Analysis of Service Quality, University Image and Student Satisfaction on Student Loyalty in Higher Education in Nigeria

[1]Umar Usman and [2]Sany Sanuri Mohd Mokhtar
[1]Department of Business Management and Information Technology,
Faculty of Management Technology,
Abubakar Tafawa Balewa University PMB, 0248 Bauchi, Nigeria
[2]School of Business Management, Universiti Utara Malaysia, Sintok, Malaysia

Abstract: The purpose of this paper is to explore the relationship among service quality, university image and student satisfaction and student loyalty in higher education in Nigeria, A structured questionnaire was adopted and modified. The hypotheses were simultaneously tested on a sample of 446 students out of 650 distributed, giving a response rate of 68.62%. Structural Equation Modeling analytical techniques were used to assess the relationships among the variables under investigation. The findings of this study have shown significant relationships among the variables under investigation. The research was limited to the first six generation universities in Nigeria and the study used cross-sectional design. Despite the significant ofservice quality, student satisfaction and student loyalty, this study contributes in adding to the body of knowledge in HEIs in Nigeria. Also, to the best of the authors' knowledge there is no study published that explores the influence of service quality, student satisfaction and its relationship to how students perceive the offered service whether they are satisfied or not and most importantly whether they will retain dealing with the institution or not.

Key words: Service quality, university image, student satisfaction, student loyalty, relationship

INTRODUCTION

Higher Education Institutions (HEI's) can be defined as postsecondary school training, learning and teaching at college of education, polytechnic and Universities with the main goal of equipping individual person with sound knowledge, creative ideas, skills and societal understanding. The earliest Universities developed were in Italy at Salerno in the ninth century (Lander *et al.*, 2001). In addition, the emergence of HEIssuch as the College of education, Polytechnic and Universities evolved towards the end of twelfth century as few of the greatest schools rose to Centre of excellence and teaching and research. One of the greatest issues to HEIs throughout the ages has been how to effectively manage and deal with change while maintaining focus, value, funding and quality (Mcfarlane, 2011).

The Nigerian governments have recognized education as a sound instrument for effecting national growth and development of her citizenry. Her mission on education is mainly based on the development of individual person in to effective citizens towards national development and the provision of equal educational opportunities for the entire citizens at all levels of education which include both inside and outside the formal system of education. The official language used in teaching at all level of institutions is English language and both the federal and state ministry of education is the government bodies responsible for monitory, maintaining and regulating the standard of education in the country.The research was limited to the first six generation universities in Nigeria.

Theoretical background and research model: Expectation-Disconfirmation Theory (EDT) has its origins in the field of marketing and consumer behavior research (Bijmolt *et al.*, 1998; Oliver, 1976, 1980). EDT posits that satisfaction is considered as a function of prior expectations and disconfirmation (Oliver, 1980; Susarla *et al.*, 2003). Satisfaction is the main key determinant of repurchase intentions of a student intention to patronize the HEIs (Oliver, 1980).

Expectation can be define as a set of pre-exposure beliefs about the services (Olson and Dover, 1979; Susarla *et al.*, 2003). Disconfirmation can be defined as the discrepancy between expectations and actual experiences. Better-than expected outcomes lead to positive disconfirmation and worse-than-expected outcomes lead

Corresponding Author: Umar Usman, Department of Business Management and Information Technology,
Faculty of Management Technology, Abubakar Tafawa Balewa University PMB, 0248 Bauchi, Nigeria
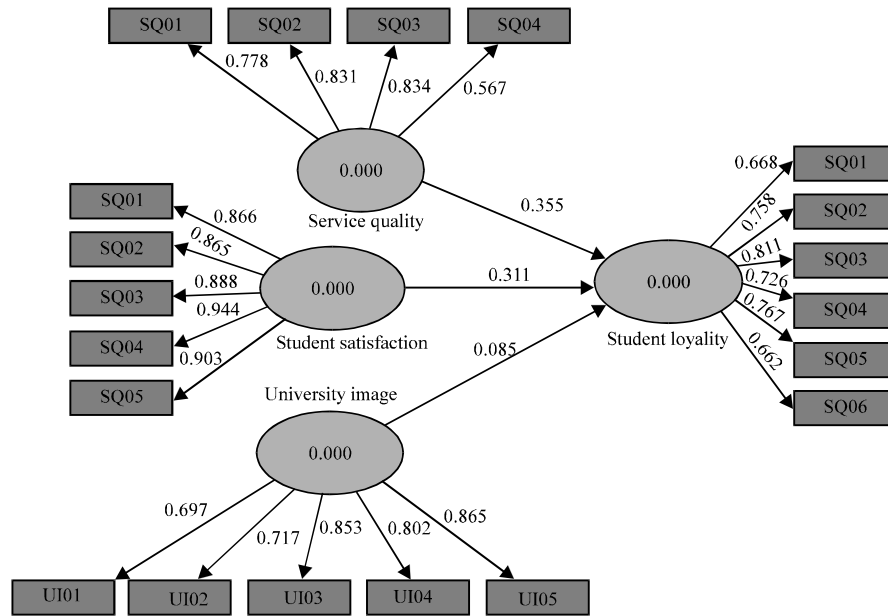
Fig. 1: Research model

to negative disconfirmation (Churchill and Surprenant, 1982; Kopalle and Lehmann, 2001; Oliver, 1980; Ruyter, Wetzels and Bloemer, 1998). The causal flow is as follows: exposure to information about a services performance characteristics leads to the formation of services specific beliefs or expectations towards a student (Olson and Dover, 1979); a cognitive comparison between expectations and actual experiences leads to a subjective calculation of disconfirmation (Ruyter *et al.*, 1998a) and a combination of expectations and disconfirmation determines the satisfaction level that, in turn, influences repurchase intentions.

EDT has been applied in so many different fields such as marketing and consumer behavior (Kopalle and Lehmann, 2001; Szymanski and Henard, 2001), service quality (Jia and Reich, 2005; Parasuraman *et al.*, 1994), psychology (Phillips and Baumgartner, 2002), leisure behavior (Madrigal, 1995), medicine. A common theme in the expectation disconfirmation literature is that satisfaction is said to be a function of the size and direction of disconfirmation: when the consumers are satisfied in the case of positive disconfirmation and dissatisfied in the case of negative disconfirmation. Further, fluctuation in satisfaction is higher as the degree of disconfirmation increases. Initially, Oliver (1980) hypothesized that prior expectation and disconfirmation are the only determinants of satisfaction but subsequent research by Churchill and Surprenant (1982) showed that actual performance (i.e., experience) exerts independent effects on satisfaction beyond its impact via disconfirmation and in some cases, experience is the only determinant of satisfaction (Fig. 1).

Student loyalty: Student loyalty can be defined as a deeply commitment held by a student to patronize a preferred service of higher education in the future despite any situational influence (Ndubisi *et al.*, 2012).

According to other scholars have defined student loyalty as a process of making a student's feel committed to service of HEIs, Whenever the benefits are known to the students, they will really stay on and continues to demand and patronized for such services (Dado *et al.*, 2011).It has always argued that for any students to be loyal, institution must invest in building a strong relationship and establish a very close relationship with the students (Ndubisi, 2007). In the context of service quality dimensions, student's satisfaction, University images is often considered as a central determinant of student's loyalty.

While the fundamental goal of service quality is all about gaining and fostering students (Guenzi and Pelloni, 2004).The traditional marketing mainly focused on attracting new customers only rather than retaining the existing customers and also focus on selling rather building the relationship (Al-rousan and Abuamoud, 2013). Today, students loyalty and retention is the most vital goal for any service institutional success (Heskett *et al.*, 2008). In addition, Guo *et al.* (2012) stated that satisfaction is a necessary perquisite for students loyalty but is not sufficient enough on its own to automatically lead to repurchase. "It is no longer sufficient to concentrate only on customer satisfaction; the next step is customer loyalty".

Service quality is an indicator of repeat purchase or repurchase intentions (Dietz, 1997; Cronin and Taylor, 1992; Ruyter *et al.*, 1998). Recommendation and favorable word-of-month (Brown and Swartz, 1989; Dado *et al.*, 2011; Berry *et al.*, 1990; Teece, 2007).

Student's loyalty is only possible with a student satisfaction, university image, study loyalty is one of the most valuable things that institutions have to build and sustain a strong relationship. The loyalty of a client to a business and the strength of their attitudes make its very hard and costly for its competitor to draw its clients. Now a days Universities are giving more significance to student's loyalty in order to gain a competitive advantage (Helgesen and Nesset, 2007).

The benefits of higher education from having a loyal students while in school cannot only end at the school when the students are formal attendees (Ibrahim *et al.*, 2013). The success of an higher education also depends on the loyalty of their former students after graduating from school such as the alumnus may continue to support his or her academic institution in different capacity that is to contribute both financially and morally, firstly financial assistance such as through donation or to provide financial support to a research projects. Secondly, through word-of-month promotion of the institution to other prospective students, finally, through some form of cooperation such as regular visiting lecturers or even offering placement for students. Student's loyalty has certainly increased the success of HEIs, the reputation of the institution and even its development. The benefits of student loyalty have increase student satisfaction with the institution always lead to positive attitude such as student's positive evaluation, client citizen behavior and student's loyalty.

Previous studies have shown that student loyalty is a sort of strategic competitive advantage used by higher education because seeking new students is definitely more cost intensive than keeping existing students, the assumption is that students loyalty may pay off after graduating from the institution as an alumni and may continue to support their academic HEIsthrough many ways (Mendez *et al.*, 2009).

Loyalty represents a very complex factor in the consumer behavior and has respectively been studied from various aspects in marketing literature. However, there is no unanimous definition of student's loyalty. But after summarizing various studies it can be concluded that student's loyalty expressions have two dimensions; behavioral loyalty and attitudinal loyalty. The behavioral dimension comprises such aspects as making repeated purchases, frequency of purchases and habit of changing product or service providers.

Thus from the point of view of student loyalty two aspects are important for HEIs, the willingness to recommend and if needed, the willingness to choose the same higher education repeatedly.

Marketing research conducted before has proved that service quality, student's satisfaction and overall image of the institution have led to student's loyalty (Fogarty *et al.*, 2000; Walker, 2009; Helgesen, 2006).

Student loyalty is normally the actual behavior of students to maintain a relationship with an institution or an organization through regular purchase of its services (Behara *et al.*, 2002; Singh and Sirdeshmukh, 2000). Students loyalty can be classified into two groups; one of the group is the long-term and which is considered and argued by many scholars as the most valid relationship and while the second group is the short-term relationship in which the students as a customer will likely to switch if and when a relatively better services or products is presented to the students (Ruyter *et al.*, 1998).

Loyalty consists of a loyal student supported by the view that loyalty by the view that loyalty students, though presented with the appeal of alternative offerings, are minimally affected in their future patronize intentions (Oliver, 1980). According to Martensen *et al.* (2000) students loyalty have four dimensions which include the following:

- The students intention to repurchase
- The desire to refer the institution to other potential students
- The level of tolerance to price changes
- The students intention to purchase other services or product from the institution

Similar factors consisting of future purchase of renewal of services or products, switching barriers, positive word of mouth. Although, the effect of switching barrier is very low, since the factors is considered as having limited durability (Selnes, 1998). However, in other words students may switch to alternatives if they are provided with unsatisfactory services or products for a long period of time.

The study will quantify students loyalty by adopting the group proposed by (Martensen *et al.*, 2000; Selnes, 1998). Namely the intention to renewal of service or patronize such as attending other course offered by the institution and also to support the institution through the strategy of reference and purchase of other services or products from the institution (cross-selling). Cross-selling in this particular situation simple means the utilization of other services or products offered by the HEIs such as purchasing reference material, to attend conference and workshops and using library resources, etc.

Student loyalty is only possible in a situation with student satisfaction. Strong student's loyalty is one of the most important things that an institution can have. Therefore, the loyalty of a student to an institution or business and the strength of their behavior make it really difficult and costly for the competitors to draw away their students to other institution.

However, Universities are giving more significance to student's loyalty in order to gain more competitive advantage, just like any other service businesses in the service sector, than they used to. That is the main reasons why the factors that influence student's satisfaction and student loyalty should be research and analyzed in future studies. With such situation, the universities can increase the value presented and that will result in to students loyalty (Nesset and Helgesen, 2009).

Service quality: Nitecki and Hernon (2000) defined service quality in terms of "meeting or exceeding student expectations or as the difference between student perceptions and expectations of service". Service quality is a focused evaluation that actually reflects the students perception of specific dimensions of service: reliability, responsiveness, assurance, empathy and tangibles. On the other hand, student's satisfaction is more inclusive: it is influenced by perceptions of product quality, service quality and price as well as the personal and situational factors. The role of service quality in HEIs has actually received increasing attention in the past two decades and the management of HEIsis ensuring that all services provided to students are managed and well organized to enhance the students perceived quality service delivery.

The definition of quality service revolves within the ideology that quality has to be judged on the evaluation of the user or students who is the consumer of the service.

The construct of quality as in the service literature is conceptualized based on the perceived quality. Perceived quality is refer to as the students who is the consumer judgment on the status of an entity overall superiority or experience (Ziethaml *et al.*, 1996). However, perceived service quality could be the service or product assessment of a number of service encounters and in this particular case a students who is the customers, these arrangement could be range from the initial contact with the office administrative staff, to the contact relationship with the academic staff, the coordinators, dean of faculty, directors of colleges, etc (Hill, 1995). On other hand, if an institution constantly provides service at a level that above students expectations, the service will be assessed as high quality service and vice versa that is if an institution perform below the students expectations, then

the service is been considered as poor service quality (Abouchedid and Nasser, 2002). The service quality in the educational sector particularly in the higher education institutions is been considered as the fundamental aspect of HEIsexcellence. Service quality is considered an significant research topic in view of its important relationship to customer satisfaction (Boulding *et al.*, 1993; Kwek *et al.*, 2010), customer retention (Kwek *et al.*, 2010). Service quality have been considered as a driver of corporate financial performance and corporate marketing (Buttle, 1996). Service quality also affect student satisfaction. A known definition of service quality that is proposed by Zeithaml *et al.* (1990) is "conformance to student specifications" that is in other words, it is the students who are the customers definition of quality that matters but not really that of management of HEIs.

Therefore, the service quality construct is mostly known to be conceptualized in the context of the service literature in the field of marketing. However, it really deals with the concept of perceived service quality of the students. According to Parasuraman Berry and Zeithaml, perceived service quality is the extent to which a firm successfully serves the purpose of their students. The students determine the perceived or cognitive value of service based on their previous experience with the service delivered. According to Ghobadian *et al.* (1994) stated that student expectations, service delivery process and the service output have a very serious impact on perceived service quality. Yoo and Park (2007) found that workers as part and parcel of the service delivery process are very critical element in enhancing perceived service quality delivery process. In addition Edvardsson *et al.* (2005) posit that service quality perceptions are formed during the process of production of goods and services, delivery and consumption process. However, the consumer's favorable and unfavorable practical experience as well as their positive and negative emotions may actually have a significant impact on perceived service quality of an institution.

Since, 1980s research on the concept of service quality gained momentum, at the initial stage the main focus was to define the concept of service quality. Research by Gronroos (1984) focused on what he referred to as the missing service quality concept. He argued there was a difference between technical quality and functional quality, the technical quality which describes what the customer gets and is objective in nature and functional quality which describes how the customer gets it and is subjective in nature. Thus:

- H_1: service quality is positively related to students loyalty in the Nigerian HEIs

University image: The University corporate image and reputation is been considered as one of the most critical and sensitive factor in the overall assessment of an institution or a business firm (Gronroos, 1984; Anderson and Gerbing, 1992, 1988; Andreassen and Lindestad, 1998; Henseler *et al.*, 2012; Hu *et al.*, 2009) due to the strength that lies in the students perception and mind when hearing the name of the institution. Because, constant research on the corporate image and reputation is a must for any institutions that wish to be successfully differentiate in their positioning in the existing and potential market. Agus *et al.* (2007) stated that corporate image of an institution consist of two major components; firstly is the university functional corporate image such as the tangible features that can be seen, measured and evaluated easily.

Secondly, is the university emotional corporate image such as the feelings, attitudes and beliefs that one have towards an institution. These emotional components are consequences from past experiences the students over long period of time with the institution.

Even though service quality as "perceived by customers" Parasuraman *et al.* (1990, 1991) although, the service provider is the one who is in charge of creating and to deliver the service. Basically, the service providers are the institutions ambassadors because of their role which they hold as the ultimate balance of quality in service in the students mind (Surprenant and Solomon, 1987).

Actually without building corporate philosophy, culture and adequate, coordinate, efficient and effective management, developing a superior excellence corporate image and reputation will not be possible task to be achieved (Gronroos, 1984; Lau and Woods, 2009; Winters, 1990). Some are of the opinion that customers evaluate service quality always and it's on perceptions of two dimensional service quality concept, a technical quality or outcome of the service act dimension such as how well the service performs as expected and as promised or what the customers receives at the end. (Shintani *et al.*, 2010) and the functional quality, i.e., how it is delivered, it emphasized on how the perception of the manner in which the service is delivered (Opoku *et al.*, 2008). They also believe that "how" of service quality is always critical to perceptions of service quality. Gronroos (1984) is of the opinion that this is another quality dimension which is very much related to how the moments of truth of the buyer and seller interactions themselves are taken care of and how the service provider does functions, therefore it is refer to as the functional quality of the process. The technical quality is also known as the extrinsic quality and it is refer to as what the customer is actually receiving from the services or the quality of the outcome therefore, it is refer to as the functional quality of the entire process. In addition technical quality, also refer to as extrinsic quality which simple means as what the student is actually receiving from the service, in other wards the result of the service is the "what" is to be delivered during the actual service delivery process. And the functional quality which is refer to as the intrinsic quality, perceptual quality and interactive quality which describe the manner in which how the service is been delivered. Functional quality is defined as employees' actions that take place during the service encounter it is mainly refer to as "how" a service is provided (Rahman *et al.*, 2012).

In addition, when the students do not have the adequate expertise, time and desire to make an assessment of technical quality, they may rely primarily and completely, on the perceptions of functional quality to assess service quality. In summary, when the levels of service quality are high, the benefits may reduce cost savings and increased in market share and profitability, improved in employee morale (Opoku *et al.*, 2008).

Numerous definitions are shown in the literature, defined the concept of corporate university image and reputation as a perception of quality service associated with corporate name (Aaker, 1997). In addition, Keller (1993) also defined corporate image as perceptions of an institution reflected in the associations which held in students memory (Nguyen and LeBlanc, 2001; Nguyen *et al.*, 2005). Refer corporate image as a subjective knowledge or attitude such as ideology, corporate name, goodwill and reputation and delivery system quality level and all the above features contribute to build the corporate image of a HEIs.

University corporate image is refer to as the "overall impression" left in the students mind as a result of the accumulative feelings, ideas, attitudes and experiences with the HEIs which isstored in memory, transformed in to a positive or negative meaning, retrieved to reconstruct image and recalled when the name of the institution is heard, called or brought to one's mind (Grund, 1996). This is consistent with Keller (1993) worldwide vision of brand reputation and corporate image. Thus, corporate image could be considered as a type brand image in which the brand refers to as the institution as a whole than to its sole services provided. The university certificate obtained from this university is highly recognized worldwide. Those students who graduated from this university have potential career prospect and excellent job and is one of the top high ranking institution with a good logo and name of the university said much about the status of the institution, also degree obtained from this university will

be very useful in my life of a student,career guide to students and university staffs are polite to serve studentsasthiswill result to student's satisfaction which will lead to student's loyalty of the HEIs. Thus:

- H$_2$: University Image is positively associated with student loyalty in the HEIs

Students satisfaction: According to Anderson *et al.* (1994) stated that two quite different conceptualizations of the satisfaction construct can be distinguished: transaction specific and brand specific. Transaction-brand specific limits satisfaction to a specific purchase occasion (Oliver, 1980); Similarly, cumulative satisfaction, customer-satisfaction simple refers to an overall evaluation based on many purchase and consumption experiences of a product over period of time. It can be viewed as a function of all previous transaction and specific satisfactions (Anderson *et al.*, 1994). Overall satisfaction is said to be a more fundamental indicator of the industry past, current and future performance this is because customers always make repurchase evaluations and based their decisions on their purchase and consumption experience to date and not only restricting to a particular transaction (Quinn *et al.*, 2009).

Therefore, this will reduces the price sensitivity and the customer losses from regular fluctuations in service quality in the short term. The ultimate result is high customers' loyalty to the industry.

Satisfaction refers to as the extent to which a customer will experience a pleasurable level of consumption of a related fulfillment (Koppius *et al.*, 2005; Oliver, 1976). Technically, customer satisfaction develops in the short term as a result of previous interactions with the service provider (Geyskens *et al.*, 1999). The impact of customer satisfaction in the development of strong customer brand relationships is a clearly" argued by authors such as Noblitt *et al.* (2010) who observed that customer satisfaction is the customers affective and cognitive evaluation of the services provider based on all consumption episodes that the customer had with the service provider. Its means that the customers has built a strong level of confidence in the integrity and reliability of the industry (Vivek *et al.*, 2012).Similarly, if in any way a customer is not satisfied with the service, a deeply committed, emotionally and bonded relationship cannot occur in any way. (Crosby *et al.*, 1990; De Wulf *et al.*, 2001). The ideal situation is that customer satisfaction is essential to the buyer and seller relationship (Crosby *et al.*, 1990). If a strong and enduring customer

brand relationship is to be built a customer must barely satisfied with the service provider (Moore *et al.*, 2012). It is very significant that satisfaction is to be measured at a global evaluative level in order to ensure a proper understanding of the overall nature of the relationship.

Satisfaction is the central point in the study of customer loyalty in any business institution (Chan *et al.*, 2003; Kenney and Khanfar, 2009); previous studies in the service sector report the positive effects of customer satisfaction on purchase intentions (Chan *et al.*, 2003) ,also referrals (Heskett *et al.*, 2008). Also others, on customer or students retention (Gustafsson *et al.*, 2005), on profit and return on investment (Kwek *et al.*, 2010).

In the higher education service industry, students satisfaction in higher education has been defined in a number ways, for instance Alpert (1996) define it as a short term attitude of a customer that arises from the students evaluation of the educational experience. Elliott and Shin (2002) define it as the subjective outcome of the various outcomes and experiences at the HEIs. Quite a number of previous studies have shown that student satisfaction is a significant predictor of student loyalty. Students satisfaction increased revenue and reduced costs for high educational institutions (Grossman *et al.*, 2009). Students satisfaction and relationship continuity through students undertaking continued education (Alak, 2006; Helgesen and Nerret, 2007). Several studies have shown that a student satisfaction has explains a large proportion of the variance in students willingness to make recommendation of the HEIs (Alak, 2006; Athiyaman, 1997; Gummesson, 2005). The secondary student loyalty shall have a lot of benefits which may follow from high levels of satisfaction such as the attraction of new students, retention of existing students to continue patronized, donation behavior from alumni and membership of alumni (Helgesen and Nesset, 2007). Many of the previous literature suggests that customers weigh prior satisfactions evaluations heavily in their decision to patronize HEIs providers' (Kwek *et al.*, 2010).

Students satisfaction with the service delivery of quality products and services have been suggested and previously empirically documented as the ways and manner affecting the buyers decision with a relationship (Anderson *et al.*, 1994). Similarly, according to Kahai and Cooper (2003) and Singh (1986). Whenever students are satisfied the likelihood of exit from negative word of mouth and the relationship is greatly reduced. This is in line with the confirmation and disconfirmation theory (Churchill and Surprenant, 1982; Oliver, 1980) this made a clear explanation that satisfaction is achieved when the

real expectations are fulfilled (confirmed) that negative disconfirmation of any form of expectations will result in dissatisfaction and that positive disconfirmation will result in to enhanced satisfaction. Thus:

- H_3: Student satisfaction is positively associated with student loyalty in HEIs

MATERIALS AND METHODS

The SEM using the Smart PLS version 2.0 M3 was selected to assess the two main stage analytical procedures by firstly examining the measurement model and secondly the structural model (Anderson and Gerbing, 1988). The main reasons for the use of PLS instead of covariance-based SEM is because PLS is more robust as less restriction is always placed on the unbiased estimates of the sample size (Lawrence *et al.*, 2009). Also, PLS analysis is useful in identifying the research model's constructs relationships and the measurement (Danielsen *et al.*, 2009). In addition, in PLS does not have rigid assumptions were made concerning the population and measurement (Abazov *et al.*, 2009). As the data collected are self-administer through a questionnaire (Podsakoff *et al.*, 2003). In addition a cross-sectional research design was also used. A sample size of 446 students out of 650 wasdistributed SEM analytical techniques were used.

RESULTS

The demographic of the respondents tabulated in Table 1 above were derived from descriptive analysis. The majority of the gender group are male (73.5%) outnumbered the female (26.5%). The majority of the age group are in the category of 26-35 which represent (41.5%). In terms of marital status, the majority of the respondents are single which represent (65.7%). About 40.6% of the total respondents are educated with SSCE/NECO level of education and followed by BSc/HND. The majority of the respondents (69.1%) are undergraduate students and the majority of the respondents (79.6%) are full time students undergoing their first degree. Lastly, about 24.2 % of the respondents claimed to be on scholarship.

Measurement model: In observing the stability of the estimates and to developed a very strong confidence intervals Jing-yan a PLS bootstrapping procedure was undertaken with 500 re-samples to assess the significance level of the path analysis and hypotheses testing as suggested by Chatrchyan *et al.* (2011) as agreed by all researchers it's would be adequate for bootstrap method. All the measures were exposed to both validity and reliability testing before testing the

Table 1: Sample profile of the respondents

	Frequency	Percentage
Gender		
Male	328	73.5
Female	118	26.5
Age		
15-25	221	49.6
26-35	185	41.5
36-45	22	4.9
46-55	16	3.6
56-65	2	.4
Marital status		
Married	148	33.2
Single	293	65.7
Divorced	5	1.1
Qualifications		
SSCE/NECO	181	40.6
OND/NCE	83	18.6
BSc/HND	109	24.4
MSc/MBA	73	16.4
Student status		
Under Graduate	308	69.1
Post Graduate	138	30.9
Mode_of_study		
Full Time	355	79.6
Part Time	91	20.4
Student scholarship		
Yes	108	24.2
No	338	75.8

Table 2: Loadings and cross loadings

Student	Loyalty	Service quality	Student satisfaction	University image
SL01	**0.668**	0.401	0.321	0.364
SL02	**0.750**	0.386	0.423	0.397
SL03	**0.811**	0.481	0.527	0.498
SL04	**0.726**	0.345	0.397	0.341
SL05	**0.767**	0.504	0.438	0.393
SL06	**0.662**	0.420	0.391	0.292
SQ01	0.513	**0.778**	0.523	0.597
SQ02	0.531	**0.831**	0.476	0.513
SQ03	0.373	**0.834**	0.462	0.440
SQ04	0.285	**0.567**	0.177	0.161
SS01	0.542	0.442	**0.866**	0.576
SS02	0.423	0.501	**0.865**	0.677
SS03	0.513	0.544	**0.888**	0.719
SS04	0.553	0.554	**0.944**	0.673
SS05	0.520	0.492	**0.903**	0.626
UI01	0.332	0.366	0.404	**0.697**
UI02	0.306	0.397	0.508	**0.717**
UI03	0.361	0.452	0.644	**0.853**
UI04	0.400	0.526	0.667	**0.802**
UI05	0.581	0.574	0.629	**0.865**

Bold values are loadings for items which are above the recommended value of 0.5 (Hair *et al.*, 2006)

hypotheses. The reliability of the constructs looks on how consistently an instrument measures the concept it is supposed to measure, meanwhile validity looks at how well an instrument measures a concept that intended to measure (Abazov *et al.*, 2009).

The Ccomposite Reliability (CR) and Average Variance Extracted (AVE). All loadings of the twenty (20) standardized indicators in Table 1 and 2 above exceeded the recommended value of 0.5 as suggested by Hair *et al.* (2006), we used the factor loadings, CR and

Table 3: Result of measurement model

Model construct	Items	Loadings	AVE	CR
Student loyalty	SL01	0.668	0.537	0.874
	SL02	0.750		
	SL03	0.811		
	SL04	0.726		
	SL05	0.767		
	SL06	0.662		
Service quality	SQ01	0.778	0.579	0.843
	SQ02	0.831		
	SQ03	0.834		
	SQ04	0.567		
Student satisfaction	SS01	0.866	0.799	0.952
	SS02	0.865		
	SS03	0.888		
	SS04	0.944		
	SS05	0.903		
University image	UI01	0.697	0.624	0.892
	UI02	0.717		
	UI03	0.853		
	UI04	0.802		
	UI05	0.865		

Table 4: Discriminant validity of constructs

Constructs	1	2	3	4
Student loyalty	**0.732**	-	-	-
Service Quality	0.583	**0.761**	-	-
Student satisfaction	0.575	0.566	**0.894**	-
University Image	0.526	0.600	0.730	**0.790**

Fig. 2: Structural model

AVE to assess convergence validity. The loadings for all items exceeded the recommended value of 0.5 (Hair *et al.*, 2006).

Therefore, the reliability of all the measurement items are acceptable. Table 2 indicates the CR values of the factors ranging from 0.843 (service quality) to 0.952 (student satisfaction), all exceeding the recommended benchmark of 0.7 (Hair *et al.*, 2006). The AVE values for all the variables ranged from 0.537-0.799 which indicated that all the values were greater than the cut-off value of 0.5 (Bagozzi and Yi, 1988). Table 3 clearly indicates that each variable shares higher with its own measurement items as compared with other variables. Diagonals in bold represent the square roots of AVE while off diagonal represent correlations.

To evaluate the extent to which the items measure the other related variables (discriminant validity), the square root of the AVE for each construct should be higher than the correlations between constructs, showing the adequacy of discriminant validity (Bagozzi, 1981; Wynne, 1998). Table 3 illustrates the correlations among the constructs with the square root of the AVE extracted on the diagonal. The results shown that all the diagonal values were larger than their correlations with other constructs, showing that the values of the diagonal elements exceeded the off-diagonal elements. The results of the measurements items, validity and reliability in this study demonstrated that all the items have adequate and sufficient reliability, convergent validity and validity.

Structural model: Figure 2 and Table 4 provide the structural results of the model with the coefficients for each path that indicates the relat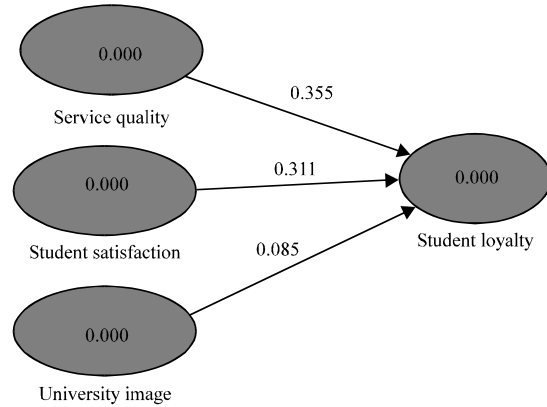ionships the constructs in the model (Lim *et al.*, 2010). However, the tests on the hypothesis and the path in the model were performed using the Smart PLS's bootstrap re-sampling technique (500 re-samples). The results of all the three (3) hypothesized relationships were supported with path coefficients >5.713 and significant p<0.01 Medium of 4.446 at p<0.01 Smaller of 1.424 p<0.05. The overall model explains 53.7% of the variance in the attitude of HEI to attract student loyalty in Nigeria.

The results of the research confirmed that service quality had a significant and positive effect on student loyalty with the path coefficient of (B = 0.355) and t = 5.713 at p<0.01 significance level. This research result suggests that providing service quality in HEI would attract student loyalty. Thus, Hypothesis 1: service quality is positively related to students loyalty in the Nigerian HEIs is supported.

The research results confirmedUniversity Image had a significant and positive effect on student loyalty with the path coefficient of (B = 0.311) and t = 4.446 at p<0.01 significance level. This result suggests that providing good University Image in HEIs would attract student loyalty. Thus, Hypothesis 2: university Image is positively associated with student loyalty in the HEIs is supported.

The research results confirmed student satisfaction had a significant and positive effect on student loyalty with the path coefficient of (B = 0.085) and t = 1.424 at p<0.05 significance level. This result suggests that providing satisfaction to students in HEIs would attract student loyalty. Thus, Hypothesis 3: student satisfaction is positively associated with student loyalty in HEIs was supported (Table 5).

Table 5: Path coefficient and hypothesis testing

Relationship	Hypotheses	Path coefficient	SE	T statistics	p-value
Service Quality-> Student loyalty	H1	0.355	0.062	5.713***	0.000
Student satisfaction-> Student loyalty	H2	0.311	0.070	4.446***	0.000
University Image-> Student loyalty	H3	0.085	0.060	1.424*	0.078

SE = standard-values are computed through bootstrapping procedure with 445 cases and 500 re-samples *p<0.01

In summary, Hypotheses 1-3 of this study were all supported. A closer examination revealed that service quality and student satisfactionare the key motivator of student loyalty followed by University image.

DISCUSSION

The purpose of this study was to test service quality among students loyalty of HEIs in Nigeria. The study also examined the relationships between service quality, university image and student satisfaction on student loyalty in Nigeria HEIs.

The result of this study is in line with the researcher expectation. It was found that there is a positive and strong relationship between service quality, university image, student satisfaction and student loyalty as indicated in SEM. Therefore, university image is really considered an issue of attitudes, feelings, beliefs toward the institution.

Secondly, a great deal of discussion has taken place within the service marketing literature regarding the appropriate causal relationship between service quality, customer satisfaction, university image and customer loyalty. This research found that service quality perceived by students had a direct and significant effect on student satisfaction with the institution, student satisfaction with the service provider and overall student satisfaction in HEIs. This finding is consistent with previous studies by Bitner *et al*. (1997), Lam and Woo, (1997), Lawrence *et al*. (2009). In addition, the studies are in consistent with the researcher expectation, we found that there is a positive relationship between service quality, student satisfaction and student loyalty. These results imply that high service quality will lead to higher satisfaction and as a result, it will produce greater willingness to recommend the institution.

The implication of the findings can be divided into two; theoretical and practical. Theoretically, this study adds to the growing body of literature that focuses on the constructs in the Nigerian context. It also contributes to the evidence in support for the determinants of student loyalty with particular reference to universities in Nigeria. Practically, the findings provided by this study enable the

HEIs to think seriously on improving service quality, university image, student satisfaction on student loyalty to retain existing and attract potential students in order to patronize the HEIs and to create strategies to boost the awareness of student loyalty even after graduation from their institution.

CONCLUSION

The study tested the effect of service quality, university image, student satisfaction on student loyalty among students of HEIs in Nigeria. It was found that service quality and student satisfaction at p<0.01 significance level. The two constructs, service quality and student satisfaction was found to be the strongest predictor of student loyalty in HEIs in this study and while the university image is at p<0.05 significance level and is basically found to be less significance than service quality and student satisfaction.

LIMITATIONS

Despite the useful findings of this study, several limitations need is to be acknowledge, future research is needed to improve the study better and in order to address its limitations in the area of other service quality dimensions, university image and student loyalty dimension in HEIs.

SUGGESTIONS

In addition, studies to be conducted in the future could alsodetermine the extending the model by incorporating any other relevant variables based on the latest literatures suggestions.

As the sample of this study was obtain from students enrolled in multiple faculties within the universities only. It would be beneficial for future research to extend this investigation and replicated the study to other HEIs such as the Polytechnic and colleges of education in Nigeria.

This research model could be further verifiedand applied in future studies that focus onacademics staff to verify the research model of service quality, university image and academic staff satisfaction towards HEIs. Finally, this study offered comprehensive details and established a theoretical model for future studies.

REFERENCES

Aaker, J.L., 1997. Dimensions of brand personality. J. Market. Res., 34: 347-356.

Abazov, V.M., B. Abbott, M. Abolins, B.S. Acharya and M. Adams *et al.*, 2009. Measurement of the WW production cross section with dilepton final states in pp¯ collisions at s = 1.96 TeV and limits on anomalous trilinear gauge couplings. Phys. Rev. Lett., 103: 191801-194502.

Abouchedid, K. and R. Nasser, 2002. Assuring quality service in higher education: Registration and advising attitudes in a private university in Lebanon. Qual. Assur. Educ., 10: 198-206.

Agus, A., S. Barker and J. Kandampully, 2007. An exploratory study of service quality in the Malaysian public service sector. Int. J. Qual. Reliab. Manage., 24: 177-190.

Alak, B.M.A.A., 2006. The impact of marketing actions on relationship quality in the higher education sector in Jordan. J. Marketing Higher Edu., 16: 1-23.

Alpert, F., 1996. A response to Koku's comments on Alpert, Wilson and Elliott's article on price signaling. J. Consum. Marketing, 13: 59-62.

Alrousan, R.M. and I.M. Abuamoud, 2013. The mediation of tourists satisfaction on the relationship between tourism service quality and tourists loyalty: Five stars hotel in Jordanian environment. Int. Bus. Res., 6: 79-90.

Anderson, E.W., C. Fornell and D.R. Lehmann, 1994. Customer satisfaction, market share and profitability: Findings from Sweden. J. Market., 58: 53-66.

Anderson, J.C. and D.W. Gerbing, 1988. Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bull., 103: 411-423.

Anderson, J.C. and D.W. Gerbing, 1992. Assumptions of the two-step approach to latent variable modeling. Sociological Methods Res., 20: 321-333.

Andreassen, T.W. and B. Lindestad, 1998. Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. Int. J. Serv. Ind. Manage., 31: 487-503.

Athiyaman, A., 1997. Linking student satisfaction and service quality perceptions: The case of university education. Eur. J. Market., 31: 528-540.

Bagozzi, R.P. and Y. Yi, 1988. On the evaluation of structural equation models. J. Acad. Marketing Sci., 16: 74-94.

Bagozzi, R.P., 1981. Evaluating structural equation models with unobservable variables and measurement error: A comment. J. Market. Res., 18: 375-381.

Behara, R.S., G.F. Fontenot and A.B. Gresham, 2002. Customer process approach to building loyalty. Total Qual. Manage., 13: 603-611.

Berry, L.L., A. Parasuraman and V.A. Zeithaml, 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. J. Retailing, 64: 12-40.

Bijmolt, T.H., M. Wedel, R.G. Pieters and W.S. DeSarbo, 1998. Judgments of brand similarity. Int. J. Res. Marketing, 15: 249-268.

Bitner, M.J., W.T. Faranda, A.R. Hubbert and V.A. Zeithaml, 1997. Customer contributions and roles in service delivery. Int. J. Serv. Ind. Manage., 8: 193-205.

Boulding, W., A. Kalra, R. Staelin and V.A. Zeithaml, 1993. A dynamic process model of service quality: From expectations to behavioral intentions. J. Marketing Res., Vol. 30,

Brown, S.W. and T.A. Swartz, 1989. A gap analysis of professional service quality. J. Market., 53: 92-98.

Buttle, F., 1996. SERVQUAL: Review, critique, research agenda. Eur. J. Market., 30: 8-32.

Chan, C., L. Entrekin, and C. Anderson, 2003. Psychometric assessment of the perception of service quality. Res. Pract. Hum. Resour. Manage., 11: 65-74.

Chatrchyan, S., V. Khachatryan, A.M. Sirunyan, A. Tumasyan and W. Adam *et al* 2011. Search for a Vectorlike Quark with Charge 2/3 in t+Z events from p p collisions at s = 7 TeV. Phys. Rev. Lett., 107: 27-30.

Churchill, Jr. G.A. and C. Surprenant, 1982. An investigation into the determinants of customer satisfaction. J. Market. Res., 19: 491-504.

Cronin, Jr. J.J. and S.A. Taylor, 1992. Measuring service quality: A reexamination and extension. J. Market., 56: 55-68.

Crosby, L.A., K.R. Evans and D. Cowles, 1990. Relationship quality in services selling: An interpersonal influence perspective. J. Market., 54: 68-81.

Dado, J., J.T. Petrovicova, S. Cuzovic and T. Rajic, 2011. An empirical examination of the relationships between service quality, satisfaction and behavioral intentions in higher education setting. Serb. J. Manage., 7: 203-218.

Danielsen, A.G., O. Samdal, J. Hetland and B. Wold, 2009. School-related social support and students' perceived life satisfaction. J. Educ. Res., 102: 303-320.

De Wulf, K., G. Odekerken-Schroder and D. Iacobucci, 2001. Investments in consumer relationships: A cross-country and cross-industry exploration. J. Market., 65: 33-50.

Dietz, J., 1997. Satisfaction: A behavioral perspective on the consumer. J. Consum. Marketing, 14: 401-404.

Edvardsson, B., A. Gustafsson and I. Roos, 2005. Service portraits in service research: A critical review. Int. J. Serv. Ind. Manage., 16: 107-121.

Elliott, K.M. and D. Shin, 2002. Student satisfaction: An alternative approach to assessing this important concept. J. Higher Educ. Policy Manag., 24: 197-209.

Fogarty, G.J., R. Catts and C. Forlin, 2000. Identifying shortcomings in the measurement of service quality. J. Outcome Meas., 4: 431-452.

Geyskens, I., J.B.E.M. Steenkamp and N. Kumar, 1999. A meta-analysis of satisfaction in marketing channel relationships. J. Market. Res., 36: 223-238.

Ghobadian, A., S. Speller and M. Jones, 1994. Service quality: Concepts and models. Int. J. Qual. Reliab. Manage., 11: 43-66.

Gronroos, C., 1984. A service quality model and its marketing implications. Eur. J. Market., 18: 36-44.

Grossman, P., C. Compton, D. Igra, M. Ronfeldt and E. Shahan *et al.*, 2009. Teaching practice: A cross-professional perspective. Teachers Coll. Rec., 111: 2055-2100.

Grund, N.E., 1996. Reputation: Realizing value from the corporate image. Acad. Manage. Executive, 10: 99-101.

Guenzi, P. and O. Pelloni, 2004. The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider. Int. J. Serv. Ind. Manage., 15: 365-384.

Gummesson, E., 2005. Qualitative research in marketing: Road-map for a wilderness of complexityand unpredictability. Eur. J. Market., 39: 309-327.

Guo, G., F.S.L. Cheung and W.F. Leung, 2012. Cross-cultural differences in attitude towards TV advertising among Beijing, Hong Kong and Warwick Viewers. Intl. J. Integr. Marketing Commun., 4: 43-60.

Gustafsson, A., M.D. Johnson and I. Roos, 2005. The effects of customer satisfaction, relationship commitment dimensions and triggers on customer retention. J. Mar., 69: 210-218.

Hair, J.F., W.C. Black, B.J. Babin, R.E. Anderson and R.L. Tatham, 2006. Multivariate Data Analysis. 6th Edn., Pearson Prentice Hall, Upper Saddle River, NJ., ISBN: 0130329290, Pages: 899.

Helgesen, O. and E. Nesset, 2007. Images, satisfaction and antecedents: Drivers of student loyalty? A case study of a Norwegian University College. Corporate Reputation Rev., 10: 38-59.

Helgesen, O., 2006. Are loyal customers profitable? Customer satisfaction, customer (action) loyalty and customer profitability at the individual level. J. Marketing Manage., 22: 245-266.

Henseler, J., C.M. Ringle and M. Sarstedt, 2012. Using Partial Least Squares Path Modeling in Advertising Research: Basic Concepts and Recent Issues. In: Handbook of Research on International Advertising, Okazaki, S. (Ed.). Edward Elgar, Massachuset, ISBN-13: 9781781001042.

Heskett, J.L., T.O. Jones, G.W. Loveman, W.E. Sasser and L.A. Schlesinge 2008. Putting the service-profit chain to work. Harv. Bus. Rev., 86: 118-129.

Hill, F.M., 1995. Managing service quality in higher education: The role of the student as primary consumer. Qual. Assur. Educ., 3: 10-21.

Hu, H.H., J. Kandampully and T.D. Juwaheer, 2009. Relationships and impacts of service quality, perceived value, customer satisfaction and image: An empirical study. Serv. Ind. J., 29: 111-125.

Ibrahim, E., L.W. Wang and A. Hassan, 2013. Expectations and perceptions of overseas students towards service quality of higher education institutions in Scotland. Int. Bus. Res., 6: 20-30.

Jia, R. and B. Reich, 2005. IT service climate: A definition and research model. Proceedings of the ICIS 2005 International Conference on Information Systems, December 31, 2005, AIS Electronic Library, Burnaby, BC., Canada, pp: 23-27.

Kahai, S.S. and R.B. Cooper, 2003. Exploring the core concepts of media richness theory: The impact of cue multiplicity and feedback immediacy on decision quality. J. Manage. Inf. Syst., 20: 263-299.

Keller, K.L., 1993. Conceptualizing, measuring, and managing customer-based brand equity. J. Marketing, 57: 1-22.

Kenney, M.G. and N.M. Khanfar, 2009. Antecedents of repurchase intention: Propositions towards using marketing strategy to mitigate the attrition of online students. Serv. Marketing Q., 30: 270-286.

Kopalle, P.K. and D.R. Lehmann, 2001. Strategic management of expectations: The role of disconfirmation sensitivity and perfectionism. J. Marketing Res., 38: 386-394.

Koppius, O., W. Speelman, O. Stulp, B. Verhoef and E.V. Heck, 2005. Why are customers coming back to buy their airline tickets online? Theoretical explanations and empirical evidence. Proceedings of the 7th International Conference on Electronic Commerce, August 15-17, 2005, ACM, New York, USA., ISBN:1-59593-112-0, pp: 319-326.

Kwek, C.L., T.C. Lau and H.P. Tan, 2010. Education quality process model and its influence on students' perceived service quality. Int. J. Bus. Manage., 5: 154-165.

Lam, S.S. and K.S. Woo, 1997. Measuring service quality: A test-retest reliability investigation of SERVQUAL. Int. J. Market Res., 39: 381-396.

Lander, E.S., L.M. Linton, B. Birren, C. Nusbaum and M.C. Zody *et al.*, 2001. Initial sequencing and analysis of the human genome. Nature, 409: 860-921.

Lau, S.H. and P.C. Woods, 2009. Understanding the behavior changes in belief and attitude among experienced and inexperienced learning object users. Comput. Educ., 52: 333-342.

Lawrence, A.D.R.A., B.M.B. Barber, T. Odean, C. Emory and J.R. Nofsinger *et al.*, 2009. The impact of public information on investors. J. Financial Econ., 25: 59-82.

Lim, N., E.K. Kim, H. Kim, E. Yang and S.M. Lee, 2010. Individual and work-related factors influencing burnout of mental health professionals: A meta-analysis. J. Employment Counseling, 47: 86-96.

Madrigal, R., 1995. Cognitive and affective determinants of fan satisfaction. J. Leisure Res., 27: 205-227.

Martensen, A., L. Gronholdt, J.K. Eskildsen and K. Kristensen, 2000. Measuring student oriented quality in higher education: Application of the ECSI methodology. Synergies Res. Rep., 9: 371-383.

Mcfarlane, D.A., 2011. The school economy: Further exploration of concepts, opportunities, challenges and questions. J. Bus. Studies Q., 2: 17-40.

Mendez, J.I.R., A.Z.P. Parraga, A.L.I. Kara and A.C. Urrutia, 2009. Determinants of student loyalty in higher education: A tested relationship approach in Latin America. Lat. Am. Bus. Rev., 10: 21-39.

Moore, D. and J.L.H.B. Everson, 2012. An appealing connection: The role of relationship marketing in the attraction and retention of students in an australian tertiary context. Asian Social Sci., 8: 65-80.

Ndubisi, N.O., 2007. Relationship marketing and customer loyalty. Market. Intell. Plann., 25: 98-106.

Ndubisi, N.O., N.K. Malhotra, D. Ulas and G.C. Ndubisi, 2012. Examining uncertainty avoidance, relationship quality and customer loyalty in two cultures. J. Int. Consum. Marketing, 24: 320-337.

Nesset, E. and O. Helgesen, 2009. Modelling and managing student loyalty: A study of a Norwegian University College. Scand. J. Educ. Res., 53: 327-345.

Nguyen, N. and G. LeBlanc, 2001. Image and reputation of higher education institutions in students' retention decisions. Int. J. Educ. Manage., 15: 303-311.

Nguyen, N.T., L.C. Allen and K. Fraccastoro, 2005. Personality predicts academic performance: Exploring the moderating role of gender. J. Higher Educ. Policy Manage., 27: 105-117.

Nitecki, D.A. and P. Hernon, 2000. Measuring service quality at Yale University's libraries. J. Acad. Librarianship, 26: 259-273.

Noblitt, L., D.E. Vance and M.L.D. Smith, 2010. A comparison of case study and traditional teaching methods for improvement of oral communication and critical-thinking skills. J. Coll. Sci. Teach., 39: 26-32.

Oliver, R.L., 1976. Effect of expectation and disconfirmation on postexposure product evaluations: An alternative interpretation. J. Applied Psychol., 62: 480-486.

Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. J. Market. Res., 17: 460-469.

Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. J. Market. Res., 17: 460-469.

Olson, J.C. and P.A. Dover, 1979. Disconfirmation of consumer expectations through product trial. J. Appl. Psychol., 64: 179-189.

Opoku, R.A., N. Atuobi-Yiadom, C.S. Chong and R. Abratt, 2008. The impact of internal marketing on the perception of service quality in retail banking: A Ghanaian case. J. Financial Serv. Market., 13: 317-329.

Parasuraman, A., L. Leonard, Berry And V.A. Zeithaml, 1990. Guidelines for conducting service quality research. Market. Res., 24: 34-44.

Parasuraman, A., L.L. Berry and V.A. Zeithaml, 1991. Refinement and reassessment of the SERVQUAL scale. J. Retail., 67: 420-450.

Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1994. Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. J. Marketing, 58: 111-124.

Phillips, D. and H. Baumgartner, 2002. The role of consumption emotions in the satisfaction response. J. Consum. Psychol., 12: 243-252.

Podsakoff, P.M., S.B. MacKenzie, J.Y. Lee and N.P. Podsakoff, 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. J. Applied Psychol., 88: 879-903.

Quinn, A., G. Lemay, P. Larsen and D.M. Johnson, 2009. Service quality in higher education. Total Qual. Manage., 20: 139-152.

Rahman, M.S., A.H. Khan and M.M. Haque, 2012. A conceptual study on the relationship between service quality towards customer satisfaction: Servqual and gronroos's service quality model perspective. Asian Social Sci., 8: 201-210.

Ruyter, K.D., M. Wetzels and J. Bloemer, 1998. On the relationship between perceived service quality, service loyalty and switching costs. Int. J. Serv. Ind. Manage., 9: 436-453.

Selnes, F., 1998. Antecedents and consequences of trust and satisfaction in buyer-seller relationships. Eur. J. Market., 32: 305-322.

Shintani, M., M. Senda, T. Takayanagi, Y. Katayama and K. Furusawa *et al.*, 2010. The effect of service dogs on the improvement of health-related quality of life. Acta Med. Okayama, 64: 109-113.

Singh, J. and D. Sirdeshmukh, 2000. Agency and trust mechanisms in consumer satisfaction and loyalty judgments. J. Acad. Market. Sci., 28: 150-167.

Singh, J.V., 1986. Performance, slack, and risk taking in organizational decision making. Acad. Manage. J., 29: 562-585.

Storbacka, K., T. Strandvik and C. Gronroos, 1994. Managing customer relationships for profit: The dynamics of relationship quality. Int. J. Serv. Ind. Manage., 5: 21-38.

Surprenant, C.F. and M.R. Solomon, 1987. Predictability and personalization in the service encounter. J. Market., 51: 86-96.

Susarla, A., A. Barua and A.B. Whinston, 2003. Understanding the service component of application service provision: Empirical analysis of satisfaction with ASP services. Mis. Q., 27: 91-123.

Szymanski, D.M. and D.H. Henard, 2001. Customer satisfaction: A meta-analysis of the empirical evidence. J. Acad. Market. Sci., 29: 16-35.

Teece, D.J., 2007. Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. Strat. Manage. J., 28: 1319-1350.

Vivek, S.D., S.E. Beatty and R.M. Morgan, 2012. Customer engagement: Exploring customer relationships beyond purchase. J. Marketing Theor. Pract., 20: 122-146.

Walker, L.J.H., 2009. Strategic positioning in higher education. Acad. Educational Leadersh. J., 13: 103-112.

Winters, J.M., 1990. Hill-Based Muscle Models: A Systems Engineering Perspective. In: Multiple Muscle Systems. Winters, J.M. and S.L.Y. Woo (Eds.). Springer, New York, USA., pp: 69-93.

Wynne, C.W., 1998. ssues and opinion on structural equation modelling. Manage. Inf. Syst. Q., 22: 1-8.

Yoo, D.K. and J.A. Park, 2007. Perceived service quality: Analyzing relationships among employees, customers and financial performance. Int. J. Qual. Reliab. Manag., 24: 908-926.

Zeithaml, V.A., A. Parasuraman and L.L. Berry, 1990. Delivering Quality Service: Balancing Customer Perceptions and Expectations. The Free Press, New York, pp: 12-40.

Zeithaml, V.A., L.L. Berry and A. Parasuraman, 1996. The behavioral consequences of service quality. J. Marketing, 60: 31-46.