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# Customers' Expectations and Perceptions of Airport Service Quality Performance in Murtala Muhammed International Airport, Lagos, Nigeria

Ikpechukwu Njoku<sup>1</sup>, Chike Godwin Udoka<sup>2</sup>

#### ABSTRACT

Expectations assessment is more critical when it comes to airport services. Hence, in this study, customers' expectations and their perceptions of airport service quality and/or performance in Murtala Muhammed International Airport (MMIA), Lagos, was examined. The study involved the use of primary data. Taro Yamane formula was used to generate the sample size and 400 copies of questionnaire was administered via systematic random sampling technique to the passengers at the airport. Statistical Packages for Social Sciences (SPSS) version 23 was used for the data analysis which involved descriptive statistics, factor analysis and independent sample t-test. It was noted that most expectations were placed on service attributes such as; overall satisfaction with the airport, cleanliness of restrooms, feeling of being safe, cleanliness of airport terminal and availability of restrooms. Service attributes that scored high performance includes availability of banking facilities and passport and visa inspection while the service attribute of phone/internet/IT facilities performed low. The significance (significant level  $\leq 0.05$ ) between the genders was examined using t-test and it revealed a high significance in the perception of male and female respondents on expectations and performance. The results therefore indicated that the female respondents' perception on expectations and performance of these services was higher than that of the male respondents' perception. The values of Kaiser-Meyer-Olkin (KMO) for airport service quality expectations is 0.923 while 0.928 is for performance. Whereas Bartlett's Test of Sphericity values are 5701.461 and 5299.519 with both p=0.000, indicating that the data were suitable for factor analysis, also with Eigen values of 1.714 and 1.464 respectively. Thus, it can be concluded that customers' expectations were not exceeded.

Keywords: Airport; Service Quality; Expectation and Performance

# 1. INTRODUCTION

Air transport, airport infrastructure, efficient and safe airline services and worldwide air transport networks are essential to sustain tourism (Lohmann & Duval, 2015). In 2014, over half of all international tourists (54%) travelled by air (UNWTO, 2015). Air transport has a major impact on a destination's economy, including the tourism sector and vice versa (Lian & Denstadli, 2010). Doganis (1992) defines airports as "a complex of runways and buildings for the take-off, landing, and maintenance of civil aircraft, with facilities for passengers and freight". He further classified the wide range of services and facilities provided by an airport into three categories: essential operational services, traffic-handling services and commercial activities. The airport is not a destination for tourists travelling by air but rather a transition point (Fodness & Murray, 2007). Even while the airport brings more customers and consequently higher profits for the management, certain problems might be generated as well, such as the airport's distraction from concentrating on passengers' expectations, satisfaction and thinking about short and mid-term commercial income.

Lewis (1993) defines service quality as the extent to which delivered service matches customer expectations. Parasuraman, Zeithaml & Berry (1988), who did pioneering work on service quality assessment, recognise service quality as a gap between customers' expectations and their perceptions of service performance. In general, expectations are assessed as if they are met or not. The same goes with meeting or exceeding customer expectations. Service expectations are defined by Parasuraman et al (1994) as what a service should be while Zeithaml, Bitner & Gremler (2006) argues that it is a combination of can be and should be. Bebko (2000) concludes that the service provider should figure out what the expectations are and what level of quality customers expect from the firm then try to meet or exceed these expectations. To be able to measure service quality, it is fundamental to assess whether or not the service provider is providing the customers with what they expect (Douglas & Connor, 2003). Expectations set the standards that form customers' evaluation of service quality and it is vital to understand those of customers (Walker & Baker, 2000). Customer satisfaction is a psychological concept that engages the emotion or welfare and delight as the consequence of what is achieved or anticipated from a product and/or service. It can also be described as a person's feeling of satisfaction or dissatisfaction resulting from comparing a product's performance with respect to his/her expectations (Kotler, Bloom & Hayes, 2002).

According to Yang (2003) the characteristics of service (i.e. intangibility, inseparability, heterogeneity and perishability) make the evaluation of service quality difficult. In order to understand service expectations and its effect on service quality, it is imperative to know how services differ from products. The experience of a service is vital because a satisfying result has been promised in advance and should be achieved during delivery. Due to the effect of these characteristics and the named differences with products, consumers have a more difficult time evaluating services than products. Hence, expectations assessment is more critical when it comes to services (Walker & Baker, 2000; Bebko, 2000). Understanding service quality involves recognizing the characteristics of service which are intangibility, heterogeneity and inseparability (Ladhari, 2009). This makes it easy to measure service quality. Therefore, the expectation of customer serves as a footing for evaluating quality of service and as such, quality is high when performance exceeds expectation and quality is low when performance does not meet their expectation (Asubonteng et al., 1996). Thus, expectation could be seen as desires or wants of consumer i.e., what they feel a service provider should offer instead of what he would offer (Parasuraman et al., 1988).

Conceptually, the dimensions of airport service quality are servicescape, service personnel and services (Fodness & Murray, 2007). Using an airport as an example, signs and symbols, coupled with other facilities and overall setting of the terminal altogether create a servicescape. Since airports demand passengers' physical presence, the physical environment of the airport can affect passengers' perceptions of the overall quality of the service rendered. Service personnel are the second influence of service quality where customers interact with the service personnel. Fodness & Murray (2007) identified three elements of this dimension which includes behavior, attitudes and expertise. The behavior and attitude of an airport employee are based on five measurements (i.e. tangibles, responsiveness, reliability, assurance and empathy). Services can be defined as any activities that the airport offers in order to facilitate travelers' choice in spending their waiting time inside the departure lounge (Widarsyah, 2013). Therefore, airport facilities have a major influence on customers' perceptions of the quality of the service rendered.

As airlines and airports transition to a deregulated environment where more commercial and privatized market-lead approaches are the norm (Spasojevic, Lohmann & Scott, 2018), it is expected that studies will have more emphasis on acquiring knowledge on the expectations and performance of quality of service in airports. However, there has been several studies on airport service quality (Fodness & Murray, 2007; Jagoda & Vajira, 2008; Hildur, 2009; Rossi, 2010; Lubbe et al., 2011; Kashif et al., 2012; Bogicevic et al., 2013; Ching, 2014; Yang et al., 2015; Hoang et al., 2016; Malik, 2017); very few empirical research has focused on investigating passengers' expectations and performance of service quality in Nigeria. Therefore, the lack of this knowledge has been identified as a significant barrier to the future growth of the aviation industry, since almost no study has carried out the

expectations and performance of service quality in MMIA, Lagos, Nigeria. Thus, the purpose of this research is to examine customers' expectations and their perceptions of airport service quality performance in this Airport.

# 2. METHODOLOGY

#### 2.1. Sources of Data

Primary data was employed for analysis in this work. This was obtained through the administration of questionnaire on respondents which reflects their opinion on expectations and perceptions of airport service quality. In essence the questionnaire was used to elicit relevant information from the respondents.

# 2.2. Data Analysis Methods

The data set was analyzed by the use of two approaches namely; the Descriptive Statistics and Inferential Statistics. While the inferential statistics like sample t-test was employed to analyze the formulated hypothesis, the factor analysis was also use to analyse the variables.

# 2.3. Factor Analysis

A principal component analysis was conducted on the 28 variables which addressed expectations and performance of airport service quality to ensure that the variables were not inter-correlated and that the variables were grouped properly. For data to be appropriate for factor analysis, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) value is 0.6 or more and that the Bartlett's Test of Sphericity value is significant at 0.05 or less. Hence, both tools were applied to test for inter-correlation of data.

#### 2.4. Data Estimation

To analyze the questionnaires, the data set was estimated by carrying out the following tests; descriptive statistics, independent sample t-test and factor analysis were employed. While independent sample t-test was used to assess whether the mean of two groups was statistically different, factor analysis was performed to ensure that the variables used in this study were not intercorrelated and that these variables were grouped properly.

# 2.5. Test of Hypothesis

The hypothesis formulated was tested with an independent sample t-test; this is used when one wants to compare the mean scores on some continuous variable for two different groups of participants. Thus, the T-test statistics is used to assess whether the mean of two groups statistically differ from each other. The formula for student's t-test is shown below:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \dots \dots (1)$$

Where,

t = t-value

 $x_1$  and  $x_2$  = means of the two groups being compared

 $S^2$  = pooled standard error of the two groups

 $n_1$  and  $n_2$  = number of observations in each of the groups.

# 3. RESULTS AND DISCUSSION

The research was carried out using questionnaires to investigate passengers' perception of service quality of airport in the different service attributes. The passengers were asked to evaluate 28 attributes designed to assess their expectations of airport services as well as to evaluate the performance of these service attributes in MMIA, Lagos. Therefore, the mean of expectation of service attributes and level of performance was calculated; also, independent sample t-test and factor analysis of airport services was computed.

#### 3.1. Descriptive Analysis of Airport Service Attributes

**Table 1: Descriptive Analysis of Airport Service Attributes** 

Service Attributes	Mean	Expectation	Mean	Performance	
		Level		Level	
Overall satisfaction with the airport	4.52	Very high	2.90	Moderate	
Cleanliness of restrooms	4.49	Very high	2.95	Moderate	
Feeling of being safe	4.42	Very high	3.16	Moderate	
Cleanliness of airport terminal	4.31	Very high	3.08	Moderate	
Availability of restrooms	4.27	Very high	3.14	Moderate	
Speed of baggage delivery service	4.20	High	2.79	Moderate	
Flight information screens	4.19	High	2.74	Moderate	
Comfort of waiting	4.17	High	2.79	Moderate	
Ease of finding your way	4.13	High	3.09	Moderate	
Phone/Internet/IT facilities	4.10	High	2.49	Low	
Courtesy and helpfulness of security staff	4.09	High	3.02	Moderate	
Thoroughness of security inspection	4.09	High	3.06	Moderate	
Courtesy, helpfulness of check-in staff	4.08	High	3.05	Moderate	
Ambience of the airport	4.04	High	2.82	Moderate	
Availability of baggage carts/trolleys	4.01	High	2.95	Moderate	
Courtesy, helpfulness of airport staff	4.00	High	2.92	Moderate	
Availability of banking facilities	3.99	High	3.81	High	
Waiting time in check-in queue	3.96	High	2.80	Moderate	
Passport and visa inspection	3.75	High	3.52	High	
Ground transportation to/from airport	3.89	High	2.90	Moderate	
Customs inspection	3.89	High	2.97	Moderate	
Waiting time at security inspection	3.89	High	2.88	Moderate	
Availability of parking facilities	3.88	High	2.73	Moderate	
Value for money of restaurants	3.80	High	2.85	Moderate	
Restaurants/eating facilities	3.77	High	2.90	Moderate	
Value for money of parking facilities	3.71	High	2.61	Moderate	
Value for money of shopping	3.64	High	2.68	Moderate	
Opening hours of shopping/restaurant	3.60	High	2.81	Moderate	
Grand mean	4.03	High	2.94	Moderate	

Table 1 determined the mean scores of each airport service attributes. The respondents placed very high expectation on "Overall satisfaction with the airport" (mean=4.52), "Cleanliness of restrooms" (mean=4.49) ranked second and the third was "Feeling of being safe" (mean=4.42); "Cleanliness of airport terminal" (mean=4.31) and "Availability of restrooms" (mean=4.27) ranked fourth and fifth respectively while the respondents placed high expectation on the other service attributes. Table 1 also addressed the issue of how MMIA, Lagos is performing in their service quality. Respondents scored "Availability of banking facilities" (mean=3.99) and "Passport and visa inspection" (mean=3.75) high performance. According to the result, the airport was seen to perform moderately in most of the airport service attributes except for "Phone/Internet/IT facilities" (mean=2.49) that scored low.

#### 3.2. Factor Analysis of Airport Service Quality

In this study, the value of Kaiser-Meyer-Olkin (KMO) of expectations and performance of airport quality of service are 0.923 and 0.928 respectively. Thus, verified that the employment of factor analysis was appropriate in the study. Bartlett's Test of Sphericity value are 5701.461 and 5299.519 respectively with both p=0.000, indicating that the data were suitable for factor analysis. The Varimax rotation procedure was used to produce an orthogonal transformation matrix yielding independent factors, which provided unique information. Only the factors with Eigen values equal to or greater than 1 were considered as significant. The Eigen value of a factor represents the amount of the total variance explicated by that factor. Examination of the resulting factors

leads to three factors of both expectations and performance of airport service quality with Eigen values of 1.714 and 1.464 which were greater than 1.00. Statements with loadings of 0.30 or greater on a single factor were used in interpreting the factors.

Table 2a: Factor Analysis of Expectations of the Quality of Service of Airport

Service Quality Attributes	Factor 1	Factor 2	Factor 3	Commu-
(Importance)	Servicescape	Services	Service	nalities
	-		Personnel	
Factor 1: Servicescape				
Ease of finding your way	0.773			0.566
Passport and visa inspection	0.756			0.551
Customs inspection	0.723			0.425
Availability of banking facilities	0.672			0.511
Ground transportation to/from airport	0.652			0.481
Flight information screens	0.643			0.564
Thoroughness of security inspection	0.635			0.476
Waiting time in check-in queue	0.609			0.450
Value for money of parking facilities	0.594			0.439
Availability of baggage carts/trolleys	0.567			0.427
Availability of parking facilities	0.551			0.494
Overall satisfaction with the airport	0.331			0.394
Feeling of being safe	0.313			0.630
Waiting time at security inspection	0.303			0.306
Factor 2: Services				
Value for money of shopping		0.817		0.571
Opening hours of shopping/restaurant		0.783		0.531
Restaurants/eating facilities		0.763		0.555
Availability of restrooms		0.747		0.560
Speed of baggage delivery service		0.703		0.543
Cleanliness of restrooms		0.683		0.646
Value for money of restaurants		0.659		0.438
Comfort of waiting		0.526		0.505
Cleanliness of airport terminal		0.517		0.611
Phone/Internet/IT facilities		0.501		0.401
Ambience of the airport		0.474		0.425
Factor 3: Service Personnel				
Courtesy, helpfulness of check-in staff			0.820	0.640
Airport staff's courtesy and helpfulness			0.716	0.607
Courtesy and helpfulness of airport security			0.711	0.556
Eigenvalues	10.399	2.187	1.714	
Variance Explained (%)	37.138	7.811	6.120	
Cumulative Variance (%)	37.138	44.949	51.069	

Note: Kaiser-Meyer-Olkin (KMO): 0.923. Bartlett's Test of Sphericity: 5701.461, p = 0.000

After analyzing expectations of airport quality of service variables, computing the data with principal component analysis of factor analysis to delete the inter-correlations among the dimensions, the results were three factors with 28 variables. These factors are namely; Servicescape, Services and Service Personnel. In Table 2a, the first factor was labeled as "Servicescape," consisted of fourteen variables and explained 37.138% of the variance in the data with an Eigen value of 10.399. The second factor was labeled as "Services," consisted of eleven variables and explained 7.811% of the variance in the data with an Eigen value of 2.187. The third factor was labeled as "Service Personnel", consisted of three variables and the total variance explained was 6.120% with an Eigen value of 1.714. Also, after using factor analysis to delete the inter-correlation variables among the dimensions of performance of

airport service quality. The results were three factors with 28 variables: the first factor was labeled as "Servicescape," consisted of fourteen variables and explained 37.248% of the variance in the data having an Eigen value of 10.430. The second factor was labeled as "Services," consisted of eleven variables and explained 6.316% of the variance in the data with an Eigen value of 1.768. The third factor was labeled as "Service Personnel", consisted of three variables and the total variance explained was 5.230% having an Eigen value of 1.464 (Table 2b).

Table 2b: Factor Analysis of Performance of Airport Service Quality

Service Quality Attributes	Factor 1	Factor 2	Factor 3	Commu-
(Performance)	Servicescape	Services	Service	nalities
			Personnel	
Factor 1: Servicescape				
Passport and visa inspection	0.762			0.562
Feeling of being safe	0.663			0.494
Ease of finding your way	0.604			0.469
Waiting time in check-in queue	0.589			0.424
Customs inspection	0.586			0.446
Availability of banking facilities	0.579			0.427
Ground transportation to/from airport	0.564			0.464
Overall satisfaction with the airport	0.552			0.652
Availability of baggage carts/trolleys	0.551			0.449
Money for parking facilities	0.505			0.437
Availability of parking facilities	0.488			0.401
Time spent at security inspection	0.470			0.456
Flight information screens	0.394			0.340
Thoroughness of security inspection	0.319			0.355
Factor 2: Services				
Value for money of restaurants		0.798		0.581
Cleanliness of restrooms		0.797		0.610
Restaurants/eating facilities		0.778		0.539
Availability of restrooms		0.743		0.543
Baggage delivery service speed		0.693		0.495
Cleanliness of airport terminal		0.660		0.541
Comfort of waiting		0.636		0.487
Value for money of shopping		0.632		0.497
Ambience of the airport		0.629		0.501
Opening hours of shopping/restaurant		0.613		0.458
Phone/Internet/IT facilities		0.599		0.407
Factor 3: Service Personnel				
Courtesy and helpfulness of security staff			0.782	0.637
Courtesy helpfulness of airport staff			0.636	0.523
Courtesy, helpfulness of check-in staff			0.401	0.468
Eigenvalues	10.430	1.768	1.464	
Variance Explained (%)	37.248	6.316	5.230	
Cumulative Variance (%)	37.248	43.564	48.794	

Note: Kaiser-Meyer-Olkin (KMO): 0.928. Bartlett's Test of Sphericity: 5299.519, p = 0.000

# 3.3. Passengers' Perception of Airport Service Quality

Table 3a: Passengers' Expectations of Service Quality by Gender

Service Attributes	Mean		<u>T-test</u>	
(Expectations)	Male	Female	t-value	p-value
Overall satisfaction with the airport	4.50	4.55	-0.561	0.575
Cleanliness of restrooms	4.41	4.45	-0.379	0.705
Feeling of being safe	4.38	4.49	-1.098	0.273
Cleanliness of airport terminal	4.28	4,38	-0.974	0.331
Availability of restrooms	4.28	4.23	0.418	0.676
Speed at which baggage is delivered	4.14	4.32	-1.798	0.037
Flight information screens	4.16	4.24	-0.690	0.491
Comfort of waiting	4.13	4.25	-1.106	0.269
Ease at which you find your way	4.08	4.23	-1.502	0.134
Phone/Internet/IT facilities	4.12	4.06	0.550	0.582
Helpfulness and courtesy of security staff	4.00	4.29	-3.004	0.003
Thoroughness of security inspection	4.03	4.20	-1.659	0.098
Courtesy, helpfulness of check-in staff	4.03	4.18	-1.383	0.167
Ambience of the airport	4.06	4.01	0.440	0.660
Availability of baggage carts/trolleys	3.97	4.08	-1.082	0.280
Courtesy, helpfulness of airport staff	3.95	4.11	-1.443	0.150
Availability of banking facilities	3.94	4.03	-0.790	0.430
Waiting time in check-in queue	3.99	3.89	0.883	0.378
Passport and visa inspection	3.85	4.11	-2.437	0.015
Ground transportation to/from airport	3.81	4.03	-1.964	0.049
Customs inspection	3.84	3.98	-1.390	0.166
Security inspection waiting time	3.88	3.91	-0.290	0.772
Availability of parking facilities	3.80	4.05	-2.262	0.024
Value for money of restaurants	3.78	3.83	-0.462	0.645
Restaurants/eating facilities	3.74	3.81	-0.602	0.547
Value for money of parking facilities	3.67	3.79	-1.005	0.316
Value for money of shopping	3.61	3.70	-0.833	0.406
Opening hours of shopping/restaurant	3.58	3.62	-0.336	0.737

Note: T-test two tail probability ≤0.05 (significance level)

Tables 3a & 3b present passengers' perception on expectations and performance of service quality between genders with the mean score of each airport service attributes. Table 3a shows that both male and female respondents placed the most expectation on "Overall satisfaction with the airport", Mean=4.50 (male), 4.55 (female) and also placed the least on "Opening hours of shopping/restaurants" Mean=3.58 (male), 3.62 (female). According to the result in Table 3b, MMIA was seen to perform moderate in most service areas. The male respondents placed the most emphasis on "Feeling of being safe" (mean=3.18) while the female respondents focused on "Passport and visa inspection" (mean=3.20), whereas, the lowest performance of service quality were placed on "Phone/Internet/IT facilities" (mean=2.27) by male respondents and on "Value for money of parking facilities" (mean=2.65) by female respondents.

Table 3b: Passengers' Perception on Performance of Service Quality by Gender

	1	~	<i>y y</i>	
Service Attributes	<u>Mean</u>	_	<u>T-test</u>	
(Performance)	Male	Female	t-value	p-value
Overall satisfaction with the airport	2.91	2.86	0.543	0.587
Cleanliness of restrooms	2.73	2.89	-1.901	0.038
Feeling of being safe	3.18	3.12	0.549	0.583
Cleanliness of airport terminal	3.09	3.07	0.166	0.868

Availability of restrooms         3.15         3.13         0.159         0.874           Speed of baggage delivery service         2.76         2.83         -0.630         0.529           Flight information screens         2.75         2.73         0.097         0.923           Comfort of waiting         2.54         2.80         -2.507         0.013           Ease of finding your way         3.09         3.10         -0.115         0.909           Phone/Internet/IT facilities         2.27         2.59         -3.014         0.003           Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.80					
Flight information screens         2.75         2.73         0.097         0.923           Comfort of waiting         2.54         2.80         -2.507         0.013           Ease of finding your way         3.09         3.10         -0.115         0.909           Phone/Internet/IT facilities         2.27         2.59         -3.014         0.003           Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.805           Waiting time in check-in queue         2.76         2.89         -1.277         0.202           Passport and visa inspection         3.16         3.20         -0.395         0.6	Availability of restrooms	3.15	3.13	0.159	0.874
Comfort of waiting         2.54         2.80         -2.507         0.013           Ease of finding your way         3.09         3.10         -0.115         0.909           Phone/Internet/IT facilities         2.27         2.59         -3.014         0.003           Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.805           Waiting time in check-in queue         2.76         2.89         -1.277         0.202           Passport and visa inspection         3.16         3.20         -0.395         0.693           Ground transportation to/from airport         2.90         2.89         0.048	Speed of baggage delivery service	2.76	2.83	-0.630	0.529
Ease of finding your way         3.09         3.10         -0.115         0.909           Phone/Internet/IT facilities         2.27         2.59         -3.014         0.003           Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.805           Waiting time in check-in queue         2.76         2.89         -1.277         0.202           Passport and visa inspection         3.16         3.20         -0.395         0.693           Ground transportation to/from airport         2.90         2.89         0.048         0.961           Customs inspection         2.97         2.95         0.188	Flight information screens	2.75	2.73	0.097	0.923
Phone/Internet/IT facilities         2.27         2.59         -3.014         0.003           Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.805           Waiting time in check-in queue         2.76         2.89         -1.277         0.202           Passport and visa inspection         3.16         3.20         -0.395         0.693           Ground transportation to/from airport         2.90         2.89         0.048         0.961           Customs inspection         2.97         2.95         0.188         0.851           Time at security inspection         2.90         2.83         0.720	Comfort of waiting	2.54	2.80	-2.507	0.013
Courtesy and helpfulness of security staff         3.04         2.96         0.822         0.412           Thoroughness of security inspection         3.10         2.95         1.371         0.171           Courtesy, helpfulness of check-in staff         3.01         3.12         -1.075         0.283           Ambience of the airport         2.81         2.83         -0.116         0.908           Availability of baggage carts/trolleys         2.93         2.98         -0.481         0.631           Courtesy, helpfulness of airport staff         2.93         2.89         0.342         0.733           Availability of banking facilities         3.11         3.08         0.247         0.805           Waiting time in check-in queue         2.76         2.89         -1.277         0.202           Passport and visa inspection         3.16         3.20         -0.395         0.693           Ground transportation to/from airport         2.90         2.89         0.048         0.961           Customs inspection         2.97         2.95         0.188         0.851           Time at security inspection         2.90         2.83         0.720         0.472           Availability of parking facilities         2.74         2.70         0.396 <td>Ease of finding your way</td> <td>3.09</td> <td>3.10</td> <td>-0.115</td> <td>0.909</td>	Ease of finding your way	3.09	3.10	-0.115	0.909
Thoroughness of security inspection 3.10 2.95 1.371 0.171 Courtesy, helpfulness of check-in staff 3.01 3.12 -1.075 0.283 Ambience of the airport 2.81 2.83 -0.116 0.908 Availability of baggage carts/trolleys 2.93 2.98 -0.481 0.631 Courtesy, helpfulness of airport staff 2.93 2.89 0.342 0.733 Availability of banking facilities 3.11 3.08 0.247 0.805 Waiting time in check-in queue 2.76 2.89 -1.277 0.202 Passport and visa inspection 3.16 3.20 -0.395 0.693 Ground transportation to/from airport 2.90 2.89 0.048 0.961 Customs inspection 2.97 2.95 0.188 0.851 Time at security inspection 2.90 2.83 0.720 0.472 Availability of parking facilities 2.74 2.70 0.396 0.693 Value for money of restaurants 2.85 2.86 -0.088 0.930 Restaurants/eating facilities 2.93 2.83 0.930 0.353 Money for parking facilities 2.59 2.65 -0.564 0.573 Value of money of shopping 2.68 2.87 0.086 0.932	Phone/Internet/IT facilities	2.27	2.59	-3.014	0.003
Courtesy, helpfulness of check-in staff       3.01       3.12       -1.075       0.283         Ambience of the airport       2.81       2.83       -0.116       0.908         Availability of baggage carts/trolleys       2.93       2.98       -0.481       0.631         Courtesy, helpfulness of airport staff       2.93       2.89       0.342       0.733         Availability of banking facilities       3.11       3.08       0.247       0.805         Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65 <td< td=""><td>Courtesy and helpfulness of security staff</td><td>3.04</td><td>2.96</td><td>0.822</td><td>0.412</td></td<>	Courtesy and helpfulness of security staff	3.04	2.96	0.822	0.412
Ambience of the airport       2.81       2.83       -0.116       0.908         Availability of baggage carts/trolleys       2.93       2.98       -0.481       0.631         Courtesy, helpfulness of airport staff       2.93       2.89       0.342       0.733         Availability of banking facilities       3.11       3.08       0.247       0.805         Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086	Thoroughness of security inspection	3.10	2.95	1.371	0.171
Availability of baggage carts/trolleys       2.93       2.98       -0.481       0.631         Courtesy, helpfulness of airport staff       2.93       2.89       0.342       0.733         Availability of banking facilities       3.11       3.08       0.247       0.805         Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Courtesy, helpfulness of check-in staff	3.01	3.12	-1.075	0.283
Courtesy, helpfulness of airport staff       2.93       2.89       0.342       0.733         Availability of banking facilities       3.11       3.08       0.247       0.805         Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Ambience of the airport	2.81	2.83	-0.116	0.908
Availability of banking facilities       3.11       3.08       0.247       0.805         Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Availability of baggage carts/trolleys	2.93	2.98	-0.481	0.631
Waiting time in check-in queue       2.76       2.89       -1.277       0.202         Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Courtesy, helpfulness of airport staff	2.93	2.89	0.342	0.733
Passport and visa inspection       3.16       3.20       -0.395       0.693         Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Availability of banking facilities	3.11	3.08	0.247	0.805
Ground transportation to/from airport       2.90       2.89       0.048       0.961         Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Waiting time in check-in queue	2.76	2.89	-1.277	0.202
Customs inspection       2.97       2.95       0.188       0.851         Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Passport and visa inspection	3.16	3.20	-0.395	0.693
Time at security inspection       2.90       2.83       0.720       0.472         Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Ground transportation to/from airport	2.90	2.89	0.048	0.961
Availability of parking facilities       2.74       2.70       0.396       0.693         Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Customs inspection	2.97	2.95	0.188	0.851
Value for money of restaurants       2.85       2.86       -0.088       0.930         Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Time at security inspection	2.90	2.83	0.720	0.472
Restaurants/eating facilities       2.93       2.83       0.930       0.353         Money for parking facilities       2.59       2.65       -0.564       0.573         Value of money of shopping       2.68       2.87       0.086       0.932	Availability of parking facilities	2.74	2.70	0.396	0.693
Money for parking facilities         2.59         2.65         -0.564         0.573           Value of money of shopping         2.68         2.87         0.086         0.932	Value for money of restaurants	2.85	2.86	-0.088	0.930
Value of money of shopping         2.68         2.87         0.086         0.932	Restaurants/eating facilities	2.93	2.83	0.930	0.353
, 11 0	Money for parking facilities	2.59	2.65	-0.564	0.573
Opening hours of shopping/restaurant 2.79 2.85 -0.626 0.532	Value of money of shopping	2.68	2.87	0.086	0.932
	Opening hours of shopping/restaurant	2.79	2.85	-0.626	0.532

Note: T-test two tail probability ≤0.05 (significance level)

Using t-test to examine the significance (significant level  $\leq$  0.05) between the gender, there was significance difference between male and female respondents' perception on expectation (Table 3a) as follows; "Speed of baggage delivery service" (p=0.03), "Courtesy and helpfulness of security staff" (p=0.00), "Passport and visa inspection" (p=0.01), "Ground transportation to/from airport" (p=0.04) and "Availability of parking facilities" (p=0.02). While there was also significance difference (Table 3b) in perception between male and female in the performance of "Cleanliness of restrooms" (p=0.03), "Comfort of waiting" (p=0.01) and "Phone/internet/IT facilities" (p=0.00). The results therefore indicated that the female respondents' perception on expectations and performance of these services was higher than that of the male respondents.

# 4. CONCLUSION

In this research, the expectations and performance of service quality in MMIA, Lagos, Nigeria was examined. It was noted that most expectations were placed on service attributes such as; general satisfaction with the airport, cleanliness of restrooms, feeling of being safe, cleanliness of airport terminal and availability of restrooms. Service attributes that scored high performance includes availability of banking facilities and passport and visa inspection while the service attribute of phone/internet/IT facilities performed low. Using t-test to examine the significance (significant level  $\leq 0.05$ ) between the genders, there was a significance difference in perceptions of gender of respondents on expectation. The results therefore indicated that the female respondents' perception on expectations and performance of these services was higher than that of the male respondents' perception. The values of Kaiser-Meyer-Olkin (KMO) of expectations and performance of service quality of airport are: 0.923 and 0.928 respectively while Bartlett's Test of Sphericity values are 5701.461 and 5299.519 with both p=0.000, indicating that the data were suitable for factor analysis, also with Eigen values of 1.714 and 1.464 respectively. Thus, it can be concluded that customers' expectations were not exceeded.

Based on the findings of this study, the recommendations for improving quality of airport service in Nigeria includes that live Flight Information Display Systems (FIDS) are adequately provided within and outside the airport in an attempt to communicate a variety of critical travel information such as; arrivals, departures, flight number, flight status, airline information, flight delays, flight cancelations, gate information, baggage delays etc. Also, the airport management should devise an effective measure of

handling passengers' complaints. This can be achieved by paying more attention to address customers' challenges and then solving their problems immediately or as quickly as possible; this mechanism is to be applied so as to reduce customers' dissatisfaction.

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This study has not received any external funding.

#### **Conflict of Interest**

The author declares that there are no conflicts of interests.

# Data and materials availability

All data associated with this study are present in the paper.

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