

Effect of Service Quality on Students' Satisfaction in Nigerian Universities

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Abstract

This study investigated the indices of service quality (SQ) and their implications on student satisfaction (SS) in South-East Nigerian universities. Based on the theory of planned behavior and a conceptual service quality model, the responses of respondents were analyzed with simple regression analysis using SPSS version 21. Findings show that institutional infrastructure has a significant positive effect on student satisfaction with a p-value (0.000) less than Alpha (0.05), while teaching output has a significant positive effect on student satisfaction. We, therefore, concluded that service quality has a significant positive effect on students' satisfaction in Nigerian universities. The study recommends among others that higher education managers should continuously improve their service quality by managing it with the goals of satisfying the students and beating the competition, which seems to be intense and devote more serious attention to students' expectations and how they perceived service quality. The theoretical and practical relevance of the study were discussed.

Keywords *Service Quality; Plan Behavior; Institutional Infrastructure; Students' Satisfaction; Nigeria Universities*

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Introduction

The University education sector is in the business of rendering services to its teeming stakeholders directly or indirectly. For universities to remain viable in the face of stifling competition in student enrolment, their services must meet or exceed the expectations of their various stakeholders when compared with those of their competitors. Universities today face an uphill task of struggling to improve service quality so as to increase students' enrolment, as well as gaining and maintaining a certain level of competitive advantage over their counterparts due to persistent increase in the number of universities- public and private- in the country (Ezeokoli & Ayodele, 2014).

In developing countries like Nigeria, university education is regarded as a veritable tool for improving sociocultural and economic development, as well as for building the future for the younger generations to be equipped with new skills, knowledge, and ideas. This has made way for an irregular increase in the demand for its access. Therefore, it has become pertinent for universities to meet up with the challenges associated with this increase in its demand. Every year, universities vie for students nationally and internationally and students must make decisions on their choices of institutions of study. As a result of this, universities are obliged to provide top-quality services in order to compete favorably in the university education landscape and set themselves distinctly.

In the opinion of Adebayo, Oyenike, and Adesoji (2012), universities can strategically position themselves by providing top-quality services to beat those of their competitors. In recent years, top-quality services have proven to be a suitable yardstick for measuring educational excellence. Ahmed, et al. (2010) view quality service as a main strategic variable for universities to increase market share, and government presence and create a strong perception in consumers (students) and authorities' minds. Alves and Raposo (2010) similarly, affirm that perceived quality creates a favorable image in the minds of students which ultimately leads them to satisfaction. Mazzarol (1998) asserts that higher education institutions are under obligation to maintain a distinctive image to have a competitive advantage over others to satisfy the students in the university system.

Statement of the problem

It has always been a very huge challenge to determine if students' satisfaction with universities' services is a result of their quality, moreover, now that most activities by students and universities have been subjected to several factors ranging from social, political to economic. Most worrying is the bases for ascertaining satisfaction variables in universities - whether they are objective and bias-free. The service quality-satisfaction dynamics is the motivation for this research, given the fact that students at times, seem to perceive quality differently from what the universities strive for. Although studies have been conducted in the area of service quality, very few focused on satisfaction with the Nigerian university system vis-à-vis service quality in the South-East. This fact points to a need to study the quality of service delivered by universities in their programs against the satisfaction of the students during their study period. The quality-satisfaction challenge is the basis of the problem of this research work which falls under the lack of institutional infrastructure and poor teaching output.

Objectives of the study

The broad objective of this study is to examine the effect of service quality on students' satisfaction in Nigerian universities. The specific objectives are;

- I. To examine the extent of the relationship between institutional infrastructure and university students' satisfaction.
- II. To ascertain the extent of the relationship between teaching output and university students' satisfaction.

Hypotheses of study

- I. There is no significant relationship between institutional infrastructure and students' satisfaction
- II. Teaching output has no significant positive effect on Students' satisfaction in southeast Nigeria.

Review of Related Literature

Conceptual Review

Service Quality

Service quality (SQ), in its contemporary conceptualization, is a measure of discrepancy between perceived expectations (E) of service with perceived performance (P), giving rise to the equation, $SQ=P-E$ (Lewis & Booms, 1983). This conceptualization of service quality has its origins in the expectancy-disconfirmation paradigm (Oliver, Balakrishnan, & Berry 1994). From the business administration viewpoint, service quality is an achievement in customer service. It reflects customer service at each service encounter. Customers form service expectations from past experiences, word of mouth, and marketing communications (Parasuraman, Berry, and Zeithaml, 1991). In general, customers compare perceived service with expected service and if the former falls short of the latter, the customers are disappointed.

In measuring the aspects of customer service that are subjective, emphasis will be laid on the conformity of the expected benefits with the perceived result. This, in turn, depends on what the customers' expectations are, in terms of services they might receive and the service provider's ability to present this expected service. Successful companies have the task of adding benefits to their offerings that not only surpass customers' desires aimed at satisfying them but also surprise and delight them in the most favorable way possible. Delighting customers deals with the purpose of exceeding their expectations. Service quality can be related to service potential which is a function of (for example, workers' qualification); service process (for example, the quickness of service), and service result (customer satisfaction). Individuals' service quality sees the service quality of employees as different from the quality that the customer perceived (Uysal & Yildiz, 2013). Long before now, scholars have approached service quality as a term that is very difficult to define and measure due to the inherent intangibility nature of services, which are often experienced in a subjective manner (Gronroos, 1994). One of the earliest attempts to grapple with the service quality concept came from the so-called Nordic School. In this approach, service quality was seen as having two basic dimensions;

Technical Quality: What the customer receives as a result of interactions with the service firms.

Functional Quality: How the customer receives the service, the expressive nature of the service delivery (e.g., courtesy, attentiveness, promptness).

The technical quality is relatively objective and therefore, easy to measure. However, difficulties arise when trying to evaluate functional quality. Various factors which may determine customers' expectations include recommendations, personal needs, and past experiences. In the course of service delivery, there may be occasional discrepancies between the expected service and the perceived service, and this sometimes, creates a "gap". The service quality model developed by Parasuraman, Zeithaml, and Berry (1988), highlights the main requirements for delivering high service quality. The model identifies five "gaps" that could cause unsuccessful service delivery. Customers naturally have a tendency of drawing comparisons between the services they "experience" (otherwise referred to as perceived service) with the services they "expect" (referred to as expected service). If the experience obtained in the course of service delivery and consumption does not match the expectation, there arises a gap. Given the emphasis on expectations, this approach to measuring service quality is known as the expectancy-disconfirmation paradigm and is the dominant model in consumer behavior and marketing literature.

Institutional Infrastructure

A university does not operate in a vacuum. Infrastructure in a way makes a university. A university should be able to provide the basic infrastructure that facilitates learning, recreation, library, conveniences, furniture, etc., and make them available in all areas of the university environment. Ezeokoli and Ayodele (2014) and Parasuraman, Zeithaml, and Berry (1988) referring to these as tangibles pointed out that they are the appearance of physical facilities, equipment, and communication materials needed in service marketing. Tangibles can act as an invitation to prospective students to try out the university. Ezeokoli and Ayodele further stressed that tangibles are important for setting up a clear transmission of knowledge in the teaching and learning process with the presence of well-equipped facilities like laboratories, libraries well stocked with textbooks, etc.

Teaching Output

To students and other stakeholders, the basic mission of a university is the delivery of high-quality teaching output by lecturers. Every university strives to hold this seriously as the bulk of the output of students is reflected in this. This dimension of service quality deals with the punctuality and regularity of lecturers to scheduled classes, the preparedness of lecturers before lectures, and the accessibility and availability of lecturers after lectures for counseling. Kasper, van Heldsdingen and Gabbot (2006) assert that one of the potential benefits of high-quality staff is that it creates a competitive advantage for the organization (university) by insulating customers from competitors, thus giving them favorable recognition by students and other stakeholders.

Students Satisfaction

Students' satisfaction helps in assessing the extent to which the institution is viable in terms of resources (human and material) within and the output of such an organization. However, Maliki, Danish, and Usman (2010) were of the opinion that when intentional performance is a result of one's contentment, satisfaction is said to be achieved. Satisfaction was seen by Hasan and Ilias (2008) to consist of students' perceptions and proficiencies experienced while in school. They explained further that students' satisfaction is a vague concept that will continue to be redefined through campus life recurrent experiences. Helgesen and Nettet (2007), in the study on what accounts for students' satisfaction, and Gruber, FUB, Voss, and Glaser-Zikuda, (2010) in a study "examining students' satisfaction with higher education services using a new measurement tool differently observed that satisfied students will attract new students by promoting their school through positive communication.

Tan *et al* (2010) argued: "satisfaction is the function of the congruence between performance and esteemed benefits resulting from the consumer (student) personal values and the configuration of consumer value is affected by central cultural values..., that cultural differences have a direct influence on the level of students satisfaction regarding their perception of services and to satisfy the customer with the same cultural background is not that easy, then to satisfy them with the different cultural background will be even more difficult. Petruzzelli, D'Uggento, and Romanazzi (2006) reported that students are likely to be satisfied in their educational institution when the service provided fits their expectations or they will be very satisfied when the service is beyond their expectations. On the contrary, students are dissatisfied with the educational institution when the services encountered/experienced are less than their expectations and when the gap between perceived and expected service quality is high, they tend to communicate the negative aspects.

Theoretical Framework

In marketing, several theories bordering on behavior abound. Notably among them are the ones that border on decision-making, purchase intentions, reasoning, and loyalty to continue with a product/service as a result of satisfaction- which may arise from the learning process by the consumer. Such theories include the Howard and Sheth model (Agbonifoh, et al., 1998); the Theory of Reasoned Action (Solomon, 2009); Theory of Planned Behavior (Gall & Olson, 2012). However, for the purpose of this study, much credence will be given to the Theory of Reasoned Action (TORA) due to the nature of the study that borders on service quality and decision-making reasoning (either to remain loyal as a result of service outcome and learning experience), considering several variables like intentions and behavior, social pressure, attitude toward buying, learning outcome, including purchase decision (Solomon, 2009).

The Howard and Sheth Model: Theory of Consumer Behaviors

Howard developed the first consumer (for the purpose of this study, students) decision model in 1963. The model was developed further by Howard and Sheth (1969) to become the theory of Buyer Behavior (or Howard and Sheth model). It provides a sophisticated integration of the various social, psychological, and marketing influences on consumers' choices to a coherent sequence of information processing. The authors' interest was to construct a comprehensive model that could be used to analyze a wide range of purchasing scenarios. Agbonifoh et al., (1998), asserts that the specific objective of the theory is to explain the brand choice behavior of consumers (whether to be loyal as a result of service outcome leading to satisfaction).

The theory is founded on four assumptions;

1. That a buyer's behavior is rational within the constraints of available information.
2. Howard and Sheth set out to build a positive theory (which states and describes what is) rather than a normative one (which stipulates what ought to or should be). In other words, the authors (proponents of the theory) describe how the buyer makes his choice and not how he should.
3. Brand choices are assumed to be systematic and therefore, observable.
4. Buyer behavior (the output) is assumed to be caused by an input (stimulus; in this study, service quality). Thus, the model is essentially an attempt to explain what goes on between the input and output. The theory (model) could be schematically presented thus:

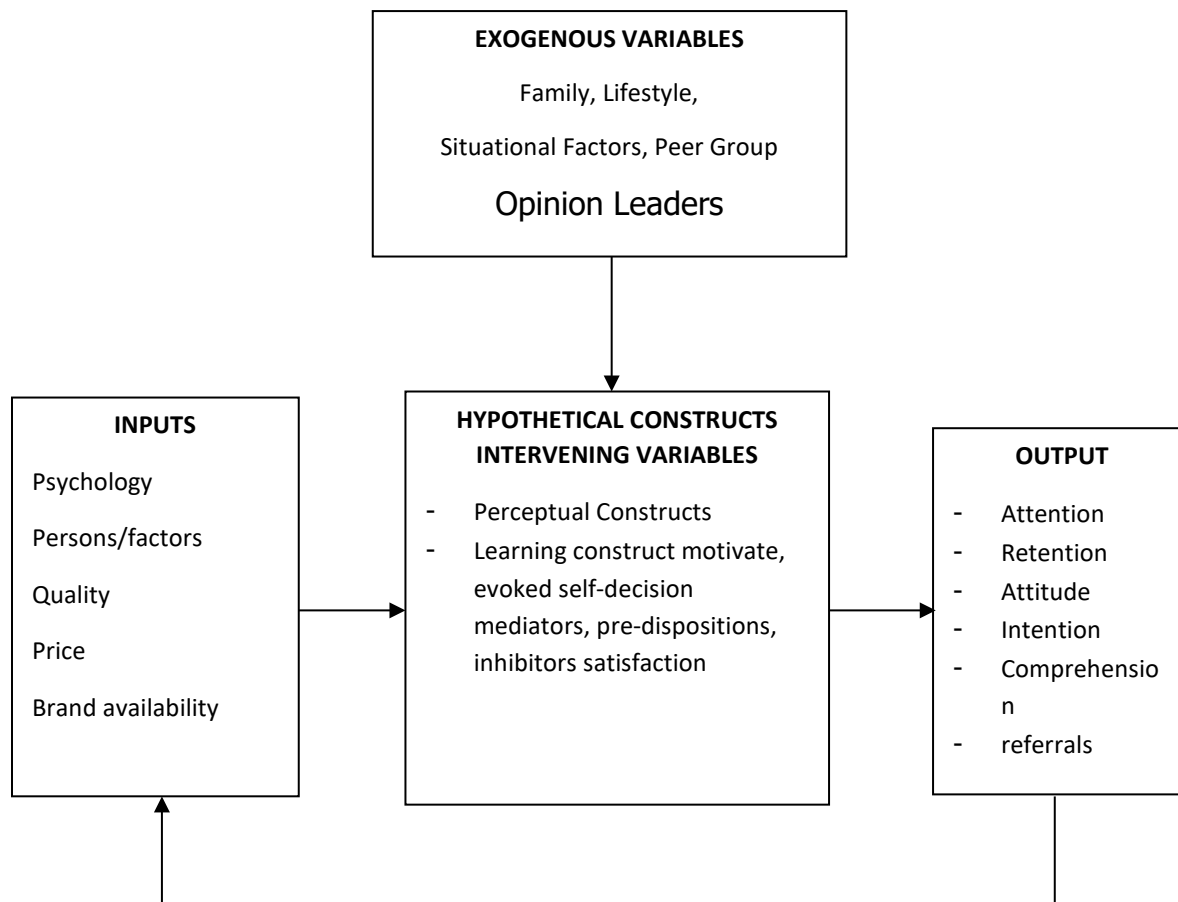


Fig. 1: Howard and Sheth Model

Empirical Review

Chandra (2018) conducted a study aimed to observe the influence of service quality on students' satisfaction in higher education institutions in Riau. The participants were 1,000 students from 13 universities and colleges in Riau. The study employed service quality as an exogenous variable, while students' satisfaction become the endogenous variable. Data were analyzed using Structural Equation Modeling (SEM) and Analysis of Variance (ANOVA) with SPSS 21 and AMOS 21. The result indicated a positive influence of service quality on students' satisfaction and a positive influence of students' satisfaction on students' loyalty. The study recommended concerted emphasis on improved service quality in all ramifications, ranging from infrastructure to personnel.

Shahzadi, Kamran, and Aber (2017) in the study aimed at finding out the imperativeness of service quality for higher education institutions in order to remain competitive and growing noted that there is a need to ensure students' satisfaction with universities. Information and data were collected using surveys, and questionnaires from higher education institute in Pakistan using a convenience sampling technique. 800 respondents were studied. Data were

analyzed using multiple regression on SPSS version 21. Findings revealed that with the moderating effect of university culture, reputation and price, higher education institutions can more significantly achieve students' satisfaction. University culture positively strengthens service quality to achieve and sustain students' satisfaction, while price and university reputation strengthen the relationship in a negative direction, these moderators are the significant contributing factors.

Maria-Jesus and Josep-Maria (2016) in their study on perceived service quality and students' satisfaction in the university had the aim of the paper to examine the influence that students perceived quality of service has on continuance intention and willingness to recommend a course in a full online university. A holistic view of the service provided by the university was taken. It studied the effects of teaching, administrative qualities, additional services, and the virtual learning environment. Through the use of a survey completed by 1870 students and the subsequent analysis using structured equations, they found that each of these services has a significant impact on the students' perceived service quality, their level of satisfaction, and as a result, their loyalty and willingness to recommend the university. Service Quality is seen to have a direct impact on students' loyalty. The study recommended improvement in service quality in the areas above.

Mwiya, et al. (2019) in their study examined university study mode differences in the under-researched context of Zambia among undergraduates in relation to service quality dimensions and overall satisfaction. Based on a quantitative approach, survey data were collected from 824 students of a public university and analyzed using correlation and one-way analyses of variance techniques. The findings indicate that while each of the five dimensions of service quality performance (feasibility, reliability, responsiveness, empathy, and assurance) is significantly related to overall student satisfaction for all study modes, distance students were most satisfied on all dimensions, followed by evening students and the least were full-time students. They concluded that the service performance model is a valid and useful framework for assessing and monitoring how primary stakeholders view service quality. They recommend that since the study took place in one public university, increasing the sample base by covering universities would improve generalizability.

Methodology

A survey design method was adopted for the study. This method uses a questionnaire to describe and/or predict some phenomenon by asking questions because of the nature of the research. It used a cross-sectional survey in which a cross-section of students of the various selected universities of interest in the South-East of Abia and Imo States were studied to find the implication of service quality on students' satisfaction. The population of the study comprised undergraduate students of some selected federal, state, and private universities in the South East; focusing on ABSU, MOUAU, FUTO, IMSU, and GUU. The units of analysis are the students of the Faculty of Business Administration or Management Sciences (from 200 level and above), due to the fact that the population is finite but too large for total adoption (the reason why the faculty of Business Administration/Management Sciences/ School of Management Technology were chosen). These 200 level students and above –with the exclusion of the 100 level students- were chosen as they have had service experience in the various universities and can report vividly on their level of satisfaction or otherwise with the university, in the course of filling up the questionnaire. The researcher used the current statistics obtained from the faculty officers in each of the Business Faculties of each university. Getting the population of 5,688, hence, the Taro Yamane formula will be adopted/applied to obtain the sample size. Data were analyzed using tables and simple percentages, while simple regression analysis (SRA) at 0.05 level of significance in SPSS version 21 was applied for test of hypotheses.

$$n = \frac{N}{1 + N (e^2)}$$

was used to determine the sample size

Where:

- n = Sample size to be determined
- N = Population
- e = error margin (5% or 0.05)

Computing, we have

$$n = \frac{5688}{1 + N (e^2)}$$

$$n = \frac{1 + 5688 (0.05)^2}{5688}$$

$$n = \frac{5688}{1 + 14.22} = \frac{5688}{15.22}$$

$$n = 373$$

The direct effect **research models for this study** are of the form:

$$CS = f (\ln F + TOU) \dots\dots (1).$$

Where:

CS is Customer satisfaction;

lnF is Institutional infrastructure;

TOU is Teaching output

The explicit specification of the models results in models 2-3 as shown below:

$$CS = \alpha + \beta_1 \ln F + \epsilon_i \dots\dots (2).$$

$$CS = \alpha + \beta_2 TOU + \epsilon_i \dots\dots (3).$$

α and β are metric coefficient and intercept while ϵ_i is the error term that is designed to capture the effect of variables not included in the models.

Decision Rule:

To validate (accept) or nullify (reject) any stated hypothesis, attention was paid to the P- values. Therefore, the null hypotheses will be rejected where the SPSS p-values are less than alpha (0.05) and the alternative hypotheses accepted.

Data Presentation and Analysis

Questionnaire Distribution and Analysis

Table 1 below shows how the copies of the questionnaire were distributed, retrieved and used.

Table 1: Questionnaire distribution

University	Number of Copies Distributed	Number of Copies Retrieved and Used	Not returned	Percentage of Valid/Used Copies
ABSU	72	61	11	19.93
MOUAU	157	129	28	42.16
IMSU	100	84	16	27.45
FUTO	34	22	12	7.19
Gregory	10	10	0	3.27
Total	373	306	67	100

Source: Field Survey, 2021

Table 1 shows that out of the 373 copies of the questionnaire distributed to respondents, 306 copies were retrieved, representing an 82% response rate. However, out of the total number distributed, 67 copies were not returned. For the individual institutions, out of 72 copies distributed in ABSU, 61 copies were retrieved; while 11 copies were not. 157 copies were distributed in MOUAU, out of which, 129 copies were retrieved; while 28 copies were lost. In IMSU, 100 copies were distributed while 84 copies were retrieved and 16 copies lost. Of the 34 copies of the questionnaire issued out in FUTO, 22 copies were retrieved; while 12 copies were lost. Finally, all 10 copies distributed at Gregory University were retrieved and used.

Therefore, further analyses were based on the copies retrieved and found valid.

Table 2: Demographics of respondents

<i>Categories</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Gender:</i>		
<i>Male</i>	117	38.00
<i>Female</i>	189	62.00
<i>Age Bracket</i>		
<i>18-20</i>	113	36.93
<i>21 - 25</i>	171	55.88
<i>26 - 30</i>	17	5.56
<i>31 years and above</i>	5	1.63
<i>Marital Status</i>		
<i>Single</i>	253	83.00
<i>Married</i>	46	15.00
<i>Not Disclosed</i>	07	02.00
<i>Level of study</i>		
<i>200</i>	98	32.00
<i>300</i>	116	38.00
<i>400</i>	92	30.00

Source: Field Survey, 2021

Table 2 showed that there was a total of 117 (38%) male respondents and 189 (62%) female respondents. In terms of their age brackets, the table shows that a total of 113 (37%) respondents, 171 (56%) respondents, 17 (6%) respondents, and 5 (2%) respondents were within the ages of 18 – 20, 21 – 25, 26 – 30 and 31 years and above, respectively. Also, data presented in the table show that a total of 253 (83%) respondents were single. 46 (15%) respondents were married; while 7 (2%) respondents could not disclose their marital status. On their levels of study, 98 (32%) respondents, 116 (38%) respondents, and 92 (30%) respondents were in 200 level, 300 level and 400 level, respectively.

Analyses of research variables

In this section of the study, all the questions in the questionnaire that are directly related to the objectives and hypotheses of the study were analyzed using tables and simple percentages.

Table 3: Responses on Institutional Infrastructure

<i>Statement</i>	<i>SA</i>	<i>A</i>	<i>UN</i>	<i>D</i>	<i>SD</i>	<i>TOTAL</i>
<i>Classrooms are adequate.</i>	88	75	36	88	19	306
<i>Furniture in classrooms is adequate</i>	126	135	24	15	6	306
<i>The library is stocked with an adequate number of up-to-date, relevant reading materials</i>	144	117	30	12	3	306
<i>Conveniences and leisure facilities are available.</i>	117	126	36	18	9	306
<i>Total</i>	475	453	126	133	37	1224
<i>Average</i>	119	113	32	33	9	306
<i>Percentage</i>	39	37	10	11	3	100

Source: Field Survey, 2021

Table 3 showed that on average, 119 (39%) respondents, 113 (37%) respondents, 32(10%) respondents, 33 (11%) respondents, and 9 (3%) respondents strongly agreed, agreed, were indifferent, disagreed and strongly disagreed respectively on the questions relating to institutional infrastructure.

Table 4: Responses on Teaching Output

<i>Statement</i>	<i>SA</i>	<i>A</i>	<i>UN</i>	<i>D</i>	<i>SD</i>	<i>TOTAL</i>
<i>Lectures are regular</i>	186	96	15	5	4	306
<i>Mode of delivery of lecture is encouraging.</i>	167	92	23	17	7	306
<i>Lectures are adequately prepared.</i>	174	94	21	12	5	306
<i>Lecturers are always available after lectures for counseling.</i>	145	122	17	14	8	306
<i>Total</i>	672	404	76	48	24	1224
<i>Average</i>	168	101	19	12	6	306
<i>Percentage</i>	55	33	6	4	2	100

Source: Field Survey, 2021

Table 4 showed that on average, 168 (55%) respondents, 101 (33%) respondents, 19 (6%) respondents, 12 (4%) respondents, and 6 (2%) respondents strongly agreed, agreed, were indifferent, disagreed and strongly disagreed respectively on the questions relating to teaching output in the institutions.

Tests of Hypotheses

Following the rules of SRA, all nine independent variables measuring service quality have been taken separately against the single dependent variable, customer (student) satisfaction.

Test of hypothesis one

H₀: There is no significant relationship between institutional infrastructure and students' satisfaction.

H₁: There is a significant relationship between institutional infrastructure and students' satisfaction.

This hypothesis was tested using data in tables 4.3 and 4.12. The SPSS output is presented below:

	Mean	Std. Deviation	N
Customer satisfaction	4.27	.952	306
Institutional infrastructure	4.1667	.93124	306

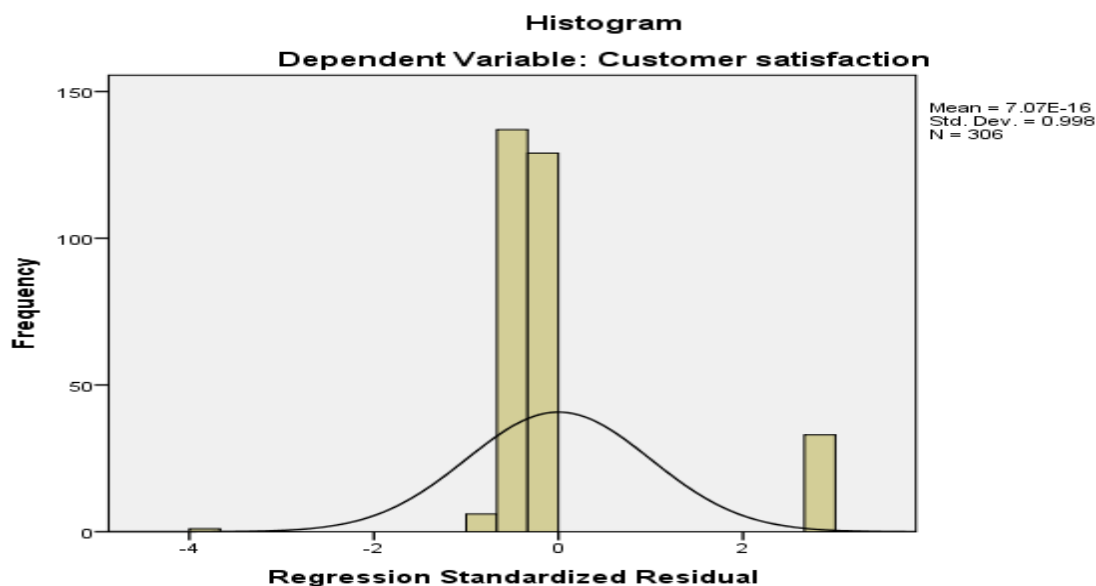
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.944 ^a	.890	.890	.316	2.191
a. Predictors: (Constant), Institutional infrastructure					
b. Dependent Variable: Customer satisfaction					

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	246.163	1	246.163	246.776	.000 ^b
	Residual	30.324	304	.100		
	Total	276.487	305			
a. Dependent Variable: Customer satisfaction						
b. Predictors: (Constant), Institutional infrastructure						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.252	.083		3.035	.003
	Institutional infrastructure	.965	.019	.944	49.677	.000

a. Dependent Variable: Customer satisfaction

Charts 1: Histogram



Interpretation

The R-value in the model summary table shows a simple correlation of 0.944, which shows a very strong positive correlation. The R² value shows how much of the total variation in the dependent variable (customer satisfaction) can be explained by the dependent variable (institutional infrastructure). The table shows that 89% variation in the students' (customers') satisfaction could be explained by institutional infrastructure. This is equally high. With a sig (p-value) of (0.000) which is less than Alpha (0.05) and a t-value of 47.677, the overall regression model, therefore, statistically predicts the outcome of the variables (That is, it is a good fit). Besides, the DW value (2.191) which is higher than the lower bound in tables indicates the absence of serial autocorrelation.

Decision

Since the p-value (0.000) is less than Alpha (0.05), that is 0.000<0.05, and t calculated (49.677) is greater than t tabulated (1.960), we, therefore, reject the null hypothesis and accept the alternative hypothesis which implies that there is a significant relationship between institutional infrastructure and students' satisfaction.

Test of hypothesis two

H₀: There is no significant relationship between teaching output and students' satisfaction.

H₁: There is a significant relationship between teaching output and students' satisfaction.

This hypothesis was tested using data in tables 4.4 and 4.12. The SPSS output is presented below:

	Mean	Std. Deviation	N
Customer satisfaction	4.27	.952	306
Teaching output	4.3660	.91079	306

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.951 ^a	.905	.905	.294	2.303
a. Predictors: (Constant), Teaching output					
b. Dependent Variable: Customer satisfaction					

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	250.243	1	250.243	2898.708	.000 ^b
	Residual	26.244	304	.086		
	Total	276.487	305			
a. Dependent Variable: Customer satisfaction						
b. Predictors: (Constant), Teaching output						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.071	.082		-.860	.390
	Teaching output	.995	.018	.951	53.840	.000

Dependent variable: customer loyalty.

Interpretation

The R-value in the model summary table shows a simple correlation of 0.951, which shows a very strong positive correlation. The R² value shows how much of the total variation in the dependent variable (customer satisfaction) can be explained by the independent variable (teaching output). The table shows that a 90.5% variation in student satisfaction is explained by teaching output. This is equally high. With a sig (p-value) of (0.000) which is less than Alpha (0.05) and a t-value of 53.840, the overall regression model, therefore, statistically predicts the outcome of the variables (That is, it is a good fit). Besides, the DW value (2.303) which is higher than the lower bound in tables indicates the absence of serial autocorrelation.

Decision

Since the p-value (0.000) is less than Alpha (0.05), that is $0.000 < 0.05$, and t calculated (53.840) is greater than t tabulated (1.960), we, therefore, reject the null hypothesis and accept the alternative hypothesis which implies that there is a significant relationship between teaching output and students' satisfaction.

Summary of Findings

The following major findings were made in this study:

- I. The study reveals that a significant relationship exists between institutional infrastructure and students' satisfaction. This implies that the adequacy of the classrooms, available furniture in classrooms, library facilities, conveniences, and leisure facilities have a significant influence on students' satisfaction (return to run a postgraduate program, recommend their institutions to others, contribute to the Alumni and defend their institutions anywhere).
- II. The study equally found that there is a significant relationship between the quality, of course, content/instructional material, and university students' satisfaction. Thus, whether the course content is comprehensive, up-to-date, and available in non-exploitative terms, will influence students' satisfaction with their institutions.

Conclusion

The study is based on the effect of service quality on students' satisfaction in Nigerian universities. Based on the finding, institutional infrastructure has a significant positive effect on students' satisfaction. Also teaching output has a significant positive effect on students' satisfaction. We, therefore, concluded that service quality has a significant positive effect on students' satisfaction in Nigerian universities.

Recommendations

Following the findings of this study, the following recommendations are made:

- i. Higher education institutions' managements are encouraged to continuously improve their service quality by managing it with the goals of satisfying the students and beating the competition which seems to be intense.
- ii. More serious attention should be given to students' expectations and how they perceived service quality. This will be possible through a periodic true assessment of students' rating of the institution on various service quality dimensions. This is important because service quality varies and is subject to the changing environment.

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