of service actually provided. The servqual scale also known as gap model is used to measure service quality and determine the relative importance of different dimensions influencing customer's overall quality perceptions. The servqual gap model has been proven to be one of the consistent and reliable ways to measure the quality of services provided to customers. Jain and Gupta (2004), informs that when perceived service is below expected service quality is less than satisfactory but when perceived service is more than expected service quality is satisfactory to the customers. Several researchers have used servqual model to measure service quality in various sectors such as transport, retail banking and information and communications technology.

This model was adapted in many studies to evaluate passengers' satisfaction with public transport in different countries of the world. In Asia, Park *et al.* (2004), developed a model of service expectation with data collected from Korean international air passengers. The result indicates that service value, passengers' satisfaction and airline image have direct effect on passengers' behavioural intentions. The study encourages airlines to develop passenger-focused services that incorporate all passengers' expectations to raise the level of passengers' satisfaction, value perception and commercial viability. In another study, Zamri and Rahim (2012) explore the domestic passengers experience of service quality provided by Malaysia Airline and Air Asia. They found out that both airlines did not meet the service quality standard expected by the passengers and they chose price over service quality. Suki (2014) examine the effects of airline service quality on levels of customer satisfaction with Asia Air and Malaysia Airline. The result of the structural equation model reveals that word of mouth recommendation and empathy dimensions are

the important and significant service quality attributes that influence passengers' satisfaction. On the contrary, passengers put less emphasis on airline and terminal tangible dimensions, as they do not have significant impact on passengers' satisfaction. The study encourages airline management to improve its service quality and image by developing marketing strategies through the use of short message service, emails and social networking sites and improvement in airline and airport tangible dimensions.

In the Central Pacific Ocean, Teikake (2012), hints that the overall level of satisfaction with service quality was low among passengers of domestic airlines in Kiribati. The low satisfaction levels made price a more important factor passengers consider when flying.

In Europe and North America, Pham (2006) adapted the servqual model of service quality to different market segments based on passengers expectations. The findings of the study reveal that less frequent travellers considered tangible and assurance to be important service quality dimensions when flying. On the other hand, frequent travellers consider reliability and empathy to be the most important service quality dimensions. Furthermore, passengers that lack traveling experience were found to value interactions with airline personnel (assurance and empathy) more and place greater importance on tangible cues when forming their expectations. Erdil and Yıldız (2011), apply servqual and servperf models on international passengers at Istanbul and Sabiha Gokcen International Airports in Turkey to analyze the differences between the two service quality scales. The findings revealed that unweighted servqual has higher explained variance (about 1 per cent) of perceived service quality than the unweighted servperf. Responsiveness and assurance dimensions have the largest percentage of explanation. For the weighted dimensions reliability and empathy are the most important dimensions for both servperf and servqual. The servperf scale explains more variance (about 26 per cent) in all dimensions and has higher loading factors than servqual scale. This implies that weighted servperf scale estimate perceived service quality better than servqual scale. Baker (2013), examines the service quality and customer satisfaction of top 14 U.S. airlines between 2007 and 2011. He compares passenger satisfaction and service quality with respect to airlines quality dimensions and subsequently establishes the relationships between the dimensions of service quality and passengers' satisfaction on airlines services. The study found that service quality of low cost airlines was generally higher than that of traditional legacy airlines.

In Africa, Namukasa (2013), examines the influence of airline service quality on passenger satisfaction and loyalty in Uganda airline industry. The result of regression model reveals that pre-flight, in-flight and post-flight services have a positive significant effect on passengers' satisfaction. Also, passengers' satisfaction has a significant effect on their loyalty to the airlines. It was found that reliability of airlines' website and prompt response to emergencies are the most important pre-flight service quality attribute. Comfort and cleanliness and safety of aircrafts are the important service quality attributes for in-flight while passengers' comment and concern are the most important service quality attributes for post-flight. In Nigeria, Ukpere *et al.* (2012), observe that sex, age, marital status, income, comfort, on-board services, crew behaviour, fare and monopoly were significant variables that influence the choice of airline among air travellers in Nigeria. In another study, Dike (2013), evaluates the customer service in Nigeria's airline industry. The result reveals that domestic airlines (Aero Contractor and Arik Air) have negative servqual scores indicating poor service quality while international airlines (Lufthansa and Air France) have positive servqual scores indicating good service quality. However, the servqual score had no significant relationship with the patronage of passengers for most of the airlines. This finding is consistent with the study of Ikeogu (2013) on service quality and passengers patronage of airlines services in Nigeria. The correlation result reveals a weak positive relationship between service quality and patronage for Lufthansa airline and a strong negative relationship between service quality and patronage for Air France airline. The servqual index score indicates that the international airlines have good service quality. The findings further show that service quality was not a major determinant factor for the level of passenger patronage of the airlines.

The delivery of high quality service to passengers is vital for airlines competitiveness and profitability. The reviewed studies focus less attention on service quality and passengers' satisfaction. This study intends to fill the gap in knowledge by evaluating passengers' satisfaction with the service quality of international airlines in Nigeria. This will provide useful information on the impact of service quality on passengers' satisfaction in a developing country.

3. Materials and Methods

The study area is Murtala Muhammed International Airport (MMIA) situated in Lagos, Nigeria. The Federal Airports Authority of Nigeria (FAAN) owns the airport. The international terminal was modelled after Amsterdam airport in Schiphol and was officially commissioned on 15th March 1979. Lagos is the former capital of the country until 1991 when the seat of federal government was moved to Abuja. However, Lagos remains the economic nerve centre of the country due to the concentration of major seaports, airports, financial institutions and industries in the city. The airport serves six Southwest States in the country namely: Lagos, Ogun, Oyo, Osun, Ondo and Ekiti with an estimated population of around 40 million people. The airport handled 2.03 million international passengers in 2017 and 2.8 million international passengers in 2018 respectively.

There were 27 international airlines actively operating at the airport when this study was conducted. This study by means of simple random sampling technique selected four international airlines for questionnaire survey. The selected airlines are British Airways, Virgin Atlantic, Emirates airlines and Arik Air. The study population could not be determined because it was difficult to ascertain the exact number of passengers that will travel with the selected airlines during the survey. The study employed purposive sampling to select the respondents since they cannot be predetermined. Every willing passenger of the selected airlines at the terminal during the questionnaire survey was sampled. For questionnaire administration, 100 passengers were sampled in each of the airlines making a total of 400 passengers that were surveyed. The passengers were given structured questionnaire to fill when waiting to board and

were retrieved before the take off. The questionnaire was designed to elicit information on their travel characteristics and satisfaction with service quality dimensions of the selected international airlines. The survey was conducted in April 2018.

This study adopted servqual model to assess passengers' perceived satisfaction with the service quality of the selected international airlines. The servqual is a service quality gap model used to quantify the gap between customers' expectations of a service and their perceptions of the actual service delivered. The five dimensions with 20 attributes on the modified servqual scale were used to measure passengers' expectations and perceptions of services rendered by the airlines in this study. The respondents were requested to rate their degree of satisfaction with the servqual dimensions on a five-point Likert-type scale ranging from 1= very dissatisfied, 2 = dissatisfied, 3 = indifferent, 4 = satisfied and 5 = very satisfied. The summation of all nominal values is 15 points for each attribute. This divided by total number of scaling variables gave 3 as mean value. This implies that any score above 3 specifies passenger's satisfaction while below 3 indicates passenger's dissatisfaction with service quality of the airlines.

According to Agyemang *et al.* (2014) the relationship between perception and expectation can be expressed mathematically to arrive at the gap score as:

SQ = P - E

Where SQ = Gap score, P = Perceptions, E = Expectations

According to Too and Earl (2010) the three possible outcomes for service gap scores are: P – E > 0 (positive gap score indicates level of service quality exceeds passengers expectation – more than satisfactory), P – E < 0 (negative gap score indicates level of service quality is below passengers expectations - less than satisfactory) and P – E = 0 (positive gap score indicates level of service quality equal to passengers expectation - satisfactory). The interpretation of gaps result poses challenges since there is no universal rule. This study adopted (Agyemang *et al.*, 2014) categorization of service quality perception gap score: 0 - 0.45 = good perception, 0.46 - 0.70 = better perception, > 0.70 = best perception. This categorization of service quality helps to calibrate degree of superiority that gives rich interpretation to the scale and a clearer understanding of the result. The three ways to arrive at the gap score are averages for each attribute, dimension analysis and all the attributes analysis called servqual gap (Ojo *et al.*, 2017). Positive and high gap score indicates good perceived service quality. This study adopts all the three identified categories to assess perceived passengers' satisfaction with the airlines service quality using modified servqual model.

The multiple regression model was used to determine the service quality dimensions that predict passengers satisfaction. The regression model is expressed as:

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + \cdots b_nx_n + e$$

Where:

Y = Airline passenger satisfaction

a = Slope/intercept

b_1-b_n= Regression coefficient

X_1 - Xn = Independent variables

X_1 = Reliability

X_2 = Assurance

X_3 = Tangible

X_4 = Empathy

X_5 = Responsiveness

e = error term

The statistical package for social sciences (SPSS) 20.0 statistical software was used to analyze the data. Statistical significance was inferred at $p \leq 0.05$. The result of the survey is discussed moving forward.

4. Results and Discussion

4.1. Travel Attributes of Respondents

The literacy level of the respondents is required to ascertain their understanding of this research. All the respondents have formal education as shown in Table 1. Specifically, more than 90 per cent of them have tertiary education indicating very high literacy level. This shows that they have basic understanding and can adequately respond to the questionnaire. The familiarity of the respondents with the sampled airlines operations is important for a correct assessment of their service quality. The information reveal that majority of the respondents are frequent fliers with the airlines. As a matter of fact, about 60 per cent have travelled at least twice in the past year with the airlines while the remaining travelled only once. This places the respondents in pole position to assess service quality of the sampled airlines in this study. Furthermore, the respondents' class of seat indicates that majority (86 per cent) travelled in the economy class. This sample gives a good representation and strikes a balance as the services provided both in the economy and business class are captured. Finally, the purpose of journey shows that most of the respondents are fun seekers who are travelling for leisure. This made it possible to administer high number of questionnaire during the survey. Those who are travelling for business purposes account for a quarter of the respondents while the rest require medical services.

Table-1. Travel attributes of respondents

Variable	Frequency	Per cent
Education		
SSCE	11	2.8
OND	59	14.8
HND/BSc.	284	71.0
Postgraduate	46	11.5
Total	**400**	**100.0**
Freq. of travel with airline		
Once in the past year	171	42.8
Twice in the past year	186	46.5
Thrice or more	43	10.8
Total	**400**	**100.0**
Class of seat		
Business	48	14.0
Economy	344	86.0
Total	**400**	**100.0**
Purpose of trip		
Business	108	27.0
Leisure	253	63.25
Medical	39	9.75
Total	**400**	**100.0**

Source: Author's Field Survey, 2018.

4.2. Passenger' Satisfaction with Airline's Service Quality

The gap score of passengers' satisfaction with the airlines service quality is reported in Table 2. It is evident that most of the dimensions and attributes have positive gap score with a representation of satisfactory level of service quality for the airlines. For example, British Airways has positive gap score ranging from 0.28 – 0.80 for all dimensions and attributes. The gap score for dimensions and attributes of other airlines are mostly positive with few negative. The negative mean score suggests poor service quality satisfaction by the passengers.

The reliability dimension show that attribute "airline is dependent on handling passengers' requests" (-0.98) for Virgin Atlantic has poor service quality while other airlines have positive mean score indicating good service quality. Passengers rate Emirate airline (0.80) as the most reliable and Virgin Atlantic (0.57) as the least reliable airlines. The servqual mean score of reliability for the airlines is 0.66 depicting a better service quality. The assurance dimension reveals that attributes "staff makes passengers feel safe in their transactions" (-0.23) for Emirate airline and "staff are consistently courteous in service delivery" (-0.90) for Arik Air have poor service quality. The other airlines have positive mean score indicating good service quality. British Airways (0.56) has the highest rating by passengers for assurance while Arik Air (0.15) has the lowest assurance rating. The servqual mean score of assurance for the airlines is 0.36 indicating a good service quality.

Table-2. Airlines' service quality dimensions and attributes gap score

Servqual dimension	Gap score			
	British Airways	**Virgin Atlantic**	**Emirate Airline**	**Arik Air**
1.Airline use adequate technology to keep passengers informed when service will be performed	0.65	0.58	0.54	0.70
2.Airline is dependent on handling passengers' requests	0.69	-0.98	0.99	0
3.Airline provides reliable services on time and as promised	0.57	0.91	0.88	0.80
4.Airline operates safe aircraft without breakdowns	0.80	0.79	0.77	0.90
Reliability	**0.68**	**0.57**	**0.80**	**0.60**
5.Staff are well trained, competent and communicate with passengers effectively	0.38	0.24	0.21	0.90
6.Staff makes passengers feel safe in their transactions	0.72	0.78	-0.23	0
7.Staff are consistently courteous in service delivery	0.77	0.46	0.43	-0.90
8.Staff instil confidence in the passengers	0.37	0.33	0.67	0.60
Assurance	**0.56**	**0.45**	**0.27**	**0.15**
9. Staff have neat and professional appearance	0.37	0.80	0.77	0.70
10.Aircraft is equipped with entertainment gadgets that make flight experience enjoyable	0.49	0.56	0.55	0.70
11.Aircraft is neat, well maintained and provided with comfortable seat	0.43	0.79	0.77	0.70
12.Ticket office is neat and attractive	0.30	-0.60	-1	0.40

Tangible	**0.40**	**0.39**	**0.22**	**0.63**
13.Staff make passengers feel special and valued	0.33	0.69	0.66	0.40
14.Airline run convenient operating hours	0.61	0.34	0.33	0.60
15.Airline provide easy access to information about services	0.30	0.12	0.11	0.30
16.Airline provides services that ensure interesting travel experience	0.72	0.46	0.44	1.90
17.Airline provides special diet options	0.91	0.82	0.76	-0.40
Empathy	**0.57**	**0.49**	**0.46**	**0.56**
18.Airline provide timely and efficient services	0.28	0.24	0.21	0.70
19.Staff are always willing to help passengers	0.42	0.79	0.77	0.10
20.Staff are ready to respond to passengers' special request	0.76	0.99	0.99	-0.30
Responsiveness	**0.49**	**0.67**	**0.66**	**0.27**
Overall gap score	**0.54**	**0.51**	**0.48**	**0.44**

Source: Author's Field Survey, 2018.

The tangible dimension shows that "ticket office is neat and attractive" for Virgin Atlantic (-0.60) and Emirate airline (-1) have poor service quality. The other airlines have positive mean score indicating good service quality. The rating of tangible dimension by passengers' show that Arik Air (0.63) records the highest and Emirate airline (0.22) has the least. The servqual mean score for tangible dimension among the airlines is 0.41 suggesting a good service quality. The empathy dimension reveals that attribute "airline provide special diet options" (-0.40) for Arik Air has poor service quality. The other airlines have positive mean score indicating good service quality. British Airways (0.57) records highest rating as the airline that empathises with passengers while Emirate airline (0.46) shows the least empathy. The servqual mean score of empathy for the airlines is 0.52 indicating a better service quality. Responsiveness dimension shows that attribute "staff are ready to respond to passengers' special request" (-0.30) for Arik Air has poor service quality while other airlines have positive mean score indicating good service quality. The passengers' rating of airlines prompt response to their requests reveal that Virgin Atlantic (0.67) records the highest rating while Arik Air (0.27) has the least rating. The servqual mean score of responsiveness for the airlines is 0.52 indicating a better service quality. It can be deduced from the findings that assurance dimension has the lowest servqual score and poorest service quality. This is followed by tangible, empathy, responsiveness and reliability dimension in that order. The airlines pay more attention to reliability dimension probably due to its importance to the sustenance of the business. There is need for the airlines to strike a balance among the service quality dimensions and work especially on assurance and tangible dimensions to improve passengers' satisfaction with their service quality.

Furthermore, the result shows that all the servqual dimensions have positive mean score for the international airlines. This indicates that all the airlines exceed passengers' expectation of service quality though at varying degrees. British Airway has the highest mean score of 0.68 in reliability and lowest mean score of 0.40 in tangible. The airline has been able to dependably and accurately delivered the promised service. The airline records overall mean score of 0.54 implying that passengers' are better satisfied with the level of service quality rendered. Virgin Atlantic airline records the highest mean score of 0.67 in responsiveness and lowest score of 0.39 in tangible. This hints that the airline show its willingness to promptly respond to passengers' requests. The airline's overall mean score of 0.51 indicates that passengers are better satisfied with the service quality. However, the airline needs to improve on the handling of passengers' requests and make the ticketing office more conducive. Similarly, Emirate airline accounts for highest mean score of 0.80 in reliability dimension. This incidentally happens to be the highest mean score recorded for any dimension. The import of this result is that Emirate airline has reliably and dependably rendered the services to passengers as promised. The airline recorded the lowest mean score of 0.22 in tangible. The airline needs to make passengers feel safe when transacting business and make the ticketing office appearance attractive. The overall mean score of 0.48 suggests that passengers are better satisfied with the level of service quality rendered by the airline. Arik Air records the highest mean score of 0.63 in tangible dimension and lowest score of 0.15 in assurance, the least for any dimension. The airline needs to improve staff's attitudes by ensuring that they are more courteous in service delivery, pay attention to individual diets and willing to respond to passengers' special requests promptly. The airline has overall mean score of 0.44 indicating that passengers have a good satisfaction of their service quality. The airlines need to improve their service quality dimensions and attributes to retain passengers' confidence and maintain their market share of the air transport industry in Nigeria.

The study further reveals that 71 per cent of passengers are satisfied with the service quality of British Airways. The result also shows that 64 per cent of passengers that travel with Virgin Atlantic are satisfied with the service quality, 60 per cent indicates their satisfaction with the services rendered by Emirate airline while 56 per cent hint that they are satisfied with service quality of Arik Air. The study also found that other factors such as availability of airlines and schedule convenience of flights are important consideration in passengers' satisfaction with the service quality.

4.3. Effect of Service Quality Dimensions on Passengers' Satisfaction

The effect of service quality dimensions (reliability, assurance, tangible, empathy and responsiveness) on passengers' satisfaction of international airlines at Murtala Muhammed International Airport Lagos, Nigeria was predicted using multiple regression. The regression coefficients of passengers' satisfaction model are reported in Table 3. In the regression model, four of the variables responsiveness, reliability, assurance and tangible had positive statistically significant effect on passengers' satisfaction. The regression model is significant at $p \leq 0.01$, with F-value of 350.30. The R^2 value indicates that 81.6 per cent of variance in the passengers' satisfaction of international airlines in the study area was accounted for by the determinants variables that is, service quality dimensions.

The analysis of regression coefficients reveals that reliability has the greatest influence on passengers' satisfaction with airlines service quality in the study area. The result suggest that for every unit increase in reliability, there is a significant corresponding increase of 68.3 per cent ($\beta = 0.683$; $p \leq 0.01$) in passengers' satisfaction with the airlines services. This implies that reliability of airline services is highly valued and significantly improves passengers' satisfaction with the airlines services. Also, the regression coefficients show that empathy has a high impact on passengers' satisfaction with airline services. The result indicates that for every unit increase in empathy, there is a significant corresponding increase of 65.6 per cent ($\beta = 0.656$; $p \leq 0.01$) in passengers' satisfaction with the airlines services. Showing empathy and care by airlines will increase passengers' approval rating of their services.

Table-3. Regression coefficients of service quality dimensions on passengers' satisfaction

		Combined	
S/N	**Variables**	***b***	***B***
1	Reliability	0.639	0.683**
2	Assurance	0.072	0.065
3	Tangible	0.487	0.364**
4	Empathy	0.641	0.656**
5	Responsiveness	0.463	0.409**
	Constant	0.020	
	F – Values	350.30**	
	R^2	0.816**	
	Adjusted R^2	0.814	

Notes: *b*: unstandardized regression coefficient; *β*: standardized regression coefficient; *N = 400* *$p \leq 0.05$; **$p \leq 0.01$
Source: Author's Field Survey, 2018.

Furthermore, the regression coefficient of responsiveness has influence on passengers' satisfaction with the airlines services. The result reveals that for every unit increase in responsiveness of the airlines, there is a significant corresponding increase of 40.9 per cent ($\beta = 0.409$; $p \leq 0.01$) in passengers' satisfaction with their services. This is expected because customers tend to be satisfied when the service provider treat them with courtesy, good humour and promptly. Finally, the tangible of the airlines services has least statistically significant influence on passengers' satisfaction. The result indicates that for every unit increase in tangible, there is a significant corresponding increase of 36.4 per cent ($\beta = 0.364$; $p \leq 0.01$) in passengers' satisfaction with the airlines services in the study area. The airlines tangible facilities have direct impact on passengers' satisfaction hence they must ensure that their environment is appealing and equipped with state of the art gadgets to attract passengers.

5. Conclusion

This study was conducted to understand how service quality influences passengers' satisfaction of international airlines operating in Nigeria. The contribution of service quality dimensions and attributes to passengers' satisfaction with airlines services clearly emerged in this study. The findings reveal that passengers' satisfaction rating for reliability dimension record the highest servqual gap score followed by responsiveness and empathy. The finding further indicates that tangible and assurance dimensions have the least servqual gap score in all the airlines. The regression model coefficients indicate that four dimensions reliability, empathy, responsiveness and tangible had statistically significant effect and predict passengers' satisfaction with the sampled airlines. Summarily, it can be inferred from the result that the airlines have good service quality and passengers are satisfied with their services. The result suggests that service quality is a major determinant of passengers' satisfaction with international airline services in the study area. Hence, the study concludes that service quality influences passengers' satisfaction with international airlines operations in Nigeria.

The implication of the findings is that policy actions aimed at improving the service quality dimensions and attributes must be taken by the airlines. This will afford them the opportunity to continue enjoying the loyalty and patronage of the passengers. Generally, airlines must give service quality dimensions equal and desired attention because they collectively determine perceived passengers' satisfaction. Specifically, airlines should improve their dependability in handling passengers' problems so as to earn their confidence. Also, airlines need to improve their assurance rating by making passengers feel safe when transacting business and staff must be courteous in their service delivery to the passengers. The airlines should endeavour to make the ticketing office more conducive for the passengers to transact business and pay more attention to passengers' special requests such as meal and seat. Furthermore, it is recommended that government should provide a friendly environment such as favourable regulations for airlines to thrive and improve on their services. Government agencies like SERVICOM dealing with

service delivery in the country and Nigerian Civil Aviation Authority regulating aviation activities should take the complaints filed against the airlines by the passengers seriously to ensure compliance with International Civil Aviation Organization standards (ICAO).

This study could be improved upon by conducting further research on other attributes in the servqual gap theory that are not included in the survey. This will increase our knowledge of how other attributes contribute to the service quality dimensions gap score and how these gaps can be bridged in the aviation service industry.

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