

**SERVICE QUALITY AND STUDENT SATISFACTION
OF STUDENTS IN PRIVATE UNIVERSITIES IN
NAIROBI COUNTY**

BY

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**A research project submitted in partial fulfilment of the
requirement for the Award of Degree of Master of
Business Administration (MBA),
School of Business, University of Nairobi**

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DECLARATION

I hereby declare that this research project is my own original work and that it has never been presented to any other university for assessment or award of a degree.

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DEDICATION

I dedicate this work to God and my late parents who made me what I am.

ABSTRACT

Private universities in Kenya like other businesses operate in a competitive environment. Knowing how to satisfy their students who are their primary customers is important because it can lead to future business. The relationship between service quality and student satisfaction is important because if it is understood properly it can enable the right decisions to be made about service quality that lead to increase in student satisfaction. The study was carried out to find out whether there is a relationship between service quality and student satisfaction of private university students in Nairobi County. About 118 students were interviewed through a survey that was based on higher education service quality model HeDPERF. It was found that service quality is positively related to student satisfaction and that some of the most important aspects of an institution that students liked most were the reputation of the university and the nature of the programs offered. This means that universities have to improve on their service quality while at the same time improving on their reputation, variety and flexibility of programs offered in order to attract more students.

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LIST OF ACRONYMS

CUE – COMMISSION FOR UNIVERSITY EDUCATION

SERVQUAL – SERVICE QUALITY

SERVPERF- SERVICE PERFORMANCE

HEdPERF – HIGHER EDUCATION PERFORMANCE

CHAPTER ONE: INTRODUCTION

1.1 Background

There is intense competition between private universities in Kenya for students Waruru (2013). The competition is so intense that universities are trying to outdo each other by buying advertising space in both print and electronic media and using members of their alumni to pass on the message. Waruru (2013) cites one of the vice chancellors of a local private university as having predicted an increase in enrolments that will result from favourable government policies, that allow state funded students to enrol in private universities because the private universities have an upper hand when it comes to quality.

Private universities need to know what to do to in order to satisfy their students because satisfied students can recommend their friends and relatives to join these institutions in future. Service quality is one of the factors that can lead to customer satisfaction (Kasper, Helsdingen, and Gabbott's 2006). Service quality can be used as a strategy for competitive advantage (Gronroos, 2007).

According to Slack, Chambers, & Johnston, (2010) the five core service performance objectives in operations management are quality, flexibility, speed, dependability and cost. Core services performance objectives are the minimum requirements that a customer expects to see or experience in a product or a service. The success or failure of an operation is determined by how these core performance objectives are met. In most cases, they also form the basis of competitive advantage. For example Evans and

Collier (2007) have mentioned cost, quality, time, flexibility and innovation as sources of competitive advantage.

1.1.1 Student as a Customer

There is some controversy surrounding the identification of true customers of education and whether marketing metaphors like customers and customer satisfaction can be applied to students. In Hebert, Dellana and Bass view as cited by (Brennan & Bennington, 2000) there is some confusion as to whether the primary customer of higher education is the student, parents, community, employers, research community, government or society in general. Other researchers suggest that seeing students as customers in state funded universities might solve some of the problems experienced by them like distant leadership and unsatisfactory course requirements on offer (Vuori, 2013). Deming (1986) states that (as cited by Brennan & Bennington, 2000) a customer is the end user of a product despite who pays. Going by this definition therefore students should be the primary customers of education because they benefit most from the knowledge acquired.

Taking marketing metaphors like customers and customer satisfaction and applying them directly to education without further adjustments is not recommended because it may lead to negative consequences. Examples of these are the narrow definition of customers, confusion between short term and long term learning, insufficiently accounting for teacher student interaction and reduction of academic staff to being panderers of students which may in the long run lead to low quality (Schwartzman, 1995: Brennan & Bennington, 2000: Vuori, 2013: Mark, 2013).

Modern service marketing theory and research on services advocates for the treatment of the customer as an active participant in the production process who is partly responsible for the outcome and therefore is also responsible for his/her satisfaction (Mark, 2013; Zeithaml, Bitner, & Gremler, 2006). The terms customers and customer satisfaction that appear in this study are therefore understood in this context. What this means in practical terms is that students are expected to do what their lecturers expect of them in order to achieve their long term goal of qualifying and getting the required certifications as opposed to preferring shorter classes, fewer assignments and inflated marks. This is what is referred to as the long-term view.

1.1.2 Service Quality

The concept of quality is difficult to define because quality means different things to different people. The way one customer will experience a product or service is not the same way another will experience it. Quality can be categorized in terms of various perspectives like Judgement, product, user, value or manufacturing perspective (Evans, 2011). With the judgment perspective, the quality of a product cannot be defined but one can recognize it once he sees it. The user perspective is about how the needs of a customer are met.

A product/service that does not address these needs is said to be of lower quality. The value perspective views quality in terms of product/service features and price. If two products have identical features but one has a lower price it will have a higher value and therefore higher quality. The product perspective associates quality with features. Products with more features are assumed to be of higher quality compared to those with

less. Under the manufacturing perspective, meeting product specifications is the main determinant of quality.

The American Society for Quality (ASQ) (as cited by Evans, 2011) defines quality as “totality of features and characteristics of a product or service that bear on its ability to satisfy given needs.” A shorter definition that is generally accepted is that quality is the ability to meet or exceed customer expectations. These two definitions are derived from the product and user perspectives described earlier.

Service quality is an attitude formed overlong term evaluation of performance (Bateson & Hoffman, 1999). Service quality can also be viewed in terms of measurements. Palmer (2005) categorises these measurements as disconfirmation approaches, performance-only measures, and importance-performance analysis. The disconfirmation model refers to the difference between expected and perceived quality. Quality gap is expressed as $Q=E-P$ where Q is quality, E is expectation and P is the perception.

Performance-only measures exclude the expectation (E) from the equation and only measure performance or perception (P). According to Palmer (2005) the SERVPERF Model was developed because of the difficulties of conceptualizing expectations. Both SERVQUAL and SERVPERF are based on the five dimensions of service quality, which are reliability, assurance, tangibles, empathy, and responsiveness. However, although all these dimensions are important there are some that are more important than others from the customer’s perspective. Higher Education performance (HEDPERF) is

a performance-based model that is similar to SERVPERF because it measures perception only and not the gap between expectation and perception as is the case with SERVQUAL. It is used to measure service quality in higher education.

The importance-performance approach classifies elements of service in terms of performance and importance. The elements that are more important are given more attention in evaluation. Apart from expectations and perceptions that define the measurement of the service quality gap customers also use the corporate image of the organization to evaluate service quality (Gronroos, 2007). This image can be split into physical and functional service quality. The physical part is what can be measured objectively like the length of a waiting line while functional quality is that part of the service that cannot be measured objectively. An example is the attitude of service provider's staff.

In Kasper et al.(2006) view there are five service characteristics that determine how service quality is achieved. The first is the inability to own the service the way one would own a product. Quality assessment can only be made after the service has been purchased. The second characteristic is the intangibility of services that make it impossible to assess what is being offered and the quality of what has been delivered.

The third characteristic of service delivery is the inseparability of the service from the people involved in its production and consumption. The customer is a participant in the process and therefore this has an effect on the output received. If the customer is not co-operative lower quality may be achieved. The fourth characteristics of services is heterogeneity or variance of the service from time to time. This means that sometimes

the service is good while at other times it may be poor. Perishability is the fifth characteristic of the service delivery that affects service quality. If it is not managed well it may mean long waiting lines or no people in the queue at all which the customer interprets as low quality.

In general, the main drivers of service quality are staff and the right technology (Evans, 2011). The author suggests that having well trained and motivated staff and the right technology has an effect on service quality with information technology having the largest impact. Apart from the customer the level of service quality is also determined by other factors like the competitors, the technology used, efficient use of resources, cost and also the owners of the business who have to decide whether to use quality as a competitive advantage or just provide the basic quality (Wright & Race, 2004).

1.1.3 Student Satisfaction

Oliver's (1997) view (as cited by Palmer 2005) is that "satisfaction is the emotional reaction following a disconfirmation experience". Geity and Thompson's (1994) definition (as cited by Palmer 2005) states that "satisfaction is a psychological experience of a consumer after confirmation-disconfirmation of expectations of a specific transaction".

Kasper et al. (2006) suggest that satisfaction can be either specific for a part of a process or overall for the whole organization. Satisfaction can be expressed through compliments or loyalty to the service provider (Kasper et al., 2006). In the extreme

customers will express dissatisfaction by switching to the competitors. The major reasons why a customer would want to switch are the failure of the core service provided or behavioural issues like uncaring staff (Kasper et al., 2006).

According to Elliott & Healy (2001) *“Student satisfaction is generally accepted as a short-term attitude resulting from an evaluation of a student’s educational experience. Student satisfaction results when actual performance meets or exceeds the student’s expectations.”*

The two definitions between customer satisfaction in general and student satisfaction are very similar because they refer to short-term nature of specific transaction events. Other researchers in this area have not attempted to separate the two. (Wilkins & Balakrishnan, 2013: Oldfield & Baron, 2000: Alves & Raposo, (n.d.):Barnes, 2007). For this reason customer satisfaction and student satisfaction are assumed to have the same meaning in the context of this study.

Customer satisfaction is important because it has an effect on financial performance of a firm as evidenced by some studies of financial services in the US that indicated that there was a positive correlation between the proportion or percentage of business done with a customer and that customer’s satisfaction (Kasper et al., 2006). Most experts agree that there is a relationship between service quality and customer satisfaction but they do not agree on the direction of the relationship as some suggest that service quality comes before satisfaction while others say it is the other way (Parasuraman, Zeithaml & Berry 1985: Cronin Jr & Taylor, 1992: Bitner, 1990).

Service quality is among the factors that determine customer satisfaction and customer satisfaction can lead to customer loyalty (Kasper et al., 2006). Customer loyalty has a positive impact on the financial performance of a firm (Gronroos, 2007). This can happen because of referrals, cost savings, and increased business from existing customers. Evans (2011) cites an example of one US University where the implementation of quality programs lead to increased student satisfaction. As a result, 90% of the undergraduate students and alumni said that if they could do it all over again they would enrol in the same university.

1.1.4 Private Universities

The study was conducted on campuses of private universities operating in Nairobi County. There are 31 accredited private universities in Kenya of which 25 of them have their main campuses or branch campuses in Nairobi County. According to Waruru (2013) private universities in Kenya account for around 60,000 students, which is about 20% of the total undergraduate student population. The oldest private university in Kenya is the University of East Africa Baraton and was registered in 1991. Private universities exist because the public universities are not able to absorb all the qualified students who complete high school every year. In some cases, students are not able to pursue their preferred courses in public universities because of competition and therefore they have to enrol in private universities.

The commission for university education is a government body and is the predecessor of the former commission for higher education ("Vision and Mission," n.d.). It is responsible for regulating the conduct of universities and accreditation of university

programmes for all universities operating in Kenya. Its vision is to ensure that there is sustainable quality in university education.

1.2 Research Problem

Universities need to know how students perceive the services they offer so that they can improve on them. Kasper et al. (2006), suggests that service quality is one of the factors that affect customer satisfaction. Universities have therefore to satisfy their students in order to compete. Service quality leads to customer satisfaction and loyalty (Kasper et al., 2006).

The research objective is to find out the relationship between service quality and student satisfaction and the nature of the relationship. A positive relationship is an indication that student satisfaction increases when service quality increases while a negative relationship is an indication of the decrease in satisfaction as a result of an increase in quality. This research also shows which of the service quality dimensions is more important than the others.

There is some research that has been done in Europe and Asia on service quality and customer satisfaction (Abdullah 2006: Sulieman 2013: Wilkins & Balakrishnan, 2013). The original study by Abdullah (2006) was about finding a tool for measuring service quality in higher education. The study concluded that the current tools for measuring service quality in higher education were not appropriate and therefore a new tool known as HEdPERF was introduced. A study by Sulieman (2013) on housing bank in Jordan bank found that the dimensions of service quality have an effect on customer satisfaction. Similarly another study by Wilkins & Balakrishnan (2013) found out that students in branch campuses of foreign universities with branch campuses in United

Arab emirates (UAE) were satisfied with their institutions because of the quality of the lecturers at their campuses, availability of resources and the effective use of technology.

In Kenya, there are studies that have been carried out on service quality and customer satisfaction. Otemba (2012) carried out a study on the telecommunications sector that was based on the five dimensions of service quality. The study found out that the five dimensions of service quality had an effect on customer satisfaction. Another study carried out by Mabinda (2012) on audit quality and customer satisfaction found that firm image, price and empathy had an effect on customer satisfaction. This study is relevant because it deals with the service quality in higher education, as there are not many studies that have been carried out in this area.

The main difference between students and other customers is that there are slightly different dimensions used to evaluate service quality as shown in the HEdPERF model explained under literature review. So far, it does not appear as if this type of research has been carried out in Kenya and therefore this study fills this gap.

The research questions are:

1. Is there any relationship between service quality and student satisfaction?
2. What is the type of relationship that exists between service quality and student satisfaction?
3. Which dimensions are the most important?

1.3 Research Objective

The research objective is to determine the relationship between service quality dimensions and student satisfaction.

1.4 Value of the Study

This study will benefit the Universities because it shows the relationship between service quality and student satisfaction. This information can be used as input for future decisions on service design based on what students have indicated are the most important dimensions of service quality in this model.

The Commission for University Education being the body that is responsible for regulating universities will want to find out if students are getting value for their money. Since this research does not cover all universities in Kenya, further studies in this area are necessary and therefore researchers may want to use this study in future. Academics may also want to use it for academic reasons.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This review discusses definitions of services, service quality, student satisfaction, and the relationship between service quality and student satisfaction. It also deals with service quality in higher education and explains the various methods or models used to measure service quality. Finally, it recommends HEdPERF as the appropriate model for this study.

There are many definitions of services but none has been accepted so far as the main one. The following are cited as examples.

“A service is a process consisting of more or less intangible activities that normally but necessarily always take place in interactions between the customer and the service employees and/or physical resources or goods or systems of the service provider which are provided as solutions to customer problems.” (Gronroos, 2007).

“A service is a time-perishable intangible experience performed for a customer acting in the role of co-producer.” (Fitzsimmons & Fitzsimmons, 2011).

Most definitions emphasize intangibility and participation as the main characteristics of the service product. Apart from these, services also have simultaneity and heterogeneity as characteristics. Intangibility means that a service cannot be touched but can only be experienced. Participation means that the customer is involved in the production

process while simultaneity means that the service has to be produced and consumed at the same time. Perishability means that a service cannot be stored while heterogeneity means that the process cannot create exactly the same experience for every customer and therefore some variation may take place.

Services are presented to the consumer as a package also known as a bundle of goods and services (Fitzsimmons & Fitzsimmons, 2011). Fitzsimmons and Fitzsimmons, (2011) explain further that the five features of this bundle are support facility, the goods used to support the service, the information obtained from the customer, explicit services or benefits easily identifiable and implicit services or benefits that are vaguely experienced by the customer.

2.2 Service Quality

There is no generally accepted definition of service quality. However most authors describe service quality in terms of the gap between customer perception and customer expectation. Customer perception is what the customer thinks of the service that has been performed and customer expectation is what the customer was expecting to receive.

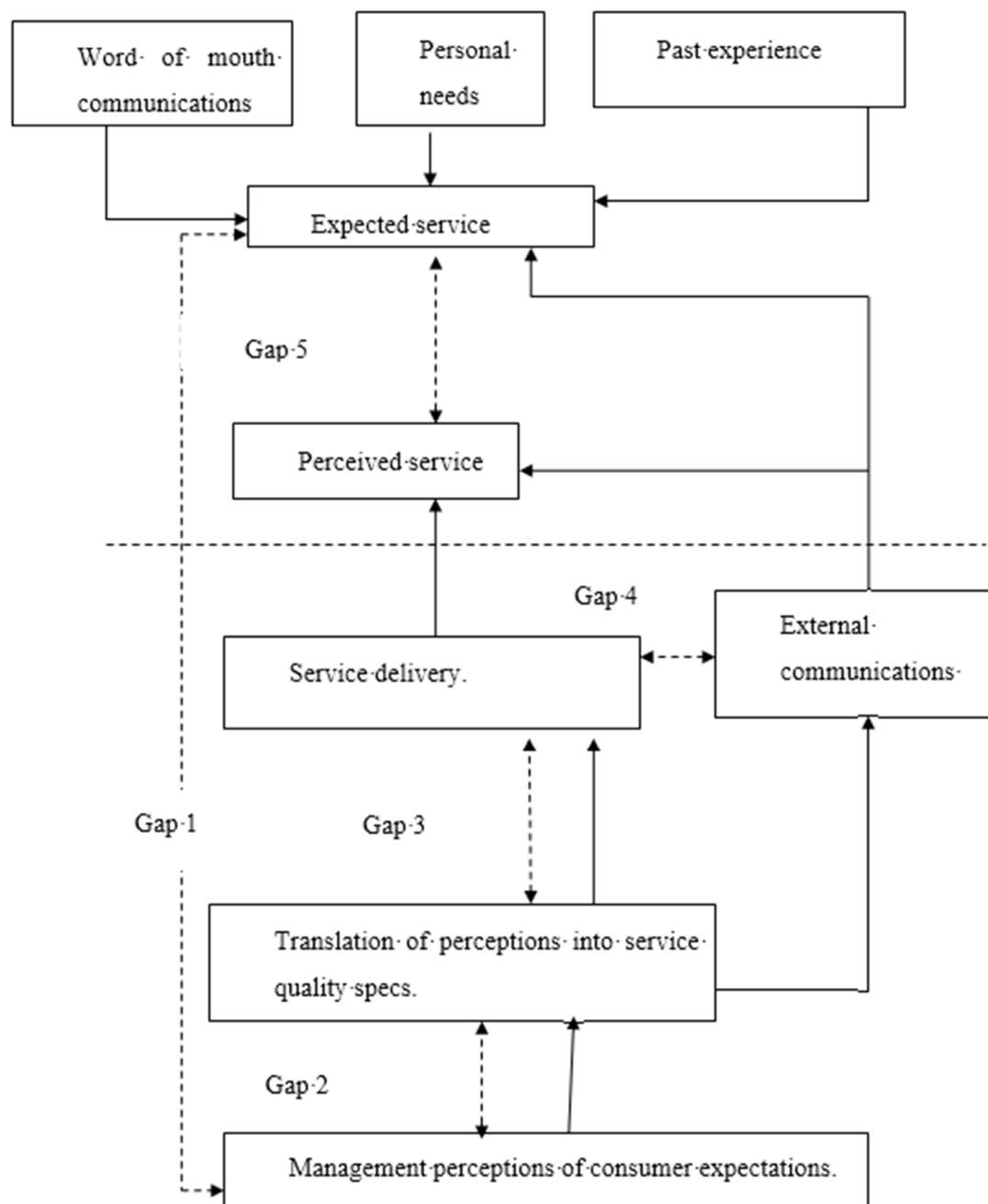
Parasuraman et al. (1985) developed the gap model that explains gaps that may arise in between what the customer expects to receive and what the organization provides. It is composed of five gaps linked together. Gap one occurs as result of management's misunderstanding of the customer's needs from the market research carried out. Gap

two is as a result of the designer's misinterpretation of the information passed on from market research while gap three is the conformance gap and arises when staff fail to perform the service as stipulated by the standards that have been put by the organization.

Gap four is the communication gap, which arises due to the wrong information being passed on to the customer. This means that the customer is not informed of what goes on in the background and therefore may interpret delays as failure when this is not the case. Gap five is the difference between what the customer expects and what the customer thinks of the service that has been received.

Figure 1

The Gap Model



From: Parasuraman, A., Zeithaml, V. A., and Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), pages 41–50.

Retrieved 29th August 2013, from <http://www.ebscohost.com>

2.3 Student Satisfaction

According to Bateson and Hoffman (1999), most experts agree that customer satisfaction is a short term transaction specific measure while service quality is an attitude formed over a long term evaluation of performance. Elliott & Healy (2001) define student satisfaction as short-term attitude resulting from an evaluation of a student's educational experience. There is not much difference between the two terms because the student is just another kind of customer who is a consumer of the education service and therefore most of the literature on service marketing will apply.

There is a general agreement among experts that there is a relationship between service quality and customer satisfaction but what is not clear is the direction of this relationship as some like Parasuraman et al. (1985) and Cronin Jr and Taylor, (1992) say that service quality comes before customer satisfaction. On the contrary according to Bitner (1990) customer satisfaction comes before service quality

Some recent studies in this area have also supported the view that service quality leads to customer satisfaction. A study carried out by Sulieman, (2013) on Jordanian banks revealed that the five dimensions of service quality have an effect on level of customer satisfaction. Another study conducted in United Arab Emirates on branch campuses of some international universities found that qualified lecturers, technology and other resources had an effect on student satisfaction (Wilkins & Balakrishnan, 2013).

However, student satisfaction levels seemed to vary with nationalities and programs. The researchers explained that this could probably be because of the different cultures and backgrounds that the students come from. They therefore recommended further research in other parts of the world as their conclusions could not be generalised.

In view of the cultural and environmental differences that exist between Kenya and the countries where these studies were carried out it was the researcher's view that this study be carried out in Kenya to find out if service quality offered by Kenyan universities has an effect on student satisfaction.

2.4 Service Quality in Higher Education

Quality in higher education is an issue that has been addressed by various institutions. In the United Kingdom quality assurance is managed by Quality Assurance Agency for Higher Education (QAA) which is a non-profit organisation ("More about us and our work," n.d.). Similarly in the United states quality assurance is managed by non-profit organisations that are run by the universities themselves (El-Khawas, 2001: "Council for Higher Education Accreditation: Accreditation Serving the Public Interest," 2012). In Kenya quality assurance is managed by a government funded organization known as the Commission for University education ("Vision and Mission," n.d.)

Apart from these there have been attempts by the universities themselves to introduce or demonstrate quality assurance through the use of total quality management techniques and ISO certifications (Evans, 2011: Lundquist, 1997). Some of the universities have stated that they have benefitted from the application of these systems.

In Kenya out of the 31 private universities only two are ISO certified (“Certified firms on ISO 9001:2008 Quality Management systems, qms,” n.d.: Gudo, Oanda, & Olel, 2011).

The other method that is common in British and American universities is what is known as student evaluation of teaching or SET (Johnson, 2000). At the end of the semester students are issued with forms to fill that have questions on how the lectures were conducted by a particular lecturer. SET assessments can be used as the basis for promotions and other rewards.

A number of universities have also used SERVQUAL model or some of its modifications to measure service quality (Oldfield & Baron, 2000: Wilkins & Balakrishnan, 2013:Barnes, 2007).

2.5 Measuring Service Quality and Student Satisfaction

Various authors have slightly different approaches on the models for measuring service quality but most of them mention SERVQUAL or one of its adaptations in their discussion. Palmer (2005) refers to performance-only measures, disconfirmation models, and importance-performance approaches. Performance-only measures are those models that deal only with performance and leave out expectation in the calculation. An example is the SERVPERF model developed by Cronin Jr and Taylor, (1992) which is a variation of the of the SERVQUAL model. Disconfirmation

approaches are models that explain service quality in terms of expectation and perception but cannot be used to measure service quality (Kasper et al., 2006).

The SERVQUAL model was developed by Parasuraman et al. (1985) in 1985 and was later refined in 1988. It has reliability, assurance, tangibles, empathy, and responsiveness as its main dimensions and is used to measure the service quality gap, which is the gap between expectation and perception. It is expressed as $Q=P-E$ where Q is the quality gap, P is the Perception of the service received and E is the expected service.

SERVQUAL has been criticised for among other things the fact that expectation is measured in order to assess the gap. The problem with measuring expectation is that it cannot be measured before the service is provided, as this would have been past expectation. Similarly, it cannot be measured after the service has been provided because expectations may change in the course of offering the service. For this reason Cronin Jr and Taylor (1992), came up with a new tool called SERVPERF that was based on the SERVQUAL model but without the expectations part of the equation.

This tool measures performance of the service and not the gap as is the case with SERVQUAL. Cronin Jr and Taylor (1992) claimed that their tool had superior performance. Other studies have shown similar results. Theoretically, SERVQUAL is superior because in service quality it is the gap that should be measured and not performance only. However since both tools give similar results, for practical reasons SERVPERF is preferred because it is easy to apply.

Higher Education Performance (HEdPERF) described in the next section is one of the models used to measure service quality in higher education institutions.

2.6 Higher Education Performance Model

Higher Education Performance (HEdPERF) is a tool developed by Abdullah (2006) to measure service quality in higher education Institutions. Parasuraman et al. (1988) have recommended that their model be adapted or modified to suit specific situations.

In coming up with HEdPERF Abdullah (2006) argued that the original SERVQUAL model and the revised version of SERVPERF were too generic to apply to higher education institutions. HEdPERF is theoretically the same as SERVPERF because it measures performance only and not the expectations performance gap like the case is with the SERVQUAL model.

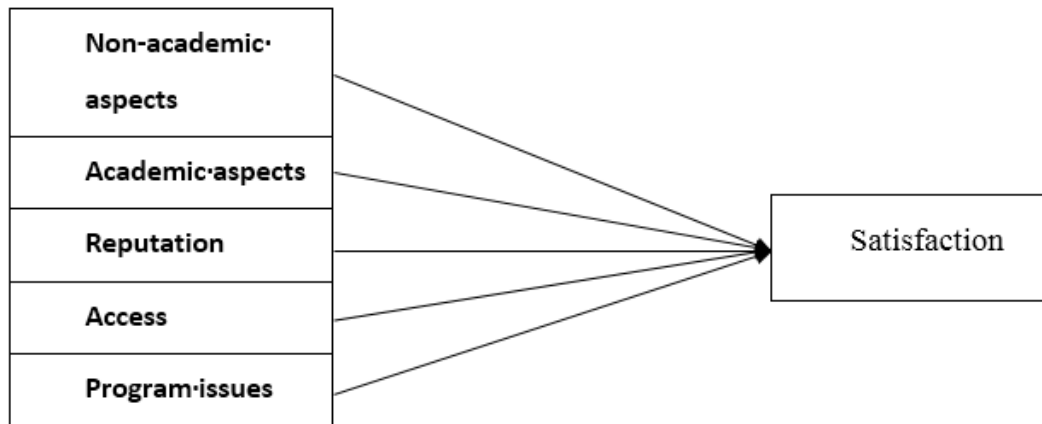
The original version had academic aspects, non-academic aspects, reputation, access, program issues and understanding as its dimensions. The revised version omits understanding as one of its dimensions and therefore has five dimensions.

HEdPERF has been found to perform better when compared to SERVQUAL and SERVPERF in academic institutions. The five dimensions are broken down or operationalized into 41 items. HEdPERF will be used for this study because it is more specific to higher education institutions.

Conceptual Model

Figure 2

Relationships between service quality dimensions and student satisfaction



Source: Researcher

Hypothesis

H0 There is no relationship between **service quality** and student satisfaction.

H0: $b_1=b_2=b_3=b_4=b_5=0$

HA: There is a relationship between **service quality** and student satisfaction.

HA: at least one b_i not equal to zero

Non-Academic Aspects

These are mostly services offered by non-academic staff. Examples of these are library services, financial services, admissions, dean of students, hostels, cafeteria and other services that do not involve actual teaching of students. Staff offering these services are being evaluated on their performance and willingness to help students.

Academic Aspects

In this category are activities like teaching, setting examinations and marking. The academic staff are assessed on their knowledge of the subjects they teach, appearance, and willingness to help students.

Reputation of the Institution

The reputation of a particular university in the eyes of the public and employers is important because it has an effect on the employability of its graduates. Employers will shun institutions that have bad reputations because they associate poor quality with them.

Access

Accessibility of the institution in terms of distances, communication channels like telephones and email is important. Students prefer institutions that are close to where they live or which have nearby accommodation and staff who answer their queries promptly.

Program Issues

This factor emphasises the importance of offering a variety of reputable academic programs in a flexible manner.

Regression Model

- $SS = b_0 + b_1x_1 + \dots + b_5x_5 + e$
- Where,
- SS = Student satisfaction.
- b_0 = Constant
- b_1x_1 = Non-Academic aspects.
- b_2x_2 = Academic aspects.
- b_3x_3 = Reputation.
- b_4x_4 = Access.
- b_5x_5 = Program Issues.

The regression model expresses the relationship between student satisfaction and various dimensions of service quality. The independent variables are non-academic aspects, academic aspects, reputation, access and program issues. The dependent variable is student satisfaction.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

The research design is descriptive, cross-sectional and statistical. It is a correlational study. A correlational study is used when relationships between two or more variables are being investigated. Research studies can also be classified according to how the data is going to be obtained. They can be categorised as empirical, experimental, or case study. This study is an empirical study that uses primary data obtained from a survey. It is correlational because the objective of the study is to find out the relationship between the two variables of service quality and student satisfaction.

3.2 Population

The population is all undergraduate students of private universities operating in Nairobi County. These universities are expected to have around 60,000 students (Waruru, 2013). The study focused on undergraduate students who are expected to be an homogeneous group as their programmes are similar because they are regulated by CUE. No distinction is made between the day and evening students. The sample frame (list) is the undergraduate students of these universities.

3.3 Sample Design

Cochran's formula for sample size is used for most samples that have a single variable and large populations. In cases where there are several variables other methods like Krejcie and Morgan's (1973) table (as cited by Sekaran and Bougie, 2010) are used. Using Krejcie and Morgan's table the sample size for a population of 70,000 is 382.

The sample size of 377 was adopted for this study because the population is estimated to be 60,000 students.

The sampling procedure used for the sample is purposive sampling because of the problem of obtaining accurate students registers from which to sample from.

3.4 Data Collection

Data was collected through a questionnaire based on the 41 questions of the HEDPERF model and five questions for satisfaction. The questionnaire scales were based on the 7 point Likert scale, which is used in similar studies (Wilkins & Balakrishnan, 2013). The students were interviewed in common areas like the Cafeteria, lecture theatres or Library since this is where most of them are likely to congregate.

3.5 Data Analysis

Data was edited to remove outliers or any unusual responses. It was then coded for analysis with the computer using a statistical package called PSPP. The model used to analyse the data is multiple regression. Multiple regression is used when there are many independent variables and dependent variables. In this case, there are five independent variables and one dependent variable. These are academic aspects, non-academic aspects, reputation, access and program issues which are compared with satisfaction.

The advantage of using multiple regression instead of simple regression is that multiple regression gives a single value for R unlike simple regression, which gives five answers

for the five dimensions. R measures correlation relationship between the variables. A negative value indicates a negative relationship while a positive value indicates a positive relationship. The strength of the relationship is shown by the value of R. Apart from correlation and regression model descriptive statistics like means and standard deviations were also used to analyse the data

CHAPTER FOUR: RESEARCH FINDINGS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with data collection analysis and discussion of the results.

The statistics used to analyse the data and the methods used to identify the universities that were sampled are also explained.

4.2 Sampling procedure and data collection

Out of the 31 accredited private universities, only 25 have campuses in Nairobi County. This information is available from the CUE website and the websites of the universities listed in the CUE website. Requests for authority to collect data were sent to a number of these universities but only a few responded with the rest declining for various reasons. Among those universities that agreed to participate in the survey, 180 questionnaires were sent out of which 118 were returned properly filled.

4.3 Data Analysis

The completed questionnaires were checked for accuracy before entering the data in Microsoft Excel Spreadsheet for the initial processing. The initial process involved entering the values for the responses in the spreadsheet and calculating the means for each variable based on the number of questions for that variable in the questionnaire. For example, a mean is calculated for the responses to the nine questions that appear

under Academic aspects to represent that variable in the questionnaire for a particular respondent. For each questionnaire, therefore there are means for the dependent variable student satisfaction, and the independent variables of Non-academic aspects, Academic aspects, Reputation, Access and Program issues. For each of the 118 respondents there are six items of data representing these variables. Data was edited further to remove errors that result from non-responses. Non-responses or nulls that appear on the spreadsheet were replaced with zeros.

The information from the spreadsheet was saved as a text file and imported into PSPP for further processing. Multiple regression was performed on the data using PSPP and then Microsoft Excel. Similar results were obtained from both applications. For the purpose of obtaining descriptive statistics like means and standard deviations for the questions in the questionnaire, codes were allocated to represent the 41 questions on service quality and the five questions on satisfaction. These were used as variables in PSPP.

4.4 Results

Table 4.1			
Means and standard deviations for the questionnaire items on service quality			
Variable	No	Mean	Std Dev
N7	116	5.94	1.46
AM9	116	5.81	1.56
R1	115	5.7	1.59
AM1	116	5.69	1.44
R8	111	5.68	1.47
N11	117	5.64	1.35
AM6	116	5.64	1.55
R3	113	5.62	1.47
AM5	115	5.5	1.49
R7	113	5.5	1.8
N8	112	5.49	1.51
N13	118	5.37	1.75
A3	110	5.35	1.78
P2	117	5.34	1.7
N10	116	5.32	1.47
AM7	115	5.3	1.57
AM3	117	5.29	1.64
AM8	115	5.29	1.65
A1	110	5.29	1.69

Table 4.1 continued...			
Means and standard deviations for the questionnaire items on service quality			
Variable	No	Mean	Std Dev
N9	116	5.28	1.66
AM4	116	5.28	1.49
A2	114	5.28	1.62
N4	114	5.26	1.54
AM2	116	5.24	1.59
N5	113	5.17	1.77
R4	114	5.15	1.71
A7	109	5.13	1.63
R6	116	5.08	1.87
P1	115	5.05	1.82
R9	114	5.04	1.78
N12	116	5.03	1.77
A5	115	5.02	1.91
N1	117	4.88	1.76
N2	117	4.78	1.75
A6	113	4.78	1.81
N6	116	4.69	1.78
A4	114	4.63	1.81
R10	117	4.61	1.89
N3	118	4.53	1.86
R5	111	4.12	2.04
R2	112	3.57	2.13

The data in Table 4.1 shows the means and standard deviations calculated from the 41 questions of the questionnaire on service quality. According to the information from the table items that were rated well in terms of quality are those relating to convenient opening hours (N7) whose mean was 5.94, followed experienced and knowledgeable academic staff (AM9) at 5.81 and professional appearance and image of the university (R1) at 5.7. This means that the respondents do somewhat agree that there is some quality offered by these institutions. Of the three top rated issues, professional

appearance and image of the university (R1) had the highest standard deviation of 1.59. The high variance could probably be due to the different backgrounds of these institutions. The least rated issues were hostel facilities (R2) at 3.57 and recreation facilities (R5) at 4.12. This could probably be because most of the universities operating in the city centre do not have these facilities in their campuses due to shortage of space.

Table 4.2			
Means and standard deviations for the questionnaire items on satisfaction			
Variable	No	Mean	Std Dev
SAM	113	5.19	1.65
SA	114	5.14	1.58
SR	114	5.1	1.71
SP	114	4.89	1.78
SN	72	4.67	1.65

Table 4.2 shows information on means for questions on student satisfaction. According to the table, the respondents were somewhat satisfied with the academic aspects of their universities (SAM). The mean for academic aspects was the highest at 5.19 followed by access to the university (SA) at 5.14 and reputation of the institution (SR) at 5.1. The respondents were indifferent to non-academic staff issues (SN) and program issues (SP) which had the lowest means. This means that the students were neither satisfied nor dissatisfied.

Table 4.3		
Means for determinants of service quality and student satisfaction		
Variable	Service quality Mean	Satisfaction Mean
Academic aspects	5.44	5.19
Access	5.066	5.14
Reputation	5.007	5.1
Program issues	5.198	4.89
Non Academic aspects	5.181	4.67

The information on table 4.3 compares the means of the five service quality determinants with means for satisfaction. The results show that the respondents do agree that they are getting some quality from the universities they are studying in. They are also somewhat satisfied with what they are getting in the areas of academics, access to the institution and the reputation of their institution. They are however not too happy on issues related to the delivery of services by non-academic staff and program issues.

Table 4.4			
Multiple Regression Results			
R	R Square	Adjusted R Square	Std. Error of the Estimate
0.59	0.35	0.32	1.44
<i>Notes Correlation coefficient R= 0.59, Coefficient of determination R squared =0.35 or 35% of total variation</i>			

Table 4.4 shows the correlation between service quality dimensions and student satisfaction. The correlation R which is 0.59 is an indicator of how strong the relationship is. It shows a positive relationship between the two variables which means that service quality tends to increase with student satisfaction. A correlation of between 0.4 and 0.69 is regarded as a strong positive relationships and therefore it can be concluded that service quality and student satisfaction have a strong positive relationship. An increase in one leads to some proportionate increase in the other.

Table 4.5					
Analysis of Variance (ANOVA)					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	122.51	5	24.5	11.82	0.00
Residual	232.13	100	2.07		
Total	354.64	117			
<i>Notes F-Statistic p value=0.00 ($p < 0.05$). Reject null hypothesis</i>					

Table 4.5 is the ANOVA table that breaks down the variations and shows the significance of the model. According to the table out of the total variation of 354.64 only 122.51 or 34% can be explained by the model. The significance of the F value is given as zero which is far below *p value of 0.05*. This means that the null hypothesis that states that the coefficients of the regression model could be zero is rejected because there is very little chance that the variations occurred randomly.

Table 4.6					
Regression Coefficients					
	B	Std. Error	Beta	t	Significance
(Constant)	-0.22	0.72	0.00	-0.31	0.76
Non Academic	0.26	0.19	0.16	1.40	0.17
Academic	0.07	0.16	0.05	0.46	0.65
Reputation	0.41	0.20	0.26	2.09	0.04
Access	0.02	0.16	0.01	0.13	0.90
Prog. Issues	0.22	0.10	0.21	2.12	0.04
<i>Notes Reputation = 0.04 ($p < 0.05$). Prog. Issues = 0.04 ($p < 0.05$)</i>					

In table 4.6, the *p-values* for reputation of the University and program issues are lower than the critical value of 0.05. This implies that the changes in the dependent variable student satisfaction can be attributed to changes in the two independent variables and are therefore significant or important. Similar studies have also confirmed that reputation of the university is important to students (Gruber, Fub, Voss, & Gläser-Zikuda, 2010; Raposo & Alves, 2005).

Table 4.7					
Correlation Matrix					
	Non Academic	Academic	Reputation	Access	Prog. Issues
Non Academic	1	0.69	0.63	0.57	0.53
Academic		1	0.67	0.58	0.46
Reputation			1	0.67	0.59
Access				1	0.5
Prog. Issues					1

The correlation matrix in table 4.7 shows correlations between the independent variables in the regression model. It is an indication that apart from the correlation between the five service quality dimensions and students satisfaction the independent variables also tend to vary with each other. This is known as multicollinearity. Multicollinearity in itself does not invalidate the multiple regression model but instead it gives us an indication of how the regression coefficients have been inflated. It is considered significant when it exceeds the value of R. In table 4.6 the correlations between non-academic aspects and Academic aspects, non-academic aspects and reputation, academic aspects and reputation, reputation and access, and finally between reputation and program issues all appear to be significant because they have correlations with higher values compared to R.

The fact that there are correlations between the independent variables, though not unusual, could be an indication that changes in the affected variables could lead to changes in other independent variables.

4.5 Interpretation and Discussion of the Results

The results show that there is a positive relationship between service quality and student satisfaction as shown by the positive correlation coefficient of 0.59. The coefficient of determination R square is the statistic that gives a measure of total variation that can be explained by the model. As demonstrated in table 4.4 it has a value of 0.35. This means that about 35% of the total variation of the students' satisfaction variable is explained by the five independent variables.

The main objective of this study was to find out if there is a relationship between service quality and students satisfaction. This objective has now been achieved by the findings that confirm that there is a positive relationship between the two variables

Research question number three is also answered by table 4.6 that shows that reputation of the university and program issues are the most important issues that affect student satisfaction for the students in these universities.

The other information obtained from this study is that students do feel that they are receiving quality from their universities and that they are somewhat satisfied with what they are getting.

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study focused on finding out whether there is a relationship between service quality and students satisfaction of students in private universities operating in Nairobi County. The importance of the two variables to universities was also stressed. It was mentioned that because universities want to compete they might want to know what contributes to their students' satisfaction because satisfied students may want to return or tell other potential students about the institution. According to the literature, reviewed service quality is one of the variables that may lead to student satisfaction and therefore knowledge about the relationship between the two is important to these institutions.

The model used to evaluate service quality is known as HeDPERF which is short form for Higher Education Performance and is based the perception of the respondent on services provided by the institution. Similar models that are based on perception like SERVPERF were also mentioned. The research methodology used was descriptive and cross-sectional. Purposive sampling was used for sample selection. A total of 180 questionnaires were sent out of which 118 were properly completed and returned. Data was analysed through statistical software using a descriptive statistics and multiple regression model of five independent variables that represent service quality. These variables are Non-academic aspects, Academic aspects, Reputation, Access and program issues. The dependent variable is student satisfaction.

The results show that there is a relationship between service quality and student satisfaction and that reputation and program issues are the most important issues among the five determinants of service quality that can affect student satisfaction in the universities surveyed.

5.2 Conclusion

The objective of this study was to find out whether there is a relationship between service quality and student satisfaction. The results show that there is a positive relationship between service quality and student satisfaction. The model used also demonstrated that what students care most about is the reputation of the university and program issues. These findings are important to the universities because they help them to focus on what is important to the students.

5.3 Recommendations

This study had a number of limitations. Some of these had to do with the time available, the resources available, and the bureaucracy of the institutions in the study. In some cases, it can take these institutions up to a month before permission to conduct the survey is granted. This is due to the number of people who have to be consulted. Others refused to participate in the survey citing confidentiality among other reasons.

By the time the study was completed some universities had not decided whether to give consent to requests that were still under consideration. Probably with more time, they would have done this, which would have then resulted in a higher response rate.

Because of the small number of institutions that participated in the survey the findings of this study cannot therefore be generalised. Future studies in this area should also cover the whole country and probably also include public universities because they are all competing in the same market.

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APPENDICES

Appendix I

List of private university campuses in Nairobi County.

Name of institution	Date awarded Charter or LIA	Physical address
University of Eastern Africa Baraton	1991	Ngong Rd, Kindarumast.
Catholic University of Eastern Africa (CUEA)	1992	Langata Ngong Rd Kenyatta roundabout
Daystar University	1994	Thika Rd
United States International University	1999	Stanbank Moi avenue
Africa Nazarene University	2002	University way
Kenya Methodist University	2006	Moi avenue
St. Paul's University	2007	Kamiti Rd
Pan Africa Christian University	2008	Ole sangale
Strathmore University	2008	Wabera st.
Kabarak University	2008	Moi avenue
Mount Kenya University	2011	Karen
Africa International University	2011	
Great Lakes University of Kisumu (GLUK)	2012	Opp. Kenyatta Market
KCA University	2013	Thika road
Adventist University of Africa	2013	Magadi road
Kiriri Women's University of Science and Technology	2002	Westlands
Aga Khan University	2002	Aga Khan hospital
Presbyterian University of East Africa	2008	Moi avenue - Bazaar
Inoorero University	2009	Forest Road Mombasa Road
GENCO University	2010	Parkside towers
Management University of Africa	2011	Mbugani Estate
Riara University	2012	Mbagathi Road
Pioneer International University	2012	Opposite Kie
Nairobi International School of Theology		Kilimani - MutitoAndei road
East Africa School of Theology		Buru Buru

APPENDIX II

Questionnaire

This survey is used in partial fulfilment of the Master's Degree in Business Administration at the University of Nairobi. It is anonymous and confidential.

Are you an undergraduate student? If yes kindly, answer the questions below by ticking on the appropriate box.

Course student is enrolled in..... Questionnaire No

Service Quality

1=Strongly disagree 2= disagree 3= Somewhat disagree, 4= Neither agree or disagree 5= Somewhat agree 6= Agree 7= Strongly agree.

Determinant	Operational component	Service quality.						
		1	2	3	4	5	6	7
Non Academic aspects	Sincere interest in solving problem							
	Caring and individualized attention							
	Efficient/prompt dealing with complaints							
	Responding to request for assistance							
	Accurate and retrievable records							
	Promises kept							
	Convenient opening hours							
	Positive attitude							
	Good communication							
	Knowledgeable of systems/procedures							
	Feeling secured and confident							
	Service within reasonable time frame							
	Confidentiality of information							

Determinant	Operational component	Service quality.						
		1	2	3	4	5	6	7
Academic aspects	Knowledgeable in course content							
	Caring and courteous staff							
	Responding to request for assistance							
	Sincere interest in solving problem							
	Positive attitude							
	Good communication							
	Feedback on progress							
	Sufficient and convenient consultation							
	Educated and experience academicians							

Determinant	Operational component	Service quality.						
		1	2	3	4	5	6	7
Reputation	Professional appearance/image							
	Hostel facilities and equipment							
	Academic facilities							
	Internal quality programmes							
	Recreational facilities							
	Minimal class sizes							
	Ideal campus location/layout							
	Reputable academic programmes							
	Easily employable graduates							
	Health services							

Determinant	Operational component	Service quality.						
		1	2	3	4	5	6	7
Access	Equal treatment and respect							
	Fair amount of freedom							
	Easily contacted by telephone							
	Counselling services							
	Student's union							
	Feedback for improvement							
	Service delivery procedures							

Determinant	Operational component	Service quality.						
		1	2	3	4	5	6	7
Program Issues	Variety of programmes/specializations							
	Flexible syllabus and structure							

Satisfaction

1=Completely dissatisfied 2= Mostly dissatisfied 3= Somewhat dissatisfied, 4 = Neither Satisfied or dissatisfied, 5= Somewhat Satisfied, 6= Mostly Satisfied 7= Completely Satisfied.

Determinant	Student Satisfaction						
Non Academic aspects	1	2	3	4	5	6	7
Academic aspects							
Reputation							
Access							
Program Issues							