

Students Perception of Service Quality Encountered and their Future Enrichment: Implication for Academic Quality Assurance in Nigeria Polytechnics

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Abstract

Quality is one of the core functions for service organisations, which is an ongoing process of building and sustaining relationships by assessing, anticipating and fulfilling stated and implied needs. It is inevitable to measure the students' perception on the service quality encountered from Nigerian Polytechnic for their future enrichment. Hence, the present study uses the 'SERVQUAL' scale developed by Parasuraman & McDaniel (1997) and Tan, et al (2010) to measure the service quality. One thousand eight hundred and fifty (1850) randomly selected students from two Polytechnics in Ogun State, Nigeria took part in the study. Data analysis involved mean and standard deviation as descriptive statistics and Pearson product moment correlation, t-test and regression analysis as inferential statistics. The study showed that the students' perceptions on service quality encountered are not up to their level of expectations; and there were statistically significant differences in their perception based on gender ($t = 2.286, P < 0.05$), career choice ($t = 5.337, P < 0.05$), and on school type ($t = 1.581, P > 0.05$). Also, the results revealed composite ($R = .657, R^2 = .389$) contributions of the service quality dimensions on students' perception of their future enrichment. Tangible ($\beta = .801, t = 7.111, P < .05$) has been identified as the most potent predictor of good service quality as compared to other four (4) dimensions; reliability ($\beta = .209, t = 1.614, P < .05$), responsiveness ($\beta = .733, t = 5.505, P < .05$), assurance ($\beta = .717, t = 5.203, P < .05$) and empathy ($\beta = .444, t = 3.181, P < .05$). Recommendations and implication for academic quality assurance in Nigeria Polytechnics were given.

Key Words: *Quality Assurance, Service Quality Encountered, Polytechnic Students' Perception, Assurance, Responsiveness, Reliability, Tangibles and Empathy.*

Introduction

In Nigeria today, education industry (especially public polytechnics) with the sporadic springs of private universities and polytechnics all around is facing an environment characterized by increased competition, changes in student age range, and new social contexts among others. This is making the present moment a critical period in which Polytechnics in Nigeria must deal with the opportunities and threats to ensure their competitiveness.

Higher education institutions share the same characteristics as those of other service businesses. From the student's vantage point, the perception of institutional services is inseparable from the people who deliver those services—the service providers. Their services are intangible, heterogeneous, variable, and perishable and the students themselves participate in the service delivery process because they must interact with the service providers (Gronroos, 1992).

Unlike other service businesses, however, many higher education institutions erroneously view students as a captive audience and consider the demand for their educational services as inelastic. As competition intensifies between private, public, and online education providers, the business methods for measuring customer satisfaction will prove valuable to higher education institutions (Shank, Walker, & Hayes, 1995).

According to Combrinck (2006) service quality within education is a subject, which is debated from a number of viewpoints in the literature. Almost all the research undertaken agrees that service quality has many faces and is multi-dimensional. In this regard the following position is taken up by Le Blanc & Nguyen (1997); they state that the design of quality measures for specific service providers should lead to a better understanding of the construct and to the adaptation of quality improvement programmes which correspond to service company needs. From the design perspective, dependable measures of service quality for specific service industries are a viable research strategy to pursue (Brown & Koenig, 1993; Carman, 1990; Cronin & Taylor, 1992; Finn & Lamb, 1991; Zeithaml, 1988). Service quality has five dimensions: Reliability, Assurance, Responsiveness, Tangibles and Empathy.

We tweaked the elements in each of the five dimensions to suit the study in an institution of higher learning as adopted by Adenuga & Ayodele (2012) and Tan, Wong, Lam, Ooi, Ng, (2010). These five dimensions appear as the knowledge and courtesy of the teachers and in their ability to convey trust and confidence to students (assurance), the willingness to perform prompt service to students (responsiveness), the ability to provide accurate and promised service to students (reliability), the appearance of the physical facilities, equipment and personnel (tangibles) and the ability to show care and personal attention to students (empathy).

Educational institutions that are committed to serving students are often focused on the continuous improvement of the students' experience. They strive to understand students' expectations and anticipate their future requirements. To accomplish these tasks, these educational institutions strive to listen to their students and gather their feedback regarding items such as academics, admissions, rules and policies, facilities, and registration, to name a few.

It is essential to measure students' perceived satisfaction with higher education services in order to continuously improve the institution's study programs, teaching, staff, and facilities. Over time, this continuous measurement provides vital information necessary for effective decision making, monitoring performance, and effectively allocating resources. This study examined the students' perception of service quality encountered on their future enrichment: implication for quality assurance.

Service Quality Dimensions and Students' Perception

Assurance: the level of the service delivered to customers that is believable and can be trusted (Parasuraman et al., 1988). It is the ability of lecturers and administrative staff to provide trust and confidence to students.

Responsiveness: It is the level of services provided and able to help customer promptly (Yong, 2000). It involves the willingness to provide prompt or favourable services by the lecturers and administrative staff to students. If not perceived by the students, the services are deemed to have a negative impact.

Reliability: It is the level of the knowledge and information learnt that are accurate (Yong, 2000; Garvin, 1987). If the knowledge learnt from the lecturers is incorrect, inaccurate and not up-to-date, the sharing of knowledge among students will give a negative result, even about the future prospects.

Tangibles: refers to the tangible condition and facilities in higher learning institutions. It involve the presence of equipment and facilities like well-equipped laboratories; adequate stocked library with textbooks, reference books and etc; updated computer facilities; comprehensive information system and also the support facilities like sports and recreation centres. If the equipment and facilities are insufficient and unavailable, the transmission of knowledge will be more challenging.

Empathy: It is the ability of the organization to provide personal attention and care to customers (Parasuraman et al., 1985; Yong, 2000). The empathy dimension of service quality is defined as showing care and provides individualized attention to students. A good academic environment in a higher learning institution is not only to establish a good teaching and learning culture for sharing of knowledge but also to be able to involve in the student's personal development as well as academic matters by giving care and advice.

In a study conducted by Chineze (2012) on students' perception of academic staff quality: a measure of quality assurance in South-South Nigerian higher institutions, it was found that the students rated the quality of the academic staff high, especially in terms of professional competence, but rated their supervision low. He also reported that the students felt that the lecturers do not have enough time for students and do not prepare their lectures well.

The study conducted by Adenuga & Ayodele (2012) on the dimensions of service quality on postgraduate students' thesis writing in Southwest Nigeria reported that postgraduate students' thesis writing was not satisfactory, while significant difference was observed in the students' thesis writing which were linked to the service quality experienced. They also reported that all the five variables of the dimensions of service quality significantly contributed to postgraduate students' thesis writing.

Statement of the problem

All over the world today, students have been considered as the main customers in higher institutions of education as their needs would have to be fulfilled by the relevant parties, such as the need to acquire a valuable educational experience and good service quality (Adenuga & Ayodele, 2012; Nek, Salomawati, Ahmad, 2010). However, it has been observed that students' needs in the educational system has not been met, which has been manifesting in the failure of graduates of higher institutions to meet industrial and business requirements. Our graduates today have failed so many work interviews for lack technical skills and competency on job applied for. Therefore, this study was designed to determine students' perception of

service quality encountered on their future enrichment. In specific terms, what would be the implication of the service quality encountered by the students on academic quality in Nigeria Polytechnics?

Research Questions

1. Would there be any significant composite contribution of the service quality dimensions on students' perception of their future enrichment?
2. Would there be any significant relative contribution of the service quality dimensions on students' perception of their future enrichment?
3. Would there be any statistical significant difference in students' perception of service quality based on gender, career choice, and school type?
4. What are the students' perceptions of service quality encountered during their course of program in the polytechnic?

Methodology

Design

This study employed ex-post – facto research design in which the existing status of the independent variables were only determined during data collection without any manipulation of the variables by the researchers.

Sample

A total of one thousand eight hundred and fifty (1850) respondents, who had spent at least one academic year with their institutions, were selected for the study, using purposive sampling technique. The stratified sampling technique was used to select respondents to reflect strata of the disciplines (course of study), which include the science based and non-science based courses. The proportionate random sampling technique was adopted to select respondents from each of the selected Polytechnics in Ogun State of Nigeria on the basis of population.

1. However, two Polytechnics were selected for the study using purposive sampling method: Federal Polytechnics Ilaro and Moshood Abiola Polytechnic, Abeokuta, Ogun State. The age range of the respondents is between 17- 28 years with mean age of 19.53 and standard deviation of 7.71. The respondents consist of 1001 (54.1%) males and 849 (45.9%) females. Also, 890 (48.1%) of the respondents were offering science oriented courses while 960 (51.9%) of them were not.

Instrumentation

Two validated instruments were used for collection of data for the study. They are:

Service Quality Dimensions Inventory (SQDI)

Service quality dimensions were utilized based on the SERVQUAL model proposed by Parasuraman et al. (1985). These dimensions evaluate the level of service quality adopted in the faculty. There are 22 items altogether in the service quality dimensions section of the questionnaire which were adapted from the research done by Pariseau and McDaniel (1997); Tan, Wong, Lam, Ooi, Chee-Yee & Ng (2010), also used by Adenuga and Ayodele (2012) where each respondent needs to answer each question using a five-point Likert scale with 1 being rated strongly disagree while 5 denotes strongly agree. Sample questions of each service quality dimensions include: 'Good lecturers instill confidence in students' (assurance); 'Good

lecturers give prompt service to students’ (responsiveness); ‘Good lecturers have students’ best interest at heart’ (empathy); ‘Good lecturers perform services right the first time’ (reliability) and ‘A good faculty has modern equipment’ (tangibles). The SQDI have a Cronbach alpha’s value range of .793 and .832 which are greater than .70, thus the measurement of the variables are valid and reliable.

Students’ Perception of Education and Future Enrichment (SPEFE)

SPEFE was a self-developed questionnaire by the researchers to tap into the students’ perception of the education they are receiving now and the hope of it for the betterment of their lives and communities in future to come. It is 15-items scales ranging from strongly agree (5) to strongly disagree (1). Sample items include: ‘I can compete favourably with my colleagues in other higher institutions’ ‘The education I am receiving today is really preparing me for the future’ and ‘I can be self-reliant after completing my education in the polytechnic’. The reliability was ascertained by establishing the test on 100 students of the Polytechnic of Ibadan who are not part of the original study. A spilt half reliability coefficient of 0.77 and validity co-efficient index of 0.81 was obtained (Ayodele & Iro-idoro, 2012). Thus, the instrument was reliable and valid to use.

Administration of the Instruments

The researchers and three (3) other colleagues administered the measuring scales, which guarantee confidentiality and anonymity of the respondents. The researchers consulted with the Registrars and the Deputy Registrars of the selected institutions, in order to intimate them with the purpose of the study. The researchers explained all aspects of the questionnaire to the respondents. The researchers through the help of one officer or the other in the institutions were able to administer the questionnaire with ease. However, it took the researcher a period of two weeks to administer and retrieve the distributed measuring scales. Meanwhile, out of 2000 copies of questionnaire administered in the selected tertiary institutions, 1933 were returned and out these 1850 were adequately filled and valid for the purpose of the study. Thus, 92.5% success of questionnaire administration and retrieval was achieved.

Data Analysis

The data collected through the questionnaires was analyzed using simple percentages and frequency counts for demographic information about the respondents, while research questions were tested using independent t-test and Multiple Regression. However, all the research questions generated for the study were tested at 0.05 alpha levels.

Results

Table 1: Regression Analysis on the combined effect of service quality dimensions on students’ perception of their future enrichment

Regression	Analysis of Variance					
Analysis	Source	SS	MS	DF	Beta	F
R = 0.667	Regression	1526.425	305.285	5		
R ² = 0.513	Residual	23743.344	12.876	1844	0.377	23.710
SE = 11.184	Total	25269.769		1849		

Significant at 0.05 alpha level

Results presented in Table 1 show the composite contribution of the service quality dimensions on students’ perception of their future enrichment. The total variance accounted for by the predictor variables

on students' perception of future enrichment is 51.3% ($R^2 = 0.513$). Analysis of variance shows that this value is significant ($F = 23.710, P > .05$). Therefore, 51.3% of the total variability in students' perception of their future enrichment is accounted for by service quality dimensions.

Table 2: Beta Coefficients and t ratio for relative contribution the service quality dimensions on students' perception of their future enrichment

Model	Unstandardized Coefficients		Standardized coefficient	t-ratio	Sig
	B	SE	Beta		
(constant)	2.003	.109		9.111	.000
Assurance	.282	.031	.256	.918*	.010**
Responsiveness	.366	.058	.343	1.234*	.028*
Reliability	.293	.036	.280	.991*	.000*
Tangibles	.388	.077	.361	1.389*	.017*
Empathy	.300	.043	.287	1.035*	.031**

a. Dependent variable: students' perception of their future enrichment; *Significant at $<.05$

Table 2 shows the relative contribution of each predictor variable to the variance in students' perception of their future enrichment. Tangible has the highest beta value ($\beta = .361; t = 1.389; p < .05$) significant at less than .05 alpha level; followed by responsiveness ($\beta = .343; t = 1.234; p < .05$), empathy ($\beta = .283; t = 1.035; p < .05$); reliability ($\beta = .280; t = .991; p < .05$); and lastly by assurance ($\beta = .256; t = .918; p < .05$). Therefore, all the service quality dimensions are potent factors to students' perception of their future enrichment.

Table 3: T-test analysis showing difference in students' perception of service quality based on gender, career choice, and school type

Gender	N	X	SD	Df	t-cal.	t-crit.	P
Male	1001	51.688	13.861	1848	5.692*	1.96	Significant
Female	899	53.911	11.436				
Science	890	54.789	10.174	1848	2.813*	1.96	Significant
Non-Science	960	49.321	15.288				
State	925	49.222	33.419	1848	10.456*	1.96	Significant
Federal	925	58.013	27.098				

The results presented in Table 3 revealed that the obtained value of t is 5.692 for the gender difference in the students' perception of their future enrichment based on the service quality encountered which is greater than the t-critical value of 1.96 at 1.96 degree of freedom and 0.05 level of significance. This implies that there is a significant gender difference. Further analysis of the result based on the respondents' mean scores reveal that female students with average mean score of 53.911 expected more than their male counterparts with a mean score of 51.688 in terms of service quality encountered.

The section that measures the difference between science and non-science students revealed that science students with an average mean score of 54.789 shows that they perceived the service quality encountered better than their non-science counterparts with a mean score of 49.321. Therefore, there is a significant difference between science and non-science students on service quality encountered.

Also, the aspect that measures the difference in students' perception of service quality based on school type revealed that federal polytechnic students had an average mean score of 53.013 which shows they

perceived the service quality encountered better than their state counterparts with a mean score of 49.222. Therefore, there is a significant difference in students' perception of service quality based on school type.

Table 4: Students' Perception of Service Quality on their Future Enrichment

Variable	N	Minimum	Maximum	Mean	Std. Dev
Service quality encountered	1850	22.00	65.00	28.333	12.019

Table 4 reveals that students' perceptions of service quality encountered during their course of program in the polytechnic with a mean score of 54.333 (43.589%), which is not really satisfactory. This is because it is less than 50%, though higher than the minimum score of 22 which is 33.846%. It could then be deduced generally that students' perceptions of service quality encountered during their course of program in the polytechnic is not encouraging and satisfactory, which may be as a result of some factors inherent in the students or in the school.

Discussion of Findings

This study examined the students' perception on the service quality encountered from Nigerian Polytechnic for their future enrichment. It provides a picture of service quality in Nigerian polytechnics as perceived by the students who are the primary consumer of the services based on the five service quality dimensions in SERVQUAL model as proposed by Parasuraman et al. (1985) in association with the knowledge sharing as a tool for continuous improvement in fulfilling or exceeding the students' expectation (Adenuga & Ayodele; Tan, Wong, Lam, Ooi, Ng, 2010).

Results of the students' perceptions of service quality encountered during their course of program in the polytechnic is not encouraging and satisfactory, while there are composite and relative contributions of the service quality dimensions on students' perception of their future enrichment. The magnitude of the relationship between the service quality dimensions in predicting students' perception of their future enrichment is reflected in the values of coefficient of multiple regression ($R^2 = .513$; $F = 23.710$, $P > .05$). As for the extent to which each of the five independent variables contributed to the prediction, it could be concluded that all the service quality dimensions are potent factors to students' perception of their future enrichment, while tangible and responsiveness are potent than the others. This finding corroborates the findings of Al-Naggar, et al (2012); Chineze (2012); and Adenuga & Ayodele, (2012) who reported that success and completion of any academic endeavour among tertiary students to a large extent depend on the intellectual environment of the departments, access to equipment, level of research funding available, lecturer-students' relationship, among other things.

The results of the students' perception of their future enrichment based on gender, field of study, and school type revealed demographic effects. This finding lends credence to the findings Adenuga & Ayodele (2012), Al-Naggar, et al (2012); Yong, (2000); Garvin, (1987).

Conclusion and Recommendations

Quality services at tertiary level are the most important factor to motivate students. So, quality of student services in higher educational institutions needs to be ensured. Nigerian educational system should note that service experiences are the outcomes of interactions between the organizations, related system/processes, service employees and customer satisfaction with service experiences. The findings of this study however had shown the predictive effect of service quality dimensions (assurance, responsiveness, reliability, tangibles and empathy) on students' satisfaction.

The important role of assessing service quality in Nigeria higher institution cannot be over emphasized in achieving quality education and fostering students' satisfaction. Therefore, there is need for tertiary education service providers to participate in service quality training that promotes friendly and caring service, problem solving, flexibility, and recovery from mistakes, which are critical elements to building student satisfaction and promoting quality education all year round.

Also, students' academic need is not only the major services students expect to find satisfactory in schools, social, and emotional needs are of equal importance. As such, there is a need for the institution's executive management team to paying "lip service" to the overall development of the students in our schools. This can be achieved by having functional counseling centers or students support services.

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