

Dimensions of Service Quality Encountered By Students on Sustainability of Higher Education in Nigeria

Ezeokoli, Rita Nkiruka PhD

Babcock University, Ilishan-Remo Ogun State, Nigeria, E-mail: ezeokolirita@gmail.com

Ayodele, Kolawole Olanrewaju PhD

Babcock University, Ilishan-Remo Ogun State, Nigeria, E-mail: ayodelewole@gmail.com

Abstract

Higher education sector in Nigeria today is at the forefront of striving for quality in order to attract more students, as well as gaining a sustainable competitive advantage over others due to imminent rise in the number of private universities in the country. Therefore, this study was designed to examine the dimensions of service quality (SERVQUAL) encountered by students on sustainability of higher education at Babcock University. Also, the study investigated whether the service quality encountered was satisfactory or not. A cross-sectional study was carried out at Babcock University during 2012/2013 summer class. In this study, a total of 250 students were randomly selected. Two valid and reliable instruments were used for data collection. These instruments were (1) Service Quality Dimensions Inventory (SQDI) adapted from the research done by Pariseau & McDaniel (1997) and Tan, et al (2010); (2) Students' Academic Satisfaction Scale (SASS) developed by Bhamani (2013). Data analysis was done with descriptive statistics, Pearson Product Moment Correlation, t-test and regression analysis. The results showed that the service quality encountered was satisfactory, there was no statistically significant gender difference in service quality encountered and academic satisfaction ($t = .973, P < 0.05$); while a statistical significant difference was observed based on discipline ($t = 1.987, P > 0.05$). Also, assurance, responsiveness, reliability, tangibles and empathy dimensions of service quality individually contributed significantly to students' academic satisfaction. This study concluded that quality services at tertiary level are the most important factor to promote academic excellence. Also, this study provides university management with a 'snapshot' of service quality and offer suggestions that could be implemented to improve service quality in a competitive educational environment like Nigeria.

Keywords: Service quality dimension, student's academic satisfaction, Babcock University, Assurance, Responsiveness, Reliability, Tangibles and Empathy.

Introduction

In developing countries like Nigeria, higher education, and university education in particular is recognized as a key force for socio-cultural and economic development, as well as for building the future, for which the younger generations will need to be equipped with new skills, knowledge and ideals. This has allowed a sporadic increase in the demand for its access. It is therefore, imperative for the university to meet up with the challenges associated with it. Every year, universities vie for students nationally and internationally, and in order for students to make a meaningful decision on their choice of school of study, while the university needs to set itself apart from all the others. Adebayo, Oyenike and Adesoji (2012) affirm that university educational sector can achieve this quiet strategically by providing top quality services.

Service quality in the recent years has been seen a key performance measure for educational excellence, and was noted by Ahmed and Nawaz (2010), and, Donaldson and Runciman (1995) to be a main strategic variable for universities to increase market share, and create a strong perception in consumer's mind. Alves and Raposo (2010) on the other hand, affirm that perceived quality creates positive image in the mind of students which ultimately leads them to satisfaction. Mazzarol (1998) was of the opinion that higher education institutions should maintain a distinctive image to have a competitive advantage.

Service quality to a student can mean many things, namely, by the university being a world ranked tertiary institution of learning, by it having a well-established faculty, by the university being well recognized within the world and the community within which it resides, by the institution providing quality education, by it providing degrees and diploma's that are market related and in tune with the labour force requirement within the economy, by the university providing adequate funding and scholarships to students, by the institution having well recognized and highly skilled academics and efficient administration staff that have the students best interests at heart, by the university providing a safe learning environment with well-equipped lecture venues and laboratories (Naidoo, 2000). All these, are but a few distinguishing characteristics of high quality service that can set a university apart from others.

Kasper, van Heldsdingen, and Gabbot, (2006) asserts that one of the potential benefits from a high quality service is that it creates a competitive advantage for the organization by insulating customers from competitors. If the service delivered is perceived to be equal or higher quality than that of competitors then there is no motivation for customers to defect regardless of poaching tactics.

There are many stakeholders of educational institutions ranging from internal to external stakeholders. Out of all these, students are considered to be one of the most important stakeholders. They are important as all the process of quality implications i.e. input, process and output are applied on them. They are also considered important as they bridge the relationship between academic institutions and other stakeholders i.e. parents, employers, society and satisfaction of all these stakeholders is dependent on the satisfaction of students. Considering the strategic importance of students, studying students' satisfaction has been prime interest of many researchers using SERVQUAL model. This manuscript targets the impact of quality of service offered by academic institutions to the students in the shape of overall satisfaction with the institution and willingness to put more work effort.

Higher educational institutions that adopt quality culture as their philosophy will strive to achieve excellence in service quality and customer satisfaction (Abdul Raheem *et al* 2012). Tertiary institutions are therefore being forced to re-look at themselves and account for quality of education that they provide. They can do this by taking the needs of the students into account and having proper systems and personnel in place to implement and deliver quality service.

Service Quality and Students' Satisfaction

In the literature of service industry like education, analyses for the measurement of service quality have been conducted by looking into the definitions of quality (Nadiri *et al.*, 2009; Lagrosen *et al.*, 2004), dimensions of service quality (Tan, Wong, Lam, Ooi, & Chee-Yee Ng, 2010; Lagrosen *et al.*, 2004) and the level of service quality in meeting customer (student) satisfaction (Rowley, 1997). A common definition of service quality is that the service delivered should fulfill the customers' requirements, expectations and satisfactions. Customers play an important role with regard to the perception of effect on quality of service delivered (Gan *et al.*, 2006; Oyeniyi & Joachim, 2008). Since service quality is constructed from multi-elements, it may be assessed based on the characteristic of service delivery system, the level of customer satisfaction and/or the relations of the service meeting the various factors of the service system (Adenuga & Ayodele, 2011; Tan, *et al.*, 2010; Yasin *et al.*, 2004; Parasuraman *et al.*, 1988).

Quality in education sector can be simplified under service quality dimensions as it is considered as service because of its characteristics (Dotchin & Oakland, 1994). Students' perceptions of service quality have become a main issue in the management of higher learning institutions as students are deemed to be their customers (Brochado, 2009; Hill, 1995).

Many researchers carried out numerous studies on how to evaluate service quality and subsequently, Parasuraman *et al.* (1988) have developed SERVQUAL model (based on functional quality rather than technical quality) which has become an adapted model for many to be used for measuring of service quality in higher learning institutions (Tan, Wong, Lam, Ooi, Ng, 2010). The SERVQUAL model is constructed based on a gap model in terms of the differences between perception and expectation.

Student satisfaction helps in assessing the extent at which the institution is viable in terms of resources within, and the output of such organization. However, Malik and Usman, (2010) were of the opinion that when intentional performance is as a result of one's contentment, satisfaction is said to be achieved. Satisfaction was seen by Hasan and Ilias (2008) to consist of students' perception and proficiencies experienced while in school. They explained further that student satisfaction is a vague concept that will continue to be redefined through campus life recurrent experiences. Helgesen and Nettet, (2007) in their study on "What Accounts for Students' Loyalty?" and Gruber, Fuß, Voss, and Glaser-Zikuda's (2010) study of "Examining Student 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. Tian and Wang (2010) argued that:

“Satisfaction is the function of the congruency between perceived performance and esteemed benefits resulting from consumer personal values, and the configuration of consumer values is affected by central cultural values..... that cultural differences have a direct influence on the level of students' satisfaction regarding their perception of the services, and to satisfy the customers with the same cultural background is not that easy, then to satisfy the customers with different cultural background will be even more difficult.”

Petruzzellis, 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, or completely satisfied when they receive more than they expect. 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.

Students, Service Quality Encountered, and Sustainability in Higher Education

Ahmed *et al.* (2010) also found that provision of quality services is significantly associated with customer satisfaction. In the words of Spreng and Singh (1993) "Satisfaction is emotional reaction to a product or service experience". While looking at the causes of satisfaction it has been noticed that Satisfaction is a result of quality service (Shemwell *et al.* 1998, Cronin & Taylor, 1992 & Bolton & Drew, 1991). While discussing the customer (students) criteria for selection of academic institution, Veloutsou *et al.* (2004) found students use quality as the prime criteria to select an institute for admission and education. Low (2000) also concluded that provision of better quality services is key source of lure, satisfy and retain students, which in result have direct bearing on financial resources, security of job and viability of educational institution.

Students assess the quality of institution on the grounds of tangibility (teachers), reliability and responsiveness (methods of teaching) and management of the institute and these factors have direct bearing on the satisfaction level of students (Navarro *et al.* 2005). University administration should focus on the quality of service to increase the satisfaction level of students (Helgesen & Nettet, 2007). In the increasing competition in the educational sector, the basic strategic tool used is the provision of better quality services (Gruber *et al.* 2010). Positive perception about the quality of service offered leaves positive image in the mind of students which finally leads them towards higher level of satisfaction (Alves & Raposo 2010; Ahmed *et al.*, 2010). Customer satisfaction is based on the perceptions and expectations of customers about service quality (Ekinci, 2004; Christou & Sigala, 2002).

Thus, sustainability education is intended to provide learning, training, and practical experience, in both formal and non-formal settings, that fosters personal development, community involvement, and action for change in our human and natural worlds. Grounded in our experience of the world, Sustainability Education must mirror both the patterns present in the natural environment and the conditions present in the human society with the intention of preparing us for uncertain and rapidly transforming world conditions (Medrick, 2012) Project-based community service learning increases the effectiveness of sustainability education and demonstrates the importance of providing children with opportunities to be healthy, happy and eco-literate global citizens. At Babcock University, as students learned environmental and socio-economic content, they became informed citizens who were empowered as local change agents.

The concepts and practices surrounding sustainability are increasingly the focus of many new post-secondary and graduate education programs. However, the term sustainability refers to a complex mixture of disciplines, methods, contexts, and topics. This complexity is often confusing and can create barriers to learning. Comprehensive understanding of sustainability issues requires that students engage in an active learning process, focusing on context and perspective (Chambers, Koepf, Lyons, & Druckenmiller, 2012). High levels of service quality within tertiary institutions can contribute to making the institution highly marketable and in demand to potential undergraduate and post-graduate learners nationally or internationally. Improvements in service quality at higher education institutions can have a direct bearing on the students' performance within the institution and in so doing contribute to improving their overall quality of qualifications obtained. Thus service quality can improve performance or encourage performance by the student.

Table 1: Service Quality Dimensions

SN	Service Quality	Conceptualization
1	Assurance	Refers to the ability of faculty and staff to provide trust and confidence to students. According to Parasuraman et al.(1988)assurance is known as the level of the service delivered to customers that is believable and can be trusted.
2	Empathy	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.
3	Reliability	It is defined as the level of the knowledge and information learnt is accurate (Yong, 2000; Garvin, 1987). The reliability dimension of service quality is defined to which extent the correct, accurate and up-to-date knowledge and information are fulfilling and also perform the services promised to students.
4	Responsiveness	Defined as the level of services provided is able to help customer promptly (Yong, 2000). It involves the willingness to provide prompt or favorable services by the faculty and staff to students.
5	Tangibles	The <i>tangibles</i> dimension of service quality refers to the tangible condition and facilities in higher learning institutions. It is important for setting up a clear transmission of knowledge in the learning and teaching process with 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 centers.

Statement of the problem First sentence deleted.

It has been observed that there is no relationship between students' expectations before entry into the college and service quality encountered therein; some attributed this problem to students' factor while others blamed the citadel of learning for this problem. Therefore, this study was designed to determine service quality dimensions and students' academic satisfaction in Nigerian universities. In specific terms, would students' academic satisfaction at Babcock University (BU) be linked to service quality dimensions? Also, will the students gender (male or female), and career choice (science or non-science career) moderate the influence of the encountered service quality on the students' academic satisfaction, with a view to offering suggestions toward enhancing sustainability of higher education in Nigeria.

Research Questions

1. Is the level of service quality encountered by students satisfactory or not?
2. Are there any significant relationship between service quality dimensions encountered by students and their academic satisfaction?
3. Are there any significant difference in the service quality encountered by students and academic satisfaction based on gender and disciplines?

Methodology

Design: This study employed survey research design of an ex-post facto type 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: The target population for this study comprised of all undergraduate students at Babcock University Ilishan-Remo, Ogun State, Nigeria. Sample of two hundred and fifty (250) students were selected through a stratified random sampling technique. The stratified sampling technique was used to group the students into nine (9) strata based on the existing schools. The selection of the schools and students were done using simple random sampling techniques. The mean age of the respondents was 18.9 while the standard deviation was 7.23

and the age range was 16-27 years. Eighty-eight (88; 42.51%) males and one hundred and nineteen (119; 57.49%) females participated in the study.

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

1. 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) and Tan, Wong, Lam, Ooi, Chee-Yee Ng (2010), 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.

2. Students’ Academic Satisfaction Scale

An aspect of Student University Satisfaction Scale (SUSS) developed by Bhamani (2013). Section C of SUSS tagged academic quality was adopted and used to tap into the students’ academic satisfaction. It is a 16-item scale measured on a three continuum scale ranging from always (3) to never (1). Sample items include: ‘I find university’s learning environment conducive’, ‘I find classrooms well equipped with educational resources’, and ‘Teachers are generally student friendly and focus on specific individual needs’. The reliability was ascertained through split-half method. The validity co-efficient index of 0.81 and a test-retest reliability of 0.78 were obtained (Ayodele & Ezeokoli, 2013). Thus, the instrument was reliable and valid to use.

Procedure: A set of questionnaires for assessing service quality dimensions and students’ academic satisfaction were administered on the sample with the help of two other colleagues. A total of 250 questionnaires were distributed, filled and returned for the data analysis. Out of the returned questionnaire, 43 were not adequately filled. Therefore, 82.8% questionnaire administration success was ensured.

Data Analysis: Data was analyzed using descriptive statistical tool of mean and simple percentages while inferential statistical tool of t-test and correlation matrix were used for the analysis of earlier stated research questions. All research questions were answered at 0.05 level of confidence using a two-tailed test.

Results

Table 1: Level of service quality encountered by students

Variable	N	Highly Satisfied		Less Satisfied	
		Male	Female	Male	Female
Service Quality	207	56 (63.6%)	77 (64.7)	32 (36.4%)	42 (35.3%)
Overall Satisfaction level = 64.3%					

Table 1 reveals the level of service quality encountered by students based on gender.63.6% of the male students sampled and 64.7% of the female were highly satisfied with the level of service quality encountered. The overall satisfaction level of service quality encountered by the students irrespective of gender is 64.3%. It could then be deduced that the population sampled were satisfied with the type of academic services experienced at Babcock.

Table 2: Correlation Matrix of the Dependent and Independent Variables

Variables	Mean	SD	AS	RES	REL	TA	EM	S
Assurance (AS)	59.611	9.009	-	.466**	.484**	.401**	.418**	.372**
Responsiveness (RES)	50.007	8.505	.466**	-	.341*	.373**	.384*	.236*
Reliability (REL)	53.201	8.985	.484**	.341**	-	.402**	.358**	.307**
Tangibles (TA)	49.347	9.168	.401**	.373**	.402**	-	.412**	.347**
Empathy (EM)	46.433	9.379	.418**	.384**	.358**	.412**	-	.223*
Satisfaction (S)	33.061	7.287	.372**	.236*	.307**	.347**	.223*	-

** Correlation is significant at the 0.05 level (2-tailed), * Correlation is significant at the 0.01 level

Results presented in table 2 above indicate significant positive relationships exist among the service quality dimensions and students' academic satisfaction. In specific terms, students' academic satisfaction has significant relationship with assurance (.372), responsiveness (.236), reliability (.307), tangibles (.347), and empathy (.223). In other words students' academic satisfaction and achievement is likely to be influenced more by the service quality dimension of assurance (degree to which students are encouraged), tangible (condition of physical facilities and communication materials), and reliability (the degree to which employees are executing the promised service).

Table 3: T-test analysis showing difference in service quality encountered and academic satisfaction based on demographic factors

Variable	Factors	N	X	Mean Dif.	SD	df	t-cal.	t-crit.	Decision
Gender	Male	88	55.987		4.605	205	.973	1.960	NS
	Female	119	46.415	0.428	4.380				
Discipline	Science	96	46.202		5.491	205	1.987	1.960	S**
	Non-sci.	111	48.083	1.881	5.267				

NS= Not significant; S= Significant

The results presented in Table 3 shows that the obtained value of t is 0.973 for gender, which is less than the table value of 1.960. This implies that there is no statistical significant gender difference in service quality encountered and academic satisfaction ($t = .973, P < 0.05$). On another note, there is a statistical significant difference based on discipline ($t = 1.987, P > 0.05$). This shows that there is a significant difference between science-oriented and non-science oriented students in the service quality encountered and academic satisfaction. However, using the mean score of the discipline, one can deduced that non science-oriented students with higher mean score enjoyed better service quality and more satisfied than their counterparts in the sciences.

Discussion of Findings

This study examined the dimensions of service quality encountered by students at Babcock University in relation to students' academic satisfaction. It provides a picture of service quality from the perspective of students 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 (Tan, Wong, Lam, Ooi, & Ng, 2010). Results of the students' academic satisfaction are satisfactory. This finding corroborates the findings of Petruzzellis, Uggento, and Romanazzi, (2006) who 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, or completely satisfied when they receive more than they expect.

After the analysis of the survey of all the collected data, the results of the second research question showed a significant relationship between service quality dimensions encountered by students and their academic satisfaction. The outcome concludes that all the service quality variables have significant relationships with the overall students' academic satisfaction. The service quality variables and students' academic satisfaction have a moderately positive correlation which means there is still room for continuous improvement. This finding lends credence to the findings Adenuga and Ayodele (2011); Al-Naggar, *et al* (2012); Yong, (2000); Garvin, (1987). The university may try to focus and put more effort on the service quality variables like responsiveness (willingness to provide prompt or favorable services by the faculty and staff to students) and empathy (student's personal development).

No statistical significant gender difference in service quality encountered and academic satisfaction ($t = .973, P < 0.05$) was reported; while a statistical significant difference was observed based on discipline ($t = 1.987, P > 0.05$). However, the difference observed in service quality encountered and academic satisfaction based on discipline support the earlier findings of Tian and Wang (2010) who argued that satisfaction is the function of the congruency between perceived performance and esteemed benefits resulting from consumer (student) personal values, and the configuration of consumer values is affected by central cultural values.

Conclusion

Quality services at tertiary level are the most important factor to motivate and retain the best parents and students. Though, determining and assessing students' satisfaction with their educational experiences is not easy, but can be very helpful for the university to build strong relationship with their existing and potential students. 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 results of this study have shown a strong relationship between service quality dimensions (assurance, responsiveness, reliability, tangibles and empathy) and students' academic satisfaction. Furthermore, the results of the study revealed the need for the university to improve and balance the educational needs between the science and non-science oriented students.

Recommendations

The following recommendations were made based on the outcome of this study:

- ✓ Effective supervision of all institutional services and facilities should be ensured.
- ✓ Orientation should be more meaningful and not a mere one-week process.
- ✓ Revise remunerations for teaching and other staff so that they can give valuable and friendly services, and hold regular seminars on student welfare for university staff in order to improve their services
- ✓ There is need to translate research into practice in the role of higher education for social transformation.
- ✓ Mandatory counseling should be encouraged to help students cope with the social, academic and bureaucratic challenges.

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