

SERVICE QUALITY AND LIBRARY USER SATISFACTION AMONG
UNIVERSITIES IN KENYA

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DECLARATION

I declare that this research project is my original work and has never been submitted to any other University for assessment or award of a degree.

Signature..... Date.....

Kithome Musyoka

D61/79058/2010

This project has been submitted with my authority as the university supervisor.

Signature..... Date.....

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Danish Red Cross Regional office team in Nairobi deserves a special mention, for their unsurpassed support, cooperation and encouragement.

DEDICATION

I dedicate this work to my mother, Kasingili, for her support, love, care, concern and encouragement.

ABSTRACT

Service quality and customer satisfaction are key concepts that organizations must appreciate in order to remain competitive in any business environment. More importantly is the need for organizations to understand and be able to measure these constructs from the customer's point of view to enable them better understand and satisfy their needs. This study had three objectives: To determine library user expectations and perceptions levels among universities in Kenya; to determine the levels of service quality in libraries among universities in Kenya; to examine whether there exist any relationship between service quality and library user satisfaction among universities in Kenya.

A Standardized questionnaire was developed from the SERVQUAL instrument derived from the works of Parasuraman et al. (1988) and distributed to respondents from across the universities in Kenya. Regression analysis was used to bring out the relationship between these variables. From the analysis, it was established that service quality has a statistically significant positive effect on user satisfaction represented by R^2 (Coefficient of determination) with a value of 73.9%. This in essence implies that service quality accounts for 73.9% of library user satisfaction among universities in Kenya. The findings further reveal that Reliability dimension contributes most towards user satisfaction while Empathy dimension contributes the least. The results also indicate that the libraries cannot afford to ignore any of these other dimensions since they all appear to influence customer satisfaction although at different degrees.

This study contributes to the existing studies examining service quality and library user satisfaction using the SERVQUAL model, and its empirical results could be helpful to the library management in helping to bridge service quality gaps. The researcher recommended that since this study focused only on university libraries in Kenya, future studies could broaden the scope and look into more categories of libraries. Service quality is also found to influence 73.9% of user satisfaction, meaning that the remaining 26.1% was due to other factors. Future studies could also investigate the composition of this other percentage (26.1%).

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CHAPTER ONE: INTRODUCTION

1.1: Background of the Study

Service quality and customer satisfaction have received a great deal of attention from both scholars and practitioners because of their relevance and relationship, according to Eshghi & Ganguli (2008) and the main reason for focusing on these issues is to improve the overall performance of organizations (Magi & Julander, 1996).

Various studies have focused on customer satisfaction and others have dealt with service quality as standalone concepts, whereas others have focused on the link between service quality and customer satisfaction. Some studies have concluded that quality leads to satisfaction, Negi (2009) and others support that satisfaction leads to quality (Cronin & Taylor, 1992). Others like Parasuraman et al. (1988) propose that quality and satisfaction are determined by the same attributes. Saravanan & Rao (2007) proposed that customer satisfaction is based on the level of service quality delivered by the service providers.

These and many other studies confirm that there is a relationship between service quality and customer satisfaction, but according to Asubonteng et al., (1996), there is no agreement on the exact nature of this relationship. Asubonteng et al. (1996) however, agree with other researchers that the two concepts have attributes that are measurable.

According to Cullen (2001), academic libraries are facing two main threats: a global digital environment and increasing competition. Cullen further argues that, the quality of an academic library has historically been described in terms of its collection and measured by the size of the library's holdings and various counts of its uses. He continues to assert that such parameters have since been rendered obsolete due to the emergence of alternative and more efficient and effective approaches.

One of the most significant trends in both private and public universities in Kenya in the recent past has been a rapid expansion to cater for the growing needs of new scholars. The introduction of Privately Sponsored Student Programmes (PSSP) has opened invaluable opportunities to those individuals who had attained the minimum university requirements but had no possibility of securing an admission because of the limited

opportunities available in the regular/ government funded programmes. This has however, resulted to a number of challenges because the increase in enrollment numbers has not been matched by the provision of adequate teaching and research facilities and resources (Abangi, 1995).

As Rowley (2006) asks, 'What is the relationship between service quality and customer satisfaction?' This question has not been addressed by many libraries and limited research in the field of Library and Information Science in the country has tackled it. It therefore raises many questions on the application of service quality models and user satisfaction surveys in libraries and information services among universities in Kenya.

This study, therefore, seeks to address this issue by focusing on the libraries within universities in Kenya and examining whether there is any relationship between service quality and user satisfaction.

1.1.1: Service Quality

Parasuraman, Zeithaml, and Berry (1988) defined service quality as the global evaluation or attitude of overall excellence of the services provided by a service firm.

Hernon & Altman (1998) also defined service quality in terms of reducing the gap between the user expectations and actual service provided. The two concluded that service quality focuses on the interaction between customers and service providers, and the gap or the differences between expectations and perception of the services provided.

For the purposes of this study, the definition of service quality adopted is, 'the measure of how well the service level delivered matches customer expectations, that is, the difference between the expected and perceived levels of service (Parasuraman et al., 1994)'.

Service quality deals with the interaction between customers and service providers. The expectations of customers in a service encounter shape their assessment of quality for that service. When there is a mismatch between the customer's expectations and the service delivered, the perceived service quality will suffer. If customer expectations are greater than the service provider's performance, then the perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Berry et al., 1985). Failure by the

service provider to identify and satisfy their customer's expectation automatically leads to the emergence of a quality gap. Delivering quality service therefore means conforming to customer expectations on a consistent basis.

The conceptualization of service quality in academic libraries is no different from conceptualizations in other service contexts. Parasuraman et al. (1985) studied different types of industries that are, banking, credit card companies, motor repair shops, telecommunication companies and educational institutions and the results revealed that service quality had uniform dimensions across all these industries.

In this study, the five dimensions developed by Valerie et al. (1985) were employed in a framework known as the SERVQUAL model, discussed in later chapters.

1.1.2: Customer Satisfaction

Customer satisfaction has been defined as a judgment that a product or service feature, or the product or service itself, provides pleasurable consumption (Oliver, 1997).

Customer satisfaction can also be described as a fulfillment response of service and an attitude change as a result of the consumption (Gibson, 2005). Gibson further asserts that understanding the factors that influence customer satisfaction makes it easier for the service provider to design and deliver service offers that correspond to customer demands.

Andreassen (2001) asserts that customer satisfaction can be viewed as an evaluation where expectations and experiences are compared. A service failure results when the service delivery does not manage to meet customer expectations. Often service recovery begins with a customer complaint.

Kotler & Armstrong (1996) defined customer satisfaction as the level of a person's felt state resulting from comparing a product's/ service's perceived performance or outcome. This study, therefore, defines customer satisfaction as 'the overall cumulative judgment based on collective encounters with a service provider over time' (Hansenmark & Albinsson, 2004).

Customer satisfaction, just like service quality, deals with expectations and draws on the confirmation/ non-confirmation process. Satisfaction studies are aimed at identifying if some general areas require scrutiny, whereas service quality studies provide data to examine problem areas for improvement. Overall satisfaction on the other hand is a cumulative judgment based on collective encounters with a particular service provider over a period of time (Hernon and Whitman, 2002).

1.1.3: Libraries among Universities in Kenya

The history of libraries in Kenya can be traced back to the second half of the 19th century, brought about by the western civilization. The development of Kenya's library system comprises public, academic and special libraries, each providing dissimilar nature of services depending on the intended objectives and target clientele (Otike, 2004).

Academic libraries include those of public and private Universities, national polytechnics, teachers training colleges and private and public tertiary colleges. Academic libraries are aimed at supporting teaching and research within and without their institutions. Special libraries, on the other hand, are the ones owned by government ministries, businesses, NGOs, International bodies and diplomatic missions with concerns in matters of Agriculture, health, law and technology among others (Kavulya, 2004).

Kenya is home to 22 public universities and 26 privately owned universities, with a total of 48 universities. Some of these universities have subsidiaries spread across the country while others have only a single branch. Each of these universities has at least one library, with others having more than one, depending on the number of subsidiaries.

Most libraries have embraced modern technology by having the facilities connected to the internet. This has enabled easy access to online material from various sources.

A study conducted by in Kenya by TNS global (2011) revealed that 55% of public libraries have 10 or fewer computers; 40% have more than 10 computers; however, most computers are for library staff, and not library users. The study also established that only 15% of public library users have access to either computers or the internet. This is despite

the fact that physical libraries in most developed countries are depended on computer networks to provide access to information resources (Elbert, 2011).

We are living in the information age, and the internet is reshaping so many aspects of people's lives. There is a growing concern that the internet may eventually render libraries obsolete. It is worth noting that most libraries now offer an abundance of programmes and services beyond the traditional book lending. In Kenya, however, there is still a large population of people who do not have access to computers and/ or cannot afford to pay for internet access. According to Communication Commission of Kenya (CCK, 2012), internet penetration in Kenya stood at a mere 41% as at December 2012. This low level of penetration validates the indispensable need for libraries in Kenya.

1.2: Statement of the Problem

Different aspects of customer satisfaction have been studied by different scholars, from its measurement to its relationship with other business concepts. Specifically, the relationship between customer satisfaction and service quality has been studied in numerous sectors, and various conclusions have been reached.

I-Ming and Hsieh (1996) studied customer satisfaction in twenty one Taiwanese university libraries and found that competence, tangibles, communications, convenience, responsiveness, assurance, and resources were the influencing factors. The study did not, however, investigate whether changes in service quality leads to variations in user satisfaction levels.

Lee et al. (2000) conducted a study on mobile phone services in France and observed that customer satisfaction is determined by the level of service quality provided by the service provider and that service quality acts as a determinant of customer satisfaction.

Jalal et al. (2012) set out to assess the relationship between service quality and customer satisfaction at Universities in the Northern region of Malaysia using the SERVQUAL model. The results of the study revealed that the five dimensions of service quality (tangibles, responsiveness, reliability, empathy and assurance) had a strong relationship with students' satisfaction. These results were consistent with the findings by Bigne et al.

(2003) who after studying Spanish public services concluded that there was a significant relationship between service quality and customer satisfaction. These studies are, however, limited in that only data from undergraduate students was used.

Nitecki & Herson (2000) conducted a study to determine the measures of service quality and customer satisfaction, at Yale University's Libraries in the United States and concluded that there were three dimensions for measuring service quality and customer satisfaction in libraries, namely: tangibles, reliability or service efficiency, and affect of service. The two, however, pointed out that there was need for further research to explore the dimensions further.

According to Teshome (2008), Kenya's higher education institutions face a decline in the quality of education, learning and research due to deteriorating facilities, limited and obsolete library resources, outdated curricula, poorly prepared secondary students and an absence of academic rigor and systematic evaluation of performance. Even though the study addressed the issue of service quality in Kenyan libraries, only two libraries were sampled.

Amollo (2011) observed that libraries in Kenya are faced with financial constraints, inadequate facilities, unskilled personnel, high staff turnover and lack of high level managerial support. Amollo, therefore, recommended for more government intervention to help the libraries acquire more materials, both in print and electronic form. She also advocated for recruitment and fair remuneration of qualified library personnel. The scope of this study was, however, insufficient because it gathered its information from the library management records and did not focus on the library users.

These and many other studies have been carried out to evaluate service quality and user satisfaction levels of libraries across the globe. These studies have, however, been carried out in different technological and social-cultural contexts, and different evaluation methods have been adopted. Most of these studies have also yielded different and contradicting results. In this study, the researcher is interested in bridging this knowledge gap, by using the SERVQUAL model to determine the relationship between the two constructs from the users' point of view. The study, therefore, seeks to answer the

following research question: Is there any relationship between service quality and library user satisfaction within Universities in Kenya?

1.3: Research Objectives

The objectives of this study are:

- i. To determine library users levels of expectations and perceptions among universities in Kenya;
- ii. To determine the levels of service quality in libraries among universities in Kenya;
- iii. To examine whether there exists any relationship between service quality and library user satisfaction among universities in Kenya.

1.4: Value of the Study

This study is important in the following ways:

This study attempts to outline the gaps in service delivery which impede the attainment of desired service quality levels. Library managers could therefore make use of the proposed recommendations based on the identified service quality gaps.

Having taken only libraries within universities in Kenya as the study unit for the research project, other institutions could make good use of the results by assessing their situations and customizing the recommendations of the study to suit their situations.

To the academia, the results, conclusions and recommendations from the study could be used by other researchers as a basis for further research in the area. The results could also help to bridge the knowledge gap in this field of study.

CHAPTER TWO: LITERATURE REVIEW

2.1: Introduction

This chapter aims to present literatures relevant to the study based on the theories of service quality and customer satisfaction and thereafter provide a theoretical framework. The chapter begins with a review of definitions and some measurements of service quality and customer satisfaction, followed by the relationship between the two concepts, leading to the development of a conceptual framework of the study.

2.2: Service Quality

Bitner et al. (1994) defined service quality as the customer's overall impression of the relative inferiority/superiority of the organization and its services. On the other hand, Cronin & Taylor (1994), defined service quality as a form of attitude representing a long-run overall evaluation of service.

Parasuraman et al. (1994) consequently defined service quality as the differences between expectations and performance along the quality dimensions. Nitecki & Herson (2000) also defined service quality as meeting or exceeding customer expectations, or the difference between customer perceptions and expectations of service.

In the library context, I-Ming & Shieh (2006) defined service quality as the overall excellence of library services that satisfy users' expectation. For the purposes of this study, the definition of service quality adopted is the measure of how well the service level delivered matches customer expectations, that is, the difference between the expected and perceived levels of service (Zeithaml, 2001).

2.3: Empirical Studies on Service Quality

Wells (1995) examined the number of times each student visited the library, and whether there existed any correlation between the number of visits, the grades obtained and the diversity of resources the student used in the library. The results turned out negative and revealed that a correlation did not exist. The limitation associated with this study is that it only addressed library usage by undergraduate students and their academic achievements.

The study does not focus on the user's feedback regarding the quality of services delivered, and the satisfaction derived.

Hernon et al. (2004) studied the factors influencing service quality in libraries and established that waiting time, accurate location of data, materials, library buildings and facilities, library environment, courtesy of library personnel and use of technology were among the influencing factors. Martensen & Gronholdt (2003), on the other hand, conducted a similar study and found out that the key determinants of library service quality were electronic resources, collections of printed materials, technical facilities, library environment and human side of user service.

These findings by Hernon et al. (2004) and Martensen & Gronholdt (2003) were consistent with the conclusions made by Majid et al. (2001) who investigated the factors influencing service quality in university libraries. The results showed that collections, environment, library personnel, equipment and physical facilities were regarded as the most important factors affecting service quality by the users.

Nzivo (2012) studied service quality in Kenyan public Libraries and found out that outdated collection of printed material, user education challenges, poor retrieval skills of materials by users and lack of electronic resources were the key factors that influenced service quality in public libraries. The findings by Nzivo (2012) seemed to concur with Burke's (2011) assertion that despite the evolution of libraries globally, Kenyan public libraries have yet to attain a world class status. Burke (2011) further added that the library brand in Kenya is still largely paper based and thus lagging behind the expectations of the more informed and exposed users.

The common major limitation associated with studies by Nzivo (2012) and Burke (2011) is that they only focused on public libraries.

2.4: Measurement of Service Quality

A good model for measuring service quality should put into consideration both the expectations and perceptions of a customer (Robinson, 1999). Parasuraman et al. (1988) studied different types of service industries including banking, motor repair shops, credit card companies and telecommunication companies, and concluded that service quality

had dimensions as tangibles, reliability, responsiveness, empathy and assurance. These dimensions were incorporated in a tool known as the SERVQUAL model.

2.4.1: The SERVQUAL Model

The model was introduced by Zeithaml, Berry, and Parasuraman (1988) as a tool for measuring customer expectations and perceptions of service quality. SERVQUAL is a standardized instrument that has been applied across a broad spectrum of service industries.

To measure customer satisfaction with various aspects of service quality, Parasuraman, Zeithaml and Berry, developed the first prototype of the SERVQUAL model in the mid-1980s, which they later refined in the early 1990s. This model is based on the premise that customers can evaluate a firm's service quality by comparing their perception of its service with their own expectations.

In the library context, SERVQUAL model consists of 5 dimensions of tangibles, reliability, responsiveness, empathy and assurance. From the 5 dimensions, 22 statements are derived, each measuring both the expectations and perceptions of respondents towards the quality of services the library provides. The respondents are required to rate, on a 5-point Likert scale, the degree to which they feel the service provider should deliver for an excellent service. Another identical scale is provided adjacent to the first one in which the respondents rate the actual quality of service delivered to them by an organization based on their perceptions. For each statement, the difference between perception and expectation is calculated; the averages of the obtained score being the SERVQUAL score (Parasuraman et al., 1988).

The 5 dimensions of the SERVQUAL model are:

Tangibles: Physical facilities, equipment, and appearance of personnel.

Reliability: Ability to perform the promised service dependably and accurately.

Responsiveness: Willingness to help customers and provide prompt service.

Empathy: Caring, individualized attention the firm provides its customers.

Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Although SERVQUAL model has been chosen as the appropriate tool for this study, there exist other models for evaluating service quality such as LibQUAL and the SERVPERF.

LibQUAL uses 'gap analysis' to identify the differences between users' minimal acceptable service, perceived service and desired service levels by identifying users' Zone of Tolerance and gives feedback on where a library's services fall in relation to these zones. It is however a web-based survey administered in cases where the respondents are known or predetermined. This study did not however have predetermined respondents and therefore random distribution of questionnaires was used. LibQUAL was therefore deemed inappropriate.

SERVPERF is a modification of SERVQUAL and was developed in 1992 to measure service quality based solely on performance. It looks at the attributes of the 5 dimensions above, worded the same as SERVQUAL but does not repeat the set of statements as expectation items. This study aims to determine both expectations and performance and therefore renders SEVPERF inappropriate.

2.5: Customer Satisfaction

Elliot (1995) defined satisfaction as the emotional reaction to a specific transaction or service encounter. Zeithaml & Bitner (2003) define customer satisfaction as the evaluation of a product or service in terms of whether the product or service meets the customer needs and expectations. Failure to meet these needs automatically leads to dissatisfaction.

Hernon & Altman (1998) in their study pointed out that satisfaction may or may not be directly related to the performance of a library on a specific occasion. The two assert that a customer can receive an answer to a query but be dissatisfied because of an upsetting or angry encounter. On the contrary, the query may remain unanswered, but the customer walks away feeling satisfied because the encounter was pleasant, and the library personnel were polite and friendly (Hernon & Altman, 1998).

A model by Boshoff & Gray (2004) proposes that there are two perspectives of viewing satisfaction that are relevant to library services. The first one is the service encounter satisfaction which refers to the satisfaction or dissatisfaction with a specific service encounter, and the second one is the overall service satisfaction which is based on multiple service encounters.

This study therefore defines customer satisfaction as ‘the overall cumulative judgment based on collective encounters with a service provider over time’ (Hansenmark & Albinsson, 2004).

2.6: Measurement of Customer Satisfaction

Sureshchandar et al. (2002) suggested that customer satisfaction should be viewed as a multi-dimensional construct and that the measurement items should be generated with the same dimensions of service quality.

Otemba (2012) studied customer satisfaction in the Kenyan telecommunications industry and established that only 20% of the respondents were very satisfied while 52% were just satisfied. 13% of the respondents were neither satisfied nor dissatisfied, whereas only 7% were dissatisfied. 8% were however very dissatisfied.

Lee (1999) studied user satisfaction at the Library Council of Economic Planning and development. The results revealed that attitude of staff, circulation operations, prices charged, environmental and physical facilities, collections, serving manners of employees and education and consultancy are the six, major parameters for evaluating user satisfaction.

The findings by Lee (1999) are consistent with the conclusions reached by Al-Wugayan et al. (2007) who found out that customer satisfaction is influenced by the friendliness of employees, knowledge of employees, accuracy of billing, physical facilities, materials, competitive pricing, service quality, good value and quick services.

Norliya & Khasiah (2006) also studied user satisfaction in libraries and concluded that the determinants of customer satisfaction were: provision of the latest collection of materials, publication of a guide on information searching skills, opening for long hours and friendly and knowledgeable staff. These findings are in agreement with the

conclusions made by Kassim (2009). The conclusions are also consistent with Al-Wugayan et al. (2007) and Lee (1999) findings.

Owalo (2009) conducted a customer satisfaction survey in the Kenya's ministry of Finance and established that the factors affecting customer satisfaction were: staff ethics, speed of service provision, competence of staff, service equipment and performance contracting for all personnel within the ministry.

Westbrook (1980) proposed that future researchers propose multi-item scale for measuring customer satisfaction because this would reduce measurement errors and improve reliability of the results. Future researchers adopted this proposal and it has been used in several other studies.

Many researchers have operationalized customer satisfaction by using a single item scale. The present study adopts a different approach and views customer satisfaction as a multi-dimensional construct just as service quality, but argues that customer satisfaction should be operationalized along the same factors (and the corresponding items) on which service quality is operationalized as proposed by Sureshchandar et al. (2002).

2.7: Service Quality and Customer Satisfaction

In reference to service quality and satisfaction studies by Henard & Szymanski (2001) and Cronin et al. (2000), service quality is the main driver of customer satisfaction in the service industry.

Ruyter et al. (1997) used the SERVQUAL model to assess the healthcare service of chiropractic care, in an effort to determine the relationship between service quality and customer satisfaction. The results revealed that service quality is an antecedent of customer satisfaction. Brady et al. (2001) also studied the relationship between service quality and customer satisfaction in fast-food restaurants in America and Latin America.

The results suggested that there was a relationship between service quality and user satisfaction based on different cultural backgrounds. Additionally, service quality had significant impact on customer satisfaction.

Wanjau, Muiruri & Ayodo (2012) studied service quality and customer satisfaction in the Public health sector in Kenya and established that; ineffective communication channels, low technology adoption, low employees capacity and insufficient funds were the most significant service quality factors affecting customer satisfaction in public health sector in Kenya. Their findings are also in agreement with the findings of Ruyter et al. (1997).

Mburu (2013) carried out a study to investigate the determinants of customer satisfaction and its connection with service quality in the banking industry. She found out that customer satisfaction is determined by factors such as pricing, quality of service, value and relationship with the service provider's staff. These findings reinforced the conclusions made by Tam (2004).

I-Ming and Hsieh (1996) studied service quality and customer satisfaction in twenty one Taiwanese university libraries. The results from the study identified six important dimensions for measuring the quality of service in libraries. The dimensions are; competence, tangibles, communications, convenience, responsiveness, assurance, and resources. Andaleeb & Simmonds (2001) adopted the same dimensions and concluded that service quality was influenced by tangibles, resources, reliability, responsiveness, competence and assurance. These two studies largely agreed on the service quality factors that influenced user satisfaction. The two studies, I-Ming et al. (1996) and Simmons et al. (2001) did not however investigate whether changes in service quality has any effect on the usage of library facilities.

In a study to evaluate the relationship between service quality and customer satisfaction at Redeemer's University library, Adeniran (2011) concluded that tangibles, reliability, responsiveness, assurance and empathy, all significantly and positively contributed towards customer satisfaction. The conclusion from this study confirms the findings by Simmonds et al. (2001) and I-Ming et al. (1996).

After conducting a study to determine the measures of service quality and customer satisfaction, Nitecki & Herson (2000) concluded that, 'there may be three dimensions in libraries; tangibles, reliability or service efficiency, and affect of service, but there is a need for further research to explore the dimensions'. These conclusions were however in

contradiction with what most other researchers have found out, but consistent with the findings of Seay, Seaman & Cohen (2010).

Jalal, Abdullah & Warokka (2012) while studying service quality and satisfaction in Malaysian university libraries established that all the five dimensions of service quality (assurance, tangibles, responsiveness, empathy and assurance) had a significant impact on user satisfaction. This was true for all the different institutions that were studied. These conclusions were consistent with the findings of both Adeniran (2011) and Simmonds et al. (2001).

2.8: Summary of Literature Review

A critical review of literature into the concepts of service quality and customer satisfaction indicates that there exists a significant relationship between the two concepts. The review also reveals that there is varying importance of service quality dimensions depending on the industry being studied and the nature of services it provides (Ahmed et al., 2010) and Zekiri, 2011).

In the library sector, a review of the existing literature has shown that customer satisfaction is highly depended on service quality. This is seconded by the fact that there are consistent results and patterns of responses by users in different places and types of libraries like Jalal, Abdullah & Warokka (2012), Adeniran (2011) and Simmonds et al. (2001), I-Ming et al. (1996), Mburu (2013), Tam (2004) among others.

Service quality dimensions of responsiveness, reliability, tangibles, assurance and empathy have also proven to be acceptable parameters for gauging the levels of service quality in the library sector with few exceptions like the findings of Nitecki and Herson (2000), Seay, Seaman & Cohen (2010) whose findings are inconsistent with those of other researchers encountered in the review.

The review has also exposed other knowledge gaps in research. From the limited number of local studies cited in the review, that is Mburu (2013), Muiruri et al. (2012), Nzivo (2012) and Burke (2011), it is likely that this field has not been sufficiently researched in Kenya. More studies are therefore needed in order to bridge the gap, not just in the

libraries, but in the entire field of service quality and customer satisfaction. It is also worth noting that of all the local literature reviewed, none of them had made use of the SERVQUAL model.

2.9: Conceptual Framework

Based on the literature reviewed, a theoretical framework for this study was developed and is shown below as figure 1, the major objective of the study being to determine whether there exist any relationship between service quality dimensions (Assurance, Empathy, Reliability, Responsiveness and Tangibles) and customer satisfaction.

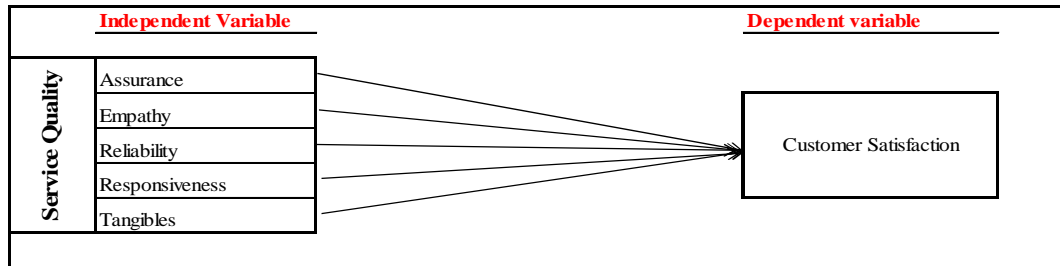


Figure 1; Source: Adapted from ‘Service quality and satisfaction-study on international students in universities of North Malaysia’ by Jalal R. M. jalal, 2012, Vol.3, P. 123

Service quality dimensions were taken as the independent variable while customer satisfaction represented the dependent variable.

The mathematical expression for the regression model represented by this conceptual framework is given as follows:

$$Y = \beta_0 + \beta_1X_1+ \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

or

$$\text{User satisfaction} = \beta_0 + \beta_1*\text{Assurance} + \beta_2*\text{Empathy} + \beta_3*\text{Reliability} + \beta_4*\text{Responsiveness} + \beta_5*\text{Tangibles} + \varepsilon$$

Where, Y is the dependent variable representing Customer Satisfaction whereas X_1 , X_2 , X_3 , X_4 and X_5 are the independent variables, that is, Assurance, Empathy, Reliability, Responsiveness and Tangibility respectively. β_0 is a constant (the intercept of the model) and β_{i_s} are regression coefficients of X_{i_s} variables while ε is the error term.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1: Introduction

According to Perez (2009), research methodology is a science that studies how research is conducted by use of scientific methods, that is, it involves systematic solving of research problems by logically adopting various steps. This chapter defines what the activity of the research is, the research design used in the study, the target population, the sample, and data collection and analysis.

3.2: Research design

Burns & Grove (2003) defined a research design as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings.

The research design adopted for this study is descriptive research design. A descriptive study is undertaken to ascertain and describe the characteristics of a variable or variables of interest in situation (Sekaran, 1992). In this study, it was used to establish whether there exists any relationship between service quality and library user satisfaction among universities in Kenya using a standardized questionnaire. The studies by I-Ming et al. (1996), Simmonds et al. (2001), Adeniran (2011) and Nitecki et al. (2000) adopted this research design and their findings confirmed that the specific research objectives were sufficiently achieved.

The study is also cross-sectional in nature since it sought to answer the research questions by use of primary data collected at a specific point in time.

3.3: Population

In statistics, a population refers to all the members of a defined group of interest to a researcher. In the context of this study, the target population comprised all users of university libraries in Kenya.

Appendix 1 contains data collected in the year 2012, and includes only the institutions accredited as full universities at the time of data collection and therefore the researcher did not consider constituent colleges of these universities for this study. It is worth noting

that most of these constituent colleges have this year (March, 2013) attained full accreditation. However, their data was unavailable for this study. The researcher deemed the population data tabulated in Appendix 1 sufficient for the study.

3.4: Sample Size

There are a number of approaches to determining the sample size in any given study. These include using a census for small populations, imitating a sample size of similar studies, using published tables, and applying formulas to calculate a sample size. This study adapted the formula shown below, by Glenn (2009).

$$\text{Sample size, } n = \frac{N}{1 + N(e)^2}$$

Where e = Margin of error (0.05) and N is the population (288,796) = 400 respondents.

Therefore, from the above calculations, a minimum of 400 questionnaires were distributed proportionately among respondents from all the accredited universities in Kenya. All the questionnaires were administered at random to the respective respondents.

3.5: Data collection and Analysis

Primary data was used for this study. Data was collected using standardized questionnaires comprising 22 statements derived from the works of Parasuraman et al. (1991). The first part of the questionnaire consisted of two sections, where one section required the respondents to give their demographic information, whereas the other section required them to rate their expectations levels with the services they received. Part two of the questionnaire required respondents to rate their perception levels. Likert type scale ranging from 1 to 5 was adapted. After the data had been collected, appropriate data analysis tools (Ms Excel and SPSS) were employed.

To achieve the first objective, the expectations and performances for each of the 22 statements were calculated. The means and standard deviations for each of the 5 dimensions were also determined. Cronbach's alpha was calculated to measure the internal consistency within the collected data, and test it for reliability, thus avoiding the unreliable results dilemma (Leedy & Ormrod, 2003).

The second research objective was achieved using the data collected from both part 1 and part 2 of the questionnaire. The difference between expectations and performance for each of the 22 statements was calculated and their means and standard deviations determined.

Regression analysis was used to realize the third objective. The mathematical expression for the regression model is given as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where, Y is the dependent variable representing Customer Satisfaction whereas X₁, X₂, X₃, X₄ and X₅ are the independent variables, that is, Assurance, Empathy, Reliability, Responsiveness and Tangibility respectively. β_0 is a constant (the intercept of the model) and β_{is} are regression coefficients of X_{is} variables while ε is the error term.

CHAPTER 4: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1: Introduction

In this chapter, the results of the findings are presented, analyzed and discussed. The study results are analyzed and interpreted in line with the objectives which were:-

- i. To determine library users levels of expectations and perceptions among universities in Kenya;
- ii. To determine the levels of service quality in libraries within universities in Kenya;
- iii. To examine whether there exists any relationship between service quality and library user satisfaction among universities in Kenya.

4.2: Results

In this study, a total of 400 questionnaires were distributed to respondents from selected universities across the country. This selection was based on the institution's student population. Of all the questionnaires distributed, 346 were returned, resulting in a response rate of 86.5%. All the returned questionnaires were examined for errors and omissions and it was established that 314 of these were useable for analysis, accounting for a success rate of 78.5%. The researcher considered the sample satisfactory based on prior studies.

4.2.1: Demographic Characteristics Respondents

The demographic profile of the respondents was as follows; Females accounted for 57% of all the respondents, whereas the rest were male, at 43%. Undergraduate students constituted the highest percentage of the respondents at 78% while masters students constituted only 18%. Doctorate students were at 2% and others (certificate, diploma and higher diploma) formed only 2% of the total respondents. Public universities produced the highest percentage of respondents at 61% whereas 39% of the respondents were from private universities as shown in Table 4.1.

TABLE 4.1

DEMOGRAPHIC PROFILE OF RESPONDENTS

Gender	Percentage
Male	43%
Female	57%

Education Level	
Undergraduate	78%
Masters	18%
Doctorate	2%
Others (Certificate, Diploma & Higher Diploma)	2%

Type of University	
Public	61%
Private	39%

Source: Research data (2013)

4.2.2: Reliability of the Results

To measure the internal consistency and reliability of the obtained results, this study adopted the Cronbach's alpha method. This is a method developed by Lee Cronbach in 1951 to determine the internal consistency or average of correlations of items in a study in order to gauge their reliability. Reliability takes center stage when data collected and analyzed in a study is used to predict future outcomes. Variables derived from test instruments are considered to be reliable only when they provide stable and reliable responses over a repeated administration of the test (Santos, 1999).

A total of 314 valid samples were analyzed and the Cronbach's alpha for the variables is as shown in Table 4.2. Responsiveness had the highest Cronbach value of $\alpha=0.83$, followed by a tie between Empathy and reliability both at $\alpha= 0.81$. Tangibles and Assurance had the least values of $\alpha=0.77$ and $\alpha=0.74$ respectively.

Notably, all dimensions had Cronbach's value higher than $\alpha=0.70$, which is the accepted threshold. The researcher therefore deemed the obtained data fit for analysis.

TABLE 4.2

RELIABILITY ANALYSIS	
Variables	Cronbach α
Tangible	0.74
Assurance	0.77
Empathy	0.81
Reliability	0.81
Responsiveness	0.83

Source: Research data (2013)

In order to obtain the overall reliability for all the study items, that is (Assurance, Empathy, Reliability, Responsiveness and Tangibles), Cronbach's alpha was calculated and found to be $\alpha=0.96$. This value is higher than that obtained by Parasuraman et al. (1988), which was $\alpha=0.91$. This therefore validates the results further and their reliability upon analysis. It is worth noting that the highest reliability value attainable is $\alpha=1.0$, and therefore the obtained value of $\alpha=0.96$ signifies a very high level of reliability. Also, the higher the Cronbach's alpha value, the higher the internal consistency of the results and vice versa.

4.2.3: User Expectations and Perceptions

In this study, both the expectations and perceptions were measured using a 5-point Likert scale with higher numbers indicating higher levels of expectations and perceptions. As shown in table 4.3, the dimension with the highest expectation score was found to be responsiveness at 4.53 followed by reliability at 4.45 and then tangibles at 4.44. Assurance and Empathy had the least scores at 4.39 and 4.01 respectively. These are relatively high scores and they are an indication that the library users' expectations are also very high.

All the 22 SERVQUAL attributes received varied degrees of expectations from different respondents according to the results of this study. The results indicate that library users expect the highest levels of attention to be given to equipping the libraries with modern

and sufficient learning and research materials, library employees to have sufficient know how to help the users and keep the library environment clean. On the other hand, individualized attention and understanding of user’s specific needs were the attributes that mattered least according to the users.

TABLE 4.3

CUSTOMER EXPECTATIONS

Dimension	N	Mean	Standard Deviation
Empathy	314	4.01	0.68
Assurance	314	4.39	0.48
Tangibles	314	4.44	0.51
Reliability	314	4.45	0.50
Responsiveness	314	4.53	0.59

Source: Research data (2013)

There is not so much difference amongst the expectation scores, but they are generally higher than perception scores. As for the perception scores, Tangibles was rated the highest with 3.39 followed by Responsiveness at 3.32 with Reliability being ranked third at 3.31. Assurance and Empathy were rated least with 3.29 and 3.05 respectively. The perception scores just like expectation scores are also very close to each other as shown in table 4.4 below.

TABLE 4.4

CUSTOMER PERCEPTIONS

Dimension	N	Mean	Standard Deviation
Empathy	314	3.05	0.86
Assurance	314	3.29	0.80
Reliability	314	3.31	0.81
Responsiveness	314	3.32	0.93
Tangibles	314	3.39	0.85

Source: Research data (2013)

Generally, users felt that the libraries have excelled in keeping the facilities clean, having their employees appear neat and opening and closing the facilities in fairly convenient hours. The users however responded negatively to the inadequate and outdated learning and research materials provided by their respective libraries. The respondents also felt that the library employees fail to accord them the amount of attention they deserve.

From tables 4.3 & 4.4, it can be seen that the standard deviation scores for the five dimensions are fairly consistent, suggesting a wide range of opinion on service quality among the respondents surveyed.

4.2.4: Gap Scores/ Service Quality Scores

Gap score analysis was used to evaluate how customers perceive service quality in libraries and determine which dimensions they are most satisfied with and vice versa. The gap score values range from -4 to +4 and these gaps are a measure of service quality. The more positive the gap score (Perception - Expectation), the higher the perceived service quality, (Parasuraman et al., 1985). This in turn results in a high level of customer satisfaction and vice versa. The general picture depicted by the results from this study is that for each of the five SERVQUAL dimensions studied, user expectations were higher than perceptions, resulting in a negative gap score (Perception – Expectation) for each one of them. The dimensions reporting larger mean gaps were Responsiveness with -1.21, Reliability with -1.14 and Assurance with -1.11. Tangibles and Empathy reported the least scores of -1.05 and -0.95 respectively as shown in table 4.5.

TABLE 4.5

GAP SCORES		
Dimension	N	Mean
Empathy	314	-0.95
Tangibles	314	-1.05
Assurance	314	-1.11
Reliability	314	-1.14
Responsiveness	314	-1.21

Source: Research data (2013)

The implications of a negative score are that the service delivered does not meet user expectations. It is however common for customer's expectations to exceed the perceived service quality (Parasuraman et al., 1988).

Parasuraman et al. (1988) proposed that service quality is measured by obtaining an average gap score of the SERVQUAL dimensions. In this study, the average gap score was found to be -1.10. This result implies that the service quality delivered falls short of user expectations and therefore improvements are required in order to meet and possibly exceed user expectations.

4.3: The Relationship between Service Quality Dimensions and User Satisfaction

This study sought to establish the relationship between service quality (independent variables) and library user satisfaction (dependent variables) by use of regression analysis. The following linear regression model was adopted by the researcher to help determine the nature of this relationship: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$; Where Y is the dependent variable (user satisfaction), ϵ is the constant (intercept), β_{is} are the regression coefficients and X_1, X_2, X_3, X_4 and X_5 are Assurance, Empathy, Reliability, Responsiveness and Tangibles dimensions respectively.

4.3.1: T Test for Regression Coefficients

TABLE 4.6

		<i>Coefficients</i>	<i>Standard Error</i>	<i>t Statistics</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept		4.115009340	0.058446921	70.40592153	0.000000000	3.999278598	4.230740081
Assurance	(X1)	0.158974374	0.067141436	2.367753573	0.019508794	0.026027626	0.291921122
Empathy	(X2)	0.066348757	0.052191776	1.271249277	0.206119200	-0.036996171	0.169693686
Reliability	(X3)	0.243889731	0.073667046	3.310703298	0.001232260	0.098021623	0.389757838
Responsiveness	(X4)	0.157888879	0.051583104	3.060864265	0.002728324	0.055749181	0.260028576
Tangibles	(X5)	0.129344216	0.053534100	2.416108881	0.017207185	0.023341350	0.235347081

Source: Research data (2013)

At 5% level of significance, all the variables were statistically significant, except Empathy, whose p -value was 0.206, which was above the acceptable threshold of 0.05.

From these research findings, positive effect was found on all the five SERVQUAL dimensions, that is, Assurance, Empathy, Reliability, Responsiveness and Tangibles with regression coefficient values: $\beta_0=4.115$, $\beta_1=0.159$, $\beta_2=0.066$, $\beta_3=0.244$, $\beta_4=0.158$ and $\beta_5=0.129$.

The regression model can therefore be expressed as follows:

$$Y = 4.115 + 0.159 X_1 + 0.066 X_2 + 0.244 X_3 + 0.158 X_4 + 0.129 X_5 + \epsilon$$

or

$$\text{User satisfaction} = 4.115 + 0.159 * \text{Assurance} + 0.066 * \text{Empathy} + 0.244 * \text{Reliability} + 0.158 * \text{Responsiveness} + 0.129 * \text{Tangibles} + \epsilon$$

From this regression equation, taking all factors constant at zero, the effect to user satisfaction would be 4.115. These findings also suggest that taking all other independent variables at zero, a unit increase in the Assurance dimension would result to a 0.159 increase in user satisfaction; a unit increase in Empathy would lead to a 0.066 increase in user satisfaction; a unit increase in Reliability would lead to 0.244 increase in user satisfaction; a unit increase in Responsiveness would lead to a 0.158 increase in user satisfaction whereas a unit increase in Tangibles would lead to a 0.129 increase in user satisfaction.

These findings infer that Reliability dimension contributes most towards user satisfaction while Empathy dimension contributes least towards user satisfaction. They also show that the libraries cannot afford to ignore any of these other dimensions, since they all appear to influence customer satisfaction although at different degrees.

4.3.2: Coefficient of Determination, R^2

Coefficient of determination is a parameter used to determine the extent to which variations in the dependent variable can be explained by changes in the independent variable. From the analysis, the five dimensions of the SERVQUAL model explain about

73.9% of user satisfaction as represented by R^2 (Coefficient of determination). This therefore implies that there are other factors, not considered in this study, but which contribute 26.1% towards user satisfaction. Further research could therefore be carried out to investigate the other factors that affect library user satisfaction within Kenyan universities. The regression results are as shown in table 4.7 below.

TABLE 4.7

<i>REGRESSION STATISTICS</i>	
Multiple R	0.859786130
R Square	0.739232189
Adjusted R Square	0.728275558
Standard Error	0.392122329
Observations	314

Source: Research data (2013)

4.3.3: F Test for the Full Model

ANOVA was used to test the claim that there is no significant relationship between the independent variables (service quality) and the dependent variable (user satisfaction). At 5% level of significance, the significance F is 0.000, which is less than $p=0.05$ and therefore the model is statistically significant. The claim that there is no significant relationship is therefore rejected.

TABLE 4.8

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	5	51.8700894	10.37401788	67.46893346	0.000000000
Residual	309	18.2974306	0.153759921		
Total	314	70.16752			

Source: Research data (2013)

This therefore implies that the model can be used for prediction purposes.

4.4: Discussions

This study has examined the levels of users' expectations and perceptions towards the quality of services provided to them by their respective university libraries. From the analysis, the average expectations score was 4.37. This expectation score is very high and implies that users expect so much from their respective libraries. Narrowing down to the individual dimensions, it is evident that customers expect more from Responsiveness dimension, which scores the highest value of 4.53. This dimension constitutes availing information to library users for easy access, provision of prompt services and library employees' willingness to help users. Expectations for Reliability, Assurance, Empathy and Tangibles dimensions also have very high scores, all above 4.0 meaning that users are very sensitive to how reliable, assuring, physically appealing and how much attention they get from the library staff.

The average perception score is slightly above average, with an overall mean of 3.27. Tangibles dimension has the highest score of 3.32 meaning that users are more satisfied with the appearance of the employees, the physical appearance of libraries and also the environments around their respective libraries than any other aspects. Reliability comes close at 3.31 followed by Assurance at 3.29. Empathy has the least score of 3.05, an indication that users do not get as much attention as they would desire.

The gap score is obtained by calculating the difference between expectations and perceptions (Perception - Expectation). The results from this study reveal that the overall gap score is -1.10. This is a negative value, implying that the quality of service is less than satisfactory and thus customers expect more than their respective libraries are able to offer. In its strict sense, customers perceive the level of service quality to be poor because it does not match their expectations. This in essence leads to dissatisfaction. Negi (2009) concluded that service quality is an antecedent of customer satisfaction, meaning that if users perceive service quality as low or poor, this in essence implies that they are dissatisfied with the services offered by their respective libraries.

In summary, all dimensions show a negative gap score between perceptions and expectations of services and this therefore calls for improvements in order to bridge this gap which could lead to meeting and possibly exceeding user expectations.

The results obtained were also statistically significant since the p -value was <0.05 for all the service quality dimensions with the exception of Empathy dimension, which had a p -value >0.05 . The regression analysis also established that Reliability dimension had the greatest impact on user satisfaction followed by Assurance and then Responsiveness. Tangibles and Empathy are seen as the least contributors to user satisfaction by the library users. The relationship between the two variables which are the subject of this study is also established.

The results of this study confirm the findings of Hanaysha, Abdullah & Warokka (2011), who studied service quality in Malaysian University libraries and found out that all the five service quality dimensions (assurance, tangibles, responsiveness, empathy and assurance) had a significant impact on user satisfaction. In this particular study, all the service quality dimensions have also been found to influence user satisfaction. These conclusions are also consistent with the findings of both Adeniran (2011) and Simmonds et al. (2001).

It can therefore be concluded that all the five dimensions are good predictors of customer satisfaction in a library setting.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1: Introduction

This chapter aims to summarize the findings from the results, analysis and discussion chapter. The chapter also covers conclusions, recommendations, limitations and suggestions for further research.

5.2: Summary of Findings

The objectives of this study were to determine the library users' levels of expectations and perceptions; establish service quality levels and determine the relationship between service quality and library user satisfaction among universities in Kenya.

Data was collected using structured questionnaires which yielded uniform feedback from the respondents. Of all the 400 questionnaires given out, 346 were returned but 32 of these had errors and omissions and were therefore unusable. The final number of usable questionnaires was 314, accounting for 78.5% of all the questionnaires initially distributed.

The results from the study show that the average user expectations score is 4.37 (in a scale of 1 to 5) whereas the average user perceptions score is 3.27 (in a scale of 1 to 5). Clearly, user expectations are more than their perceptions, implying that they are dissatisfied with services they are getting from their respective libraries.

The results further indicated that library users are more sensitive to how reliable, assuring, physically appealing and how much attention they get from the library staff. However, users are more satisfied with the appearance of the employees, the physical appearance of libraries and the environments around their respective libraries than any other aspects.

The SERVQUAL score for this study was found to be -1.10 (Perceptions - Expectations). This negative score is an indication that users are not happy with the way their respective libraries are serving them. It is therefore a sign of dissatisfaction.

Of the five SERVQUAL dimensions studied, four of them were found to be statistically significant with an exception of only one, that is, Empathy. Using regression analysis, it was established that Reliability dimension has the greatest impact on user satisfaction followed by Assurance and then Responsiveness. Tangibles and Empathy are seen as the least contributors to user satisfaction by the library users. The relationship between the two variables which are the subject of this study was also established.

5.3: Conclusions

This study set out to determine the relationship between service quality and library user satisfaction among universities in Kenya. The results of this study reveal that about 73.9% of library user satisfaction can be attributed to service quality as represented by R^2 (Coefficient of determination). The results also show that service quality dimensions differ in importance to the users and therefore influence user satisfaction differently. It was established that Reliability dimension contributed most towards achieving user satisfaction followed by Assurance and then Responsiveness. The dimensions which were seen to influence user satisfaction least were Tangibles and Empathy respectively.

The general picture depicted by the results from this study is that for each of the five SERVQUAL dimensions studied, user expectations were higher than perceptions, resulting in a negative gap score (Perception – Expectation) for each one of them. Customers were more dissatisfied with Responsiveness dimension, followed by Reliability and then Assurance. Tangibles and Empathy reported the least gap scores.

It is imperative for the libraries management to note that the top service attributes that caught users' attention most include the libraries having modern learning and research material, the willingness and ability of library employees to help the users within the libraries, cleanliness of the library environment, and availability and accessibility of information by the users of the respective libraries.

This therefore implies that there is an inevitable need for libraries to review and improve their services in line with the findings of this study.

5.4: Recommendations

This study therefore recommends that all the five SERVQUAL dimensions (Assurance, Empathy, Reliability, Responsiveness and Tangibles) should be enhanced by all the libraries within universities in Kenya in order to increase the perception levels of their users. Knowing how different users perceive service quality and being able to measure service quality levels and user satisfaction can be of great benefit to the management of libraries. This could help the management to monitor user satisfaction at all times and therefore be in a position to fix any issues as they arise. Using the SERVQUAL model to assess service quality is therefore an excellent way of enabling the management to better appreciate various dimensions and including how they affect service quality and user satisfaction.

5.5: Limitations and Suggestions for Further Research

This study focused on service quality and library user satisfaction among universities in Kenya. Since the study only dealt with libraries among universities in Kenya, it is therefore not all inclusive and the recommendations from the study cannot be generalized to all the libraries in Kenya.

Also, the majority of the respondents were undergraduate students who constituted 78% of all the respondents whereas masters and doctorate level respondents formed a mere 18% and 2% respectively. These figures for masters and doctorate students are unsatisfactorily low and therefore future studies should try to ensure that there is a fair representation of respondents from all levels of education (undergraduate, masters, doctorate and others).

Only primary data was used for this study, collected at a particular point in time. Such data could be subject to bias and therefore future researches in this area should incorporate secondary data in addition to having primary data collected over a substantially longer period of time.

The results of this study show that the five dimensions of the SERVQUAL model explain about 73.9% of user satisfaction as represented by R^2 (Coefficient of determination). This therefore implies that there are other factors, not considered in this study, but which contribute 26.1% towards user satisfaction. Further research could therefore be carried out to investigate these other factors (26.1%) that affect library user satisfaction within universities in Kenya.

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APPENDICES

Appendix 1

	UNIVERSITY NAME	Population	Sample
1	University of Nairobi	63,000	87
2	Kenyatta University	47,000	65
3	Moi University	32,000	44
4	Jomo Kenyatta University of Agriculture and Technology	28,000	39
5	KCA University	22,300	31
6	Mt. Kenya University	15,400	21
7	Egerton University	15,000	21
8	Kenya Methodist University	12,000	17
9	Masinde Muliro University of Science and Technology	9,500	13
10	Maseno University	8,800	12
11	Catholic University of Eastern African	6,300	9
12	Strathmore University	5,300	7
13	United States International University	4,500	6
14	Daystar University	4,000	6
15	Presbyterian University of East Africa	3,600	5
16	St. Paul's University	3,000	4
17	Kabarak University	2,900	4
18	University of Eastern Africa, Baraton	2,300	3
19	African Nazarene	2,200	3
20	Great Lakes University - Kisumu	860	1
21	Pan African Christian University (PACU)	340	0
22	GRE TSA University	240	0
23	Scott Theological College	120	0
24	Kiriri Women's University of Science and Technology	90	0
25	Adventist University of Africa	46	0
	Grand Total	288,796	400

Source; Office of the Assistant Director of Education, (2012), Ministry of Higher Education, Tele Posta Towers, 26th Floor, Nairobi.

Appendix 2

Dimension	Description	Specific criteria that customers use
Reliability	Ability to perform service dependably and accurately	· Timeliness · Consistency · accuracy
Assurance	Knowledge and courtesy of staff; ability to inspire trust and confidence	· staff competence · respect for customers · credibility · safety and security · confidentiality
Tangibility	Physical representation or image of the service	· physical facilities · equipment · technology · employee appearance · communication materials
Empathy	Caring and individualised attention to customers	· individualised attention · appropriate service for customer needs · clear and timely communication · access to information, staff and services
Responsiveness	Willingness to help customers and provide prompt services	· willingness to help · prompt attention to requests · problem resolution · flexibility · complaint handling

Source: Parasuraman et al. (1988)

MBA RESEARCH QUESTIONNAIRE

This research questionnaire is designed to collect data on how you feel about the quality of service delivered to you by your respective University library. Your response shall be accorded all the confidentiality it deserves and will only be used for academic purposes.

Part 2 - Service Performance		Service Performance				
		(How well the service is actually delivered to you)				
Please indicate the extend to which you agree with the following statements.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
RL5	Library administration keeps error-free records.	1	2	3	4	5
RP3	Library employees are always willing to help.	1	2	3	4	5
A3	Library employees are consistently courteous with you.	1	2	3	4	5
A4	Library employees are knowledgeable and able to answer all your questions.	1	2	3	4	5
T3	Library employees are neat-appearing.	1	2	3	4	5
RP4	Library employees are never too busy to respond to your requests.	1	2	3	4	5
RP2	Library employees give you prompt services.	1	2	3	4	5
RP1	Library employees make information easily accessible to users.	1	2	3	4	5
E5	Library employees understand your specific needs	1	2	3	4	5
E2	Library has operating hours convenient to you.	1	2	3	4	5
E3	Library has staff members who give you personal attention.	1	2	3	4	5
E4	Library has your best interest at heart.	1	2	3	4	5
T1	The library has modern (up-to-date) and sufficient material for learning and research.	1	2	3	4	5
RL1	Library services are provided in the promised time.	1	2	3	4	5
RL3	Library services are provided right the first time.	1	2	3	4	5
E1	Library's staff gives you individual attention.	1	2	3	4	5
T2	Library's physical facilities are visually appealing.	1	2	3	4	5
A1	The behavior of library employees instills confidence in users.	1	2	3	4	5
RL4	Library provides its reference services at the time it promises to do so.	1	2	3	4	5
T4	The physical environment of the library is clean.	1	2	3	4	5
RL2	When a user has a problem, library shows a sincere interest in solving it.	1	2	3	4	5
A2	You feel safe in your transactions with library.	1	2	3	4	5