

Customer Satisfaction survey of undergraduate distance students in case of St. Mary University: SERVQUAL model analysis

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Abstract

Higher education is facing pressure to improve value in its activities. As private universities are striving to maintain the quality of education, the evaluation of customers' perception is essential to provide motivation for and to give feedback on the effectiveness of educational plans and implementation for them. The purpose of this study is to find out the students perception as well as level of satisfaction about the open and distance education in St. Mary University in Addis Ababa, Ethiopia. This research began with the basic SERVQUAL survey instrument based on what students deem to be of high importance. A survey conducted over 373 students from different CODL centers located in different parts of the country and collected data by using a questionnaire that includes 22 items about the various aspects of the higher education. Gap scores were calculated for different dimensions of service quality and found empathy registered largest gap score of -1.017 and followed by gap score -0.995 for tangibles and the lowest gap (-0.64) scored for assurance dimension. The findings of the study are expected to guide the management of St. Mary University to ensure the quality of distance education service.

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I. INTRODUCTION

1.1 Background

1.1.1 Background of the study

A service can be defined as: "any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything (Kotler, 1999). The main purpose of service rendering organization is to make the intangible offer tangible through an attempt to meet the customer expectation. Customers are the sole owners of today's business. That is, the company shall tailor all their activities towards meeting and satisfying their needs. How the company's satisfied and outperforms competition is a critical issue where every service rendering organization must focus on.

The main reason to focus on quality is to meet customer needs while remaining economically competitive at the same time. This means satisfying customer needs is very important for the enterprises to survive. The outcome of using quality practices is: Understanding and improving operational processes; identifying problems quickly and systematically; establishing valid and reliable service performance measures; and measuring customer satisfaction and other performance outcomes

These five dimensions represent how customers' organize information about service quality in their minds. Thus, in measuring the service quality and the level of satisfaction, the gap between the perceived value of service by the customers and the actual service rendered by the organization must tally.

There has been a substantial growth in the number of higher educational institutions of Ethiopia in the last 2 decades. Currently there are 83 private universities, and 42 public universities, and more than 35 institutes of higher learning in Ethiopia. This high growth increases the need for proper monitoring and evaluation to teach quality education.

This study analyzes the relationship between service quality and its dimensions that lead to customer satisfaction. The research is trying to investigate the service quality performance level of the CODL, St. Mary University students. That is, it attempts to address the service quality from the review of the related literature; the perception of customers towards receiving quality service, etc. Thus, it incorporates the views of St. Mary University's distance students who have a direct contact with the service.

1.1.2 Background of the organization

Saint Mary's University is one of the Private Higher Education Institutions (PHEIs) which emerged as a result of the privatization of higher education institutions in Ethiopia. It is an outgrowth of St. Mary's

Language Center, which was established in 1991 in Addis Ababa. The University was established in 1998 as St. Mary's General Education Development PLC with its head office in Awassa and a branch in Addis Ababa. It launched its training in same year with 33 students in Awassa and 37 students in Addis Ababa, studying in three departments (Accounting, Marketing, and Law).

In the last quarter of 1998, the University admitted more than 300 students in Addis Ababa (Lideta Campus) and shifted its head office from Awassa to Lideta Campus. In 1999, the departments of Secretarial Science and Office Management were added. In September 2000, the Departments of Computer Science (diploma) and Law (degree) were started. In preparation for the September 2002 registration, new staff members were employed and a new building besides the Wabe Shebelle Hotels, was rented.

In 2003, in addition to Law, degree programs in Marketing, Management, and Accounting were introduced. After a year, a degree program in Computer Science was begun. In the same year, Natural Science stream, which offers diploma level training, was opened under Teacher Education. In July 2006, a Master's Program in various fields of studies was embarked upon in collaboration with Indra Gandhi National Open University (IGNOU). At this moment the University is hosting hundreds of workers and thousands of students on its different campuses in Addis Ababa. It has recently been granted the status of university by the HERQA.

Since its inception, St. Mary's University has made a tremendous effort toward meeting the growing demand for trained manpower in the country. Today, it offers an extensive range of undergraduate programs, in conventional and distance modes of delivery in different faculties.

The college of open and distance education (CODL) is one of the colleges of the University mandated to provide an undergraduate distance education programme. Currently CODL operates in about 90 distance centers across the country and enrolled about 9,000 students.

1.2 Statement of the problem

The study of customer satisfaction draw considerable attention from researchers in the early 1980s due to the structural change from a production to a service dominated economy in the 1970s in developed countries (Grönroos, 2007; Tajeddini, 2011). Several researchers have emphasized the importance of service marketing and satisfied customers, which demonstrates how customer satisfaction arises, how it is influenced, how it relates to service quality and how both concepts can be measured, evaluated and improved.

Educational institutions have become more market-oriented in order to fulfil the information needs of the target group regarding educational services, degrees, courses, leisure activities, rankings and many more (Hemsely-Brown & Oplatka, 2006; Molesworth et al., 2009) in order to attract students, build and maintain a certain image, and differentiate themselves from other educational institutions (Hemsely-Brown & Oplatka, 2006; Mai, 2005). Hence, prospective students face an increasing variety of degrees, which is leading to excessively demanding students (Ivy, 2008; Molesworth et al., 2009) and thus reinforces the 'competition' between educational institutions (Mai, 2005). Thus, the satisfaction among students regarding to the educational service offerings has become more important for educational institutions in recent years (Molesworth et al., 2009).

Customer satisfaction is crucial to sustainability, growth and profit for organization's supplying goods or services. Thus, better understanding of customers' perception helps companies to strategize the actions necessary to convene the customers' needs and wants. It measures the overall performance of an organization in meeting the customers' expectation. Thus, it is an eminent threat for business to fail to meet the customer perception of the service they are offering. Customer satisfaction is the sole and prominent asset for business to survive and maintain worthwhile growth.

Recently, a growth in distance education programs can be seen because of the time and space restriction of face-to-face learning system. It is also economically advantageous and preferable by working students. St. Mary University has an open and distance education covering almost the entire country. But a research on the customer satisfaction and service quality of college of open and distance education, St. Mary University is scant. Hence, this study aims to fill this gap and examines the students' satisfaction on the open and distance undergraduate program of St. Mary University.

1.3 Objective of the Study

1.3.1 General Objective

The main objective of this study is measuring the service quality at CODL, St. Mary University using the SERVQUAL model with special emphasis to customers' perception-expectation gap in terms of the five service quality dimensions, i.e. tangibles, reliability, empathy, responsiveness and assurance. Moreover, the study aims to assess the service quality and customer satisfaction of students of CODL, St. Mary University.

1.3.2 Specific Objectives

❖ To measure customers' perception and expectation gaps using reliability, tangibles, assurance, empathy and responsiveness dimensions in the case of CODL, St. Mary University.

- ❖ To assess the dominant service quality dimensions that influence quality service and customer satisfaction in the University.
- ❖ To assess the level of service quality and customer satisfaction of the students of CODL, St. Mary University.

1.4. Research Question

1. What are the gaps between the customers' perceptions and expectations on CODL, St. Mary University in terms of the five service quality dimensions?
2. Which dimensions of service quality is very important to customers?
3. How to improve service to customers?
4. What is the level of service quality and customer satisfaction of the CODL, St. Mary University?

1.5 Hypothesis of the Study

The following hypotheses are developed based on the above research question:

Service Quality and Customer Satisfaction in CODL, St. Mary University

H1: Tangibility: An increase in the quality of tangible services increases customer satisfaction.

H2: Reliability: An increase in the reliability of services increases customer satisfaction.

H3: Responsiveness: An increase in the responsiveness of services increases customer satisfaction.

H4: Assurance: An increase in the quality of assurance in services increases customer satisfaction.

H5: Empathy: An increase in the quality of empathy in services increases customer satisfaction

II. REVIEW OF RELATED LITERATURE

2.1. Theoretical Literature Review

2.1.1. Service Quality

There are many definitions of quality derived from different scholars. One of them is a, qualities are those features of products which meet customer needs and thereby provide customer satisfaction (Juran, 1988). The purpose of such higher quality is to provide greater customer satisfaction. However, providing more or better quality features usually requires an investment and hence usually involves increases in costs. Good quality means a predictable degree of uniformity and dependability with a quality standard suited to the customer. Besides that, the customer's definition of quality is the only definition that matters (Juran, 1988). Crosby (1984) defined quality of goods as "conformance to requirements". Garvin (1983) identified internal failures (those observed before product left a factory) and external failures (those incurred in the field after a product had been delivered and installed) and measured quality by counting the malfunctions.

The review of articles on quality revealed that early research has been more focusing on defining and measuring the quality of tangible goods and products (Garvin, 1983; Juran, 1988) while the more challenging service sector was disregarded. Service quality has been defined in different ways by researchers. For Example, Gronroos (1984) suggests that service quality is made of two components– technical quality and functional quality. Technical quality refers to what the service provider delivers during the service provision while functional quality is how the service employee provided the service. Parasuraman, Zeithaml and Berry (1985) stated that it may be inappropriate to use a product-based definition of quality when studying the service sector and therefore developed the expression of "service quality". For this particular study, the difference between customer expectation of service and customers' perceptions is applied to measure service quality.

Quality is the keyword for survival of organizations in the global economy. Organizations are undergoing a shift from a production-led philosophy to a customer-focused approach. Competitiveness of a firm in the post-liberalized era is determined by the way it delivers customer service. Service quality is a concept that has aroused substantial interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). Firms with high service quality pose a challenge to other firms.

2.1.2. Customers' Satisfaction

Customer satisfaction According to Cook (2008), unless perceived expectations are met with actual performance, customers will become indifferent or be in a neutral mode. In general, increased customer satisfaction will lead to a higher customer retention rate, increased customer repurchase practice, and will eventually lead the firm to higher profitability. In principle, there are two ways that customers evaluate their Satisfaction: transaction-specific satisfaction and cumulative satisfaction. These are explained by Jones and Suh (2000), and supported by a study by Yi and La (2004). Transaction -specific satisfaction is a customer's evaluation of personal experience and reaction to a particular or a specific service encounter (Boshoff & Gray 2004). Cumulative satisfaction refers to the customer's overall evaluation of the consumer experience to the present time (Cook, 2008).

Customer satisfaction depends on the perceived performance of the product relative to the buyers' expectations. If product performance falls short of expectations, the customer will be dissatisfied. If performance matches expectations, the customer will be satisfied. And if performance exceeds expectations, the customer will be highly satisfied or delighted (Kotler & Armstrong, 2006). Customer satisfaction can be defined as the customer getting more benefit from the product or service than it has cost (Liu & Yen, 2010).

Put differently, customer satisfaction leads to customer loyalty and this also leads to profitability (Hallowell, 1996). If customers are satisfied with a particular high quality service offering after its use, then they can be expected to engage in repeat purchase and even try line extensions and thus market share can be improved. Levesque and McDougall (1996), have empirically confirmed and reinforced the notion that consistent poor customer experience leads to a decrease in the levels of customer satisfaction and the chances of further willingness to recommend the service (i.e., word of mouth advertising or referrals) is lessened.

Customer Satisfaction has been a central concept in marketing literature and is an important goal of all business activities. Today, companies face their toughest competition, because they move from a product and sales philosophy to a marketing philosophy, which gives a company a better chance of outperforming competition (Kotler, 2000). Overall customer satisfaction translates to more profits for companies and market share increase.

2.1.3. Relationship between Service Quality and Customer Satisfaction

Service quality is accepted as one of the basic factors of customer satisfaction (Parasuraman et al., 1994). However, there is much debate whether customer satisfaction is a precursor of service quality judgments (Bitner et al., 1990) or the other way round (Anderson and Sullivan, 1993). Definitive analysis has showed that service quality cannot be divorced from the concept of customer satisfaction. Recent studies have shown that satisfaction is influenced by not only perceptions of service quality but also by perceptions of product quality, and pricing factors as well as situational and personal factors.

The relationship between expectation, perceived service quality and customers satisfaction have been investigated in a number of researches (Zeithaml et al., 1988). They found that, there is very strong relationship between quality of service and customer satisfaction (Parasuraman et al., 1985). Increase in service quality of the banks can satisfy and develop attitudinal loyalty which ultimately retains valued customers (Nadiri et al., 2009). The higher level of perceived service quality results in increased customer satisfaction. When perceived service quality is less than expected service quality customer will be dissatisfied according to Cronin and Taylor (1992), satisfaction super ordinate to quality that quality is one of the service dimensions factored in to customer satisfaction judgment.

2.1.4. Service Quality and Customer satisfaction Measures: The SERVQUAL Model

SERVQUAL is a multi-dimensional research instrument designed to capture consumer expectations and perceptions of a service along five dimensions that are believed to represent service quality. SERVQUAL is built on the expectancy-disconfirmation paradigm, which, in simple terms, means that service quality is understood as the extent to which consumers' pre-consumption expectations of quality are confirmed or disconfirmed by their actual perceptions of the service experience. When the SERVQUAL questionnaire was first published in 1985 by a team of academic researchers, A. Parasuraman, Valarie Zeithaml and Leonard L. Berry to measure quality in the service sector, it represented a breakthrough in the measurement methods used for service quality research. The diagnostic value of the instrument is supported by the model of service quality which forms the conceptual framework for the development of the scale (i.e. instrument or questionnaire). The instrument has been widely applied in a variety of contexts and cultural settings and found to be relatively robust. It has become the dominant measurement scale in the area of service quality. In spite of the long-standing interest in SERVQUAL and its myriad of context-specific applications, it has attracted some criticism from researchers. The five Dimensions of a SERVQUAL model are:

Tangibles: appearance of physical facilities, equipment, personnel, and written materials. Tangibles provide Physical representations or images of the service that customers, particularly new customers, will use to evaluate quality. Service industries that emphasize tangibles in their strategies include hospitality services in which the customer visits the established to receive the service.

Reliability: ability to perform the promised service dependably and accurately. In its broadest sense, reliability means that the company delivers on its promises about delivery, service provision, problem solution, and pricing. Customers want to do business with companies that keep their promises, particularly their promises about their service promises and core service attributes. All firms need to be aware of customer's expectations of reliability. Firms that do not provide the core service that customer think they buying fail their customers in the most away.

Responsiveness: willingness to help customers and provide prompt service .this dimension emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints, and problems.

Responsiveness is communicated to customers by the length of time they have to wait for assistance, answers to question, or attention to problems. Responsiveness also captures the notion of flexibility and ability to customize the service to customer needs. The excel on the dimension of responsiveness, accompany must view the process of service delivery and the handling of request from the customer point of view rather than from the company's point of view. Standards of speed and promptness that reflect the company's view of internal process requirement may be very different from the customer's requirement for speed and promptness.

Assurance: employees' knowledge and courtesy and their ability to inspire trust and confidence. This dimension likely to be particularly important for service that customer perceive as high risk or for service of which they feel uncertain about the ability to evaluate outcomes. Trust and confidences may be embodied in the person who links the customer to the company.

Empathy: caring, individualized attention g given to customers. The essence of empathy is conveying, through personalized or customized service that customers unique and special and that their needs are understood customers want to feel understood by and important to firms that provide service to them. Personnel at small service firms often know customers by name and building relationship that reflect their personal knowledge of customer requirements and preferences.

Table 2.1:- Dimension of service quality

Dimension	Description
Tangibles	Physical facilities, equipment provided by the staff for customers
Responsiveness	Staff's willingness to help users or provided prompt services
Reliability	To provides reliable and accurate service
Assurance	Staff's knowledge and courtesy that make users assured and confident
Empathy	Staff's empathy to provide concerns or individual attention

Source: Adapted from (Parasuraman, Zeithaml, and Berry, 1988)

2.2. Empirical Literature Review

The study of Zarghami & Hausafus (2002), measured the satisfaction of students enrolled in different interactive televised (ITV) courses offered both as origination sites on-campus and at a distance remote site. ITV courses were taken in content areas such as human development, political science, agriculture education, family and consumer sciences, administration, economics, business and mathematics. According to results, both origination and remote students were satisfied-remote students were more satisfied-with their experiences, agreed that facilities and technologies promoted effective communication and learning, the content of the courses was well organized and instructional materials were relevant and helpful.

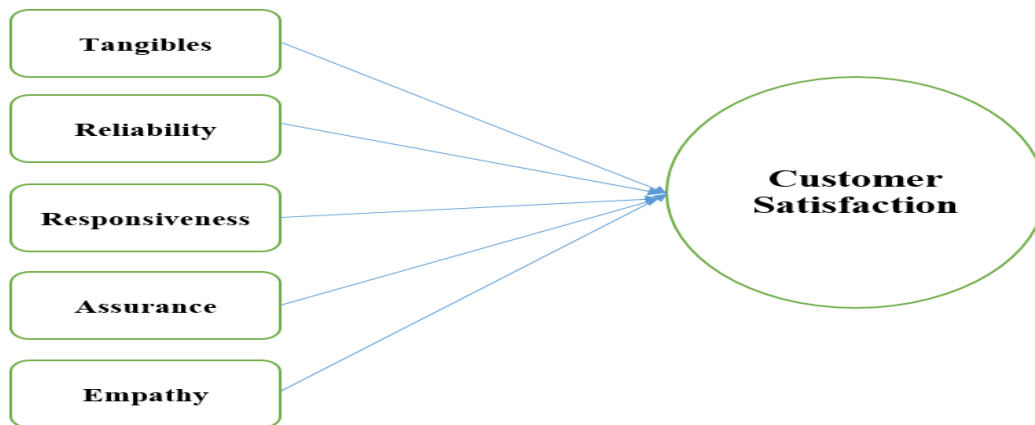
Popovich & Neel (2005), surveyed business school deans at institutions accredited by the AACSB (Association to Advance Collegiate Schools of Business) on distance education programs offered at their respective schools and examined sixteen characteristics of the distance education programs such as the number of business schools with distance education offerings, schools not offering distance education programs, future plans, degree level of programs, number of years offered, number of graduates, length of programs, public or private institutions, grant funding, faculty qualifications and student faculty ratio, method of delivery, use of a librarian, geographic areas served, tuition rates, availability of financial aid, and the successful aspects. This study provided evidence that there were positive aspects to AACSB International business school distance education programs. The results of the study may be helpful in making decisions about new distance education programs and in developing existing programs.

Gagne & Shepherd (2001), analyzed the performance of two class sections in an introductory graduate level accounting course; one section was a traditional campus-based class and the other section was distance education class. According to the results, the performance of the students in distance course was similar to the performance of students in the on-campus course. The students' evaluations of the course were similar, but students in the online course were less satisfied with instructor availability than the on-campus students.

2.3. Conceptual Framework

The conceptual framework presented below served as the foundation of this study. It is adopted from the Parasuraman et.al. (1985) gap model theory.

Figure 2.1: - Conceptual Framework of the SERVQUAL model



Source: - Adapted from: (Parasuraman, Zeithaml, and Berry, 1988)

III. RESEARCH METHODOLOGY

3.1. Research Design

Since the objective of the study is to assess the quality service and customer satisfaction of St. Mary University College of open and distance learning, the research used a descriptive type of research design which helps to describe the characteristics of service quality dimensions. According to Saunders, Lewis and Thornhill (2009), descriptive research gives general information about the phenomena.

The most widely used model to measure perceived service quality is developed by Parasuraman et al., (1985) known as SERVQUAL. The SERVQUAL model proposes that customers evaluate the quality of a service on five distinct dimensions: reliability, responsiveness, assurance, empathy, and tangibles. The SERVQUAL instrument consists of 22 statements for assessing consumer perceptions and expectations regarding the quality of a service.

3.2 Sampling Technique and Sample Size Determination

3.2.1 Population

According to a report from the CODL administration, there are around 6630 students who are qualified to take the November, 2021 term examination over 52 exam centers. Since it is costly and time taking to collect data from all CODL centers, only 28 centers was considered as a target population for the study.

3.2.2 Sample

In order to get sample from the target population the researcher used two stages sampling process. First it employed a proportional sampling technique which enables the proportional distribution of samples across the CODL centers. Then a simple random sampling technique is used to assure attainability of representative samples. To have real sample size with the consideration of missing problems the researcher used the formula developed by Yamane (1967). The simplified formula developed is written as:

$$n = \frac{N}{1 + N(e^2)}$$

Where: - n is the sample size,
N is the population (total household size) and
e is the level of precision or sample error.

Thus the sample required to estimate a population with an approximate 95% confidence level is calculated as: -

$$\begin{aligned}
 n &= \frac{N}{1 + N(e^2)} \\
 &= \frac{6630}{1 + 6630(0.05^2)} \\
 &= 377
 \end{aligned}$$

A total of 415 samples (377 calculated sample size plus 10% contingency) is assigned over the 28 CODL centers proportionally. The remaining 45 questionnaire is administered in the main office of CODL, Addis Ababa.

3.3 Source of Data

To conduct this study both primary and secondary data were used. Primary data was collected by questionnaires from CODL centers of St. Mary University. Secondary data was also used to understand the literatures produced in the area. In addition reports produced by CODL St. Mary University were also used to conduct this research.

3.4 Sampling Tools

In order to collect data from sample CODL students of St. Mary University, questionnaire was prepared and delivered to each respondent. The questionnaire was prepared by English language and translated to Amharic for the sake of smooth communication. The questionnaire has four different parts, the first part contain questions related to respondents background and the second part is related to customer expectations of service quality and the third one is related to customer perceptions about service quality. The second and third parts of the questionnaires are divided into five different parts that consists closed questions based on the SERVQUAL-questionnaire which consist of 22 different statements (Parasuraman et al., 1988). Those statements are also divided into five different dimensions (tangibles, reliability, assurance, responsiveness and empathy). A Likert rating scale that is (a commonly used rating scale) which consist of 5 steps from 1 (strongly disagree) to 5 (strongly agree) is used. And the forth part hold open ended questions which give customer a chance to say what is in their mind.

3.5. Method of data analysis

After collecting research data it is necessary to analyze and interpret them. The purpose of analysis is to build up a sort of empirical model where relationships are carefully brought out so that some meaningful interfaces can be drawn. Data has to be analyzed with reference to the purpose or objective of the study and its possible bearing on scientific discovery. Virtually all research involves numerical data, or contains data that can be usefully quantified to help to answer research questions and meet objectives of the study (Donald &William, 1995).

After the collection of data from customers through questionnaire, it was categorized accordingly, and analyzed and interpreted by using different analytical methods. SPSS version 20 was used for data entry and presented in table form. And the average gap score are calculated by deducting the results of expectation dimensions from perception dimension. The average dimension SERVQUAL scores for all five dimensions are divided by five so as to get weight Score of service quality. Finally the necessary analysis and interpretation is made based on the result.

IV. RESULT AND DISCUSSION

4.1 Background Information of Respondents

As it can be seen in table 4.1 below from the total number of respondents, male respondents' accounts 225 or (60.3%) and 148 or (39.7%) are female.

Table 4.1:- Gender of Respondents

Sex	Frequency	Percent (%)
Female	148	39.70%
male	225	60.30%
total	373	100.00%

Source: own survey (2022)

Table 4.2:- Age of Respondents

Age	Frequency	Percent (%)
18-30	225	60.30%
31-45	130	34.85%
46-60	18	4.85%
≥61	0	0%
Total	373	100.00%

Source: own survey (2022)

As can be observed from Table 4.2 above, 225 respondents (60.3%) were between 18-30 Years of age. This result might indicate a shift in the demography of open and distance education, i.e. more and more young students are enrolling in the program.

Table 2.3:- Distribution of Respondents' years of enrolment at St. Mary University

Enrollment in year	Frequency	Percent (%)
Less than 1	49	13.14%
1-2	89	23.86%
2-3	144	38.61%
3-4	76	20.37%
>4	15	4.02%
Total	373	100.00%

Source: own survey (2022)

As regard to the Customers' relationship period with St. Mary University, the responses collected and presented in Table 4.3 shows that 309(82.8%) of the respondents were rolling in the University for 1 - 4 years, of which majority of the students 144(38.61%) spent 2 to 3 years in their respective field of studies in the University. This is done intentionally by the researcher in order to give more weight to the opinion of students who have more than one year of experience with the program.

4.3. Analysis of data

The SERVQUAL model proposed by Parasuraman et al., (1988), was used as the main guide for structured questionnaire where data was collected accurately on the customers' expectations and perceptions of service quality. The researcher used the SERVQUAL 5 dimensions (Tangibles, Reliability, Responsiveness, Assurance, and Empathy) which are subdivided into 22 attributes, which were directed to measuring service quality in CODL, St. Mary University. Both expectations and perceptions are measured using a 5-point scale to rate their level of agreement or disagreement (1-strongly disagree and 5- strongly agree), on which the higher numbers indicate higher level of expectation or perceptions. Service quality scores are the difference between the perception and expectation scores (P-E). And the analyses are discussed below.

4.3.1 Tangibility

Table 4.4:- Tangibility Dimension

Dimension	Description	Average Expectation Score(E)	Average Perception Score(P)	Average Gap Score G = P - E	
Tangibility	1	The recommended module text and the tutorials must always be up to date.	4.69	3.81	-0.88
	2	The university's overall environments should make you feel comfortable.	4.43	3.71	-0.72
	3	The sense of the professionalism conveyed by the ambience in the tutorials and the level of ancillary services should be high.	4.73	3.52	-1.21
	4	The level of the difficulty of the work load should be reasonable.	4.6	3.43	-1.17
	Total average Gap Score		4.613	3.618	-0.995

Source: own survey (2022)

As depicted in Table 4.4 above, the score gap for all the five measures of the tangibility attribute is negative indicating that the students' perception is less than their expectation. This evidence that students expect CODL, St. Mary University to do more on tangibility dimension at least to the level of their expectations. The result indicates that the employees of the University should address this gap in order to improve the students stay with the programme.

4.3.2 Reliability

Reliability is the ability to perform the promised service dependably and accurately (Parasuraman et al., 1988). That means the University's service must be accomplished on time, every time, in the same manner and without errors.

Table 4.5:- Reliability Dimension

Dimension		Description	Average Expectation Score(E)	Average Perception Score(P)	Average Gap Score G = P - E
Reliability	1	If the University promises to perform the service within a certain time it must always be kept.	4.66	3.69	-0.97
	2	The University must solve complaints or problems with great concern.	4.72	3.67	-1.05
	3	The University must deliver the service correctly.	4.72	4.1	-0.62
	4	The University must deliver the service at the time agreed on.	4.5	3.77	-0.73
	5	The University must insist on error free records.	4.68	3.93	-0.75
	Total average Gap Score			4.656	3.832

Source: own survey (2022)

As depicted in Table 4.5 above, the score gap for all the five measures of the reliability attribute is negative indicating that the students' perception is less than their expectation. This evidence that students expect CODL, St. Mary University to be more reliable at least to the level of their expectations. The result indicates that the employees of the University should address this gap in order to improve the students stay with the programme.

4.3.3 Responsiveness

Table 4.6:- Responsiveness Dimension

Dimension		Description	Average Expectation Score(E)	Average Perception Score(P)	Average gap core G = P -E
Responsiveness	1	The University should have respect for your feelings, concerns and opinion.	4.63	3.65	-0.98
	2	It is realistic to expect immediate service delivery from the bank.	4.66	3.92	-0.74
	3	Employees of the University must always be willing to help students.	4.53	3.67	-0.86
	4	Employees of the University should show concern when you have problem.	4.69	3.9	-0.79
	Total average Gap Score			4.627	3.785

Source: own survey (2022)

As depicted in Table 4.6 above, the score gap for all the five measures of the responsiveness attribute is negative indicating that the students' perception is less than their expectation. This evidence that students expect CODL, St. Mary University to be more responsive at least to the level of their expectations. The result indicates that the employees of the University should address this gap in order to improve the students stay with the programme. Therefore the University must build knowledge and courtesy of employees and their ability to communicate and provide prompt response.

4.3.4 Assurance

Table 4.7:- Assurance Dimension

Dimension		Description	Average Expectation Score(E)	Average Perception Score(P)	Average Gap Score G = P - E
Assurance	1	The behavior of employees in the University impress students with the reliability of service.	4.57	4.05	-0.52

	2	The students feel confident when they contact with Employees of the University.	4.61	3.96	-0.65
	3	Employees of the University are always approachable and courteous.	4.41	3.81	-0.6
	4	Employees of the University must have sufficient knowledge to answer Students' questions.	4.58	3.79	-0.79
	Total average score gap		4.542	3.902	-0.64

Source: own survey (2022)

As depicted in Table 4.7 above, the score gap for all the five measures of the assurance attribute is negative indicating that the students' perception is less than their expectation. This evidence that students expect CODL, St. Mary University to be more assuring at least to the level of their expectations. The result indicates that the employees of the University should address this gap in order to improve the students stay with the programme. Therefore the University must build knowledge and courtesy of employees and their ability to inspire trust and confidence.

4.3.5 Empathy

According to Cambridge English dictionary, empathy means the ability to share someone else's feelings or experiences by imagining what it would be like to be in that person's situation. Empathy represents care and individual attention the firm provides to its customers (Parasuraman et al., 1988). The CODL, St. Mary University program should hence make customers/students feel like a family and try to become understanding of its customers' expectations and experiences.

Table 4.8:- Empathy Dimension

Dimension	Description	Average Expectation Score(E)	Average Perception Score(P)	Average Gap Score G = P - E	
Empathy	1	Employees of the University show concern when you encounter problem during your engagement with the University.	4.68	3.71	-0.97
	2	St. Mary University and its employees gives you individual attention.	4.46	3.28	-1.18
	3	The employees of St. Mary University understand your specific needs	4.64	3.48	-1.16
	4	Employees of the University understand the diverse background of the students.	4.53	3.37	-1.16
	5	St. Mary University's has your best interests at heart.	4.50	3.61	-0.89
	Total average score gap		4.562	3.490	-1.072

Source: own survey (2022)

As depicted in Table 4.8 above, the score gap for all the five measures of empathy is negative indicating that the students' perception is less than their expectation. This evidence that students expect CODL, St. Mary University to do more in order to meet their expectation on empathy dimension. The result indicates that the employees of the University should address this gap in order to improve the students stay with the programme.

4.4 Analysis of Open ended Questions

4.4.1 The level of importance in SERVQUAL dimension

From the SERVQUAL five dimension customers were asked to level each of these dimensions based on their importance to them. And by counting the respondents answer the most important dimension is identified. From the total respondent high number of respondent give priority to reliability dimension and followed by empathy, assurance, responsiveness and tangibility. Some respondents believe that these dimensions are inseparable and equally important to them. Hence more respondents believe reliability dimension is crucial to them, the University should focus to narrow the gap of customer expectation to that of perception.

4.4.2 Challenges faced by customers during service delivery time

More than 40% of the respondents faced a problem related to improper handling of their examination and assignment. According to these respondents, in the programme it is very common to face a problem with exam answer sheet and/or misplacement and sometimes complete disappearance. This problem created a great deal of inconvenience for the customers and affected their result and schedule. The other major challenge mentioned by the respondents were about the problems associated with examination integrity. The respondents mentioned that they lost confidence on the integrity of the term examinations as the answer and sometimes the examination itself is accessed through different communication platforms like Telegram prior to the examination date and time.

4.4.3 To solve the challenge and to improve the CODL's service quality

To solve these challenges respondents suggested that the University should upgrade its document handling mechanisms so as to get solution to the major problem of improper handling of students results. They also recommend a technological solution to address the above mentioned problem. On top of that the respondents suggested the University should evaluate its examination handling, dissemination and invigilation protocols so as the integrity of the examination and the reputation of the University will be kept intact.

4.5 Discussions

Table 4.9:- Service quality dimensions

Service Quality Dimensions	Expectation Score	Perception Score	Total Average Score Gap
Tangibility	4.613	3.618	-0.995
Reliability	4.656	3.832	-0.824
Responsiveness	4.627	3.785	-0.842
Assurance	4.542	3.902	-0.64
Empathy	4.562	3.490	-1.072
Overall average SERVQUAL gap score	4.600	3.725	-0.875
Variance	0.002	0.028	0.028
Standard Deviation	0.047	0.168	0.167

Source: own survey 2022

As indicated in the table above, the mean scores of all the five dimensions of service quality are negative, which indicate that customers/students are less satisfied by the University's services as their expectation is more than their perception of the overall service quality. In other words the quality of the services rendered at CODL, St. Mary University is less than from what customers are expecting from consuming such service.

Table 4.9 shows the average score gap for the five dimensions of service quality showed a negative disconfirmation score of -0.875. The highest Mean gap is for empathy (-1.072) followed by tangibility (-0.995), and responsiveness (-0.842). On the other hand the smallest gap score is from assurance (-0.64). This shows that on comparison from other dimensions the University is expected to improve a lot in the empathy dimensions to bring more changes in its service quality.

The researcher examined the difference between customers' expectations and customers' perceptions of CODL, St. Mary University and find that the respondents' overall average expectation on a scale of 1 to 5 is 4.60. This implies that customers expect a lot from the University to get quality service. The variance and standard deviation values of both the expectation and perception dimensions for the five customer service quality measurement attributes is very low. Since standard deviation is the spread of a group of numbers from the mean and variance measures the average degree to which each point differs from the mean, the low value indicates that the respondents/students view each attributes almost equally important in measuring customer service quality.

However, looking at each dimensions it is realized that customers expect the University to be more reliable from the reliability dimension with a score of 4.613. This shows that this dimension is highly expected by customers and customers are therefore very sensitive to each attribute in this dimension. The highest average

mean score of reliability is followed by mean value of responsiveness dimension with average score of 4.627 and tangibility dimension with a average score of 4.613.

With regard to customer perception of service in CODL, St. Mary University, the overall average score in a scale 1 to 5 is 3.725. And it is realized that customer expectations are more than perception. From the five dimensions customer perception is relatively low in empathy dimension with the average score of 3.49 and the highest perception mean value is from assurance dimension, 3.902. This result indicates that students of CODL, St. Mary University perceive the assurance they get from the University is relatively higher than the other customer service quality measuring attributes of the SERVQUAL model.

V. CONCLUSION AND RECOMMENDATION

5.1 Conclusion

In assessing the service quality and customer satisfaction of CODL, St. Mary University, the following conclusion are drawn based on the findings of the study.

From the gap score analysis carried out, customers/students have high expectation, mean value of 4.6, regarding service quality of higher education from CODL, St. Mary University and from the five dimensions SERVQUAL model, reliability exhibits the highest expectation score, 4.656. But looking at the variance (0.002) and standard deviation (0.047) values of the expectation score, it is possible to conclude that all the five attributes of SERVQUAL model are almost equally relevant in the eyes of the students of St. Mary University, CODL.

Similarly, when we look at the perception score values of the perception score, assurance exhibits the highest score of 3.902 followed by reliability with a perception score of 3.832. This indicates that among the five attributes of SERVQUAL model, the students perceived that CODL, St. Mary University performs better in assuring the students and be reliable in the service that it provides.

On all five attributes the total average score gap is negative indicating the lack of satisfaction among the students on the service provided by CODL, St. Mary University. The highest negative score gap is found to be on the empathy dimension, -1.072, followed by tangibility, -0.995. This indicates that the college of open and distance education at St. Mary University should address these main sources of student dissatisfaction.

5.2 Recommendations

Based on the findings and conclusion of the study the following recommendations are forwarded:-

The college of open and distance education should give special attention to empathy dimension since it exhibits the highest negative score gap. This can be achieved through successive training to the employees of the University on the value of empathy to achieve a better customer satisfaction and on how to be and show empathy.

The college also needs to work hard to maintain and improve its reliability as students prioritize reliability as the major attribute that affects service quality and hence satisfaction. The University should try to perform the promised service regularly and accurately through setting and following standards and procedures.

The problem of examination integrity should also be addressed by CODL and the University's top level management as it is staining the University's long standing reputation and eroding the students' trust.

Finally this research understood the need for a special and closer evaluation of the program as it fails short in satisfying its customers on all measures of customer service quality. The management of the University and particularly the college should work hard in addressing the service quality issues found through this study to maintain its current status in Ethiopian private higher education institution.

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