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**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE**

**Department of Marketing Management**

**The Effect of Service Quality on Students Satisfaction: the case of Private  
Higher Education Institutions in Addis Ababa**

**By: Semira Alferid**

**June 2019**

**Addis Ababa, Ethiopia**

**The Effect of Service Quality on Students Satisfaction: the case of  
Private Higher Education Institutions in Addis Ababa**

**By: Semira Alferid**

**Advisor: Mesfin Workineh(PhD)**

**A Thesis Submitted to the School of Graduate Studies of Addis  
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**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE**  
**GRADUATE STUDIES MA PROGRAM**

**The Effect of Service Quality on Students Satisfaction: In the case  
of Private Higher Education Institutions in Addis Ababa**

**Prepared by: Semira Alferid**

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## Statement of Certification

This is to certify that the thesis is prepared by Semira Alferid, entitled ; **The Effect of Service Quality on Students Satisfaction: In the case of Private Higher Education Institutions in Addis Ababa.** In partial fulfillment of the requirements for the award of the Degree of Master of Arts in Marketing Management with the regulation of the University and the accepted standards with respect to originality.

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Advisor: Mesfin Workineh

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Date

## **Statement of Declaration**

I, Semira Alferid, hereby declare that this Master thesis entitled “The Effect of Service Quality on Students Satisfaction: In the case of Private Higher Education Institutions in Addis Ababa” is an original work. I have carried out the present study independently with the guidance and support of the research advisor, Dr. Mesfin Workineh. Any other research or academic sources used here in this study have been fully acknowledged.

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Semira Alferid

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Date

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## Abbreviations and Acronyms

A.A	Addis Ababa
HE	Higher Education
HERQA	The Higher Education Quality and Relevance Agency
HEdPERF	Higher Education Performance
IPA	Important Performance Analysis
MoE	Ministry of Education
PHEI	Private Higher Education Institution
SERVPERF	Service Performance
SERVQUAL	Service Quality
SPSS	Statistical Package for Social Sciences

## **ABSTRACT**

*Measuring service quality in higher education has become important to determine students' level of satisfaction. This paper mainly focus on the effect of service quality on student's satisfaction in Addis Ababa private higher education institutions with the specific objective of identifying the service quality dimensions used by students to evaluate the quality of service offered by the private higher education institutions. The researcher used explanatory research design and questionnaires were administered to gather data. Quantitative research approach was conducted to collect information from primary sources .Samples of 374 students from the four private universities in Addis Ababa was contacted. Out of the 374 questionnaires distributed, 360 were deemed valid. The collected data was analyzed through SPSS version 20.0 .The scale constructed to measure the HEdPERF service quality included Academic Aspects, Non-academic Aspects, Program Issues, Reputation and Access. The methods used in data analysis include descriptive analysis and inferential statistics. The findings established that Non-academic Aspects, Program Issues, Reputation and Access proved to be very essential and are predictors of students satisfactions of Higher Education Institutions (HEI) particularly in the case of private institutions in Addis Ababa .On the contrary Academic Aspects had positive but no significant influence on students satisfaction. Non -academic aspect, program issues, reputation and access have high effect on students' satisfaction so PHEI should give priority to these aspects. Overall students' satisfaction was found to be positively explained by the sum of the five independent variables by 66.4 % in the study .According to the finding of the study Reputation and Academic Aspects dimension of HEdPERF have shown average mean score. This study contributes to the scant literature testing the applicability of service quality in the educational sector specifically in Ethiopia.*

**Key words: Service quality, Students satisfaction, Higher education, HEdPERF model**

# CHAPTER 1

## INTRODUCTION

### 1.1. Background of the Study

World has witnessed a great shift in their economic systems. Now many economies are shifting from manufacturing and industry based economies to service economies. Service industry is the lifeline for the social economic growth of a country. It is the largest and fastest growing sector globally contributing more to the global output and employing more people than any other sector. For most countries around the world, services are the largest part of their economy. Service is a process consisting of a series of more or less intangible activities that normally, but not necessarily always, takes place in interactions between the customer and service employees and/ or physical resources or goods and /or systems of the service provider, which are provided as solutions to customer's problems (Gronroos, 2000).

In today's world of global competition, rendering quality service is a key for success, and many experts concur that the most powerful competitive trend currently shaping marketing and business strategy is service quality. Service quality is becoming marketers' strategic issue in today's competitive business environment, because of the direct and strong relationship it has with customer satisfaction. According to Parasuraman Zeithaml, and Berry (1988) service quality is a form of attitude related but not equivalent to satisfaction, which results from customers comparing expectations with their perceptions of performance. Fogli (2006) define service quality as "a global judgment or attitude relating to a service: the customer's overall impression of the relative inferiority or superiority of the organization and its services. Service quality is a cognitive judgment ". Service quality is a critical success factor that affects an organization's competitiveness and profitability.

Customer satisfaction is the concept that occupies a central position in marketing thought and practice (Potluri & Mangnale ,2010 ).Customer satisfaction is actually how customer evaluates the ongoing performance (Gustafsson,Johnson & Roos ,2005) and it is critical issue in the success of any business system in today's business world(Ahmed ,Nawaz,Usman,Shaukat ,Ahmad & Iqbal ,2010).Customer satisfaction is a representation of the customer's reaction to the value

received from a particular product or service offering and it is tied to the customer's perception and expectations of service performance (Jenet ,2011).

Students' satisfaction can be defined as a function of relative level of experiences and perceived performance about educational services during the study period (Hassan, Ilias, Rahman,&Razak, 2008).According to Kontic (2014) students' satisfaction is generally accepted as short –term attitude resulting from an evaluation of a student's educational experience. Students are the key customers of higher education institutions (Helgesen &Nesset, 2007) state that student satisfaction is built continuously with experiences on campus during their study period.

Customer satisfaction is influenced by various factors. One of the most determinant factor for customer satisfaction is service quality due to the fact that customer satisfaction has been considered to be based on the customer's experience on a particular service encounter (Cronin & Taylor,1992).Service quality has been recognized as a key strategic issue for organizations operating in service sectors. Organizations achieving higher levels of service quality have high levels of customer satisfaction, an antecedent of sustainable competitive advantage (Lewis ,1991).Hence many service organizations have adopted the principles of service quality to maximize customer satisfaction and to increase their customer base and the application of these principles has also trickled into public sector organizations(Osei ,2012).

Out of the various services that are used for source of earning money is education sector. Now it is considered as a business and all the concepts and theories of business are applied on this sector as well. One of the important concepts, that are deemed to be of great significance from the perspective of all the stakeholders, is the concept of quality. The concept of quality has also evolved among the educational institutions and has helped develop a competitive environment that ultimately raises the importance of measuring the quality of services among universities (Gbadamosi and De Jager, 2008).

Service quality is of utmost importance in analyzing the performance of service organizations. Wang Lo and Yang (2004) point out that customers-perceived service quality is one of the key success factors for sustained competitive advantage for both manufacturers and service providers. Higher education is certainly one of these and this is especially the case for Private higher education institutions (PHEIs). Service quality in higher education is currently measured

by student satisfaction and quality in higher education can be determined by the extent to which students needs and expectations are being met.

There are many stakeholders of educational institutions ranging from internal to external stakeholders. Out of all these, students are considered to be one of the most important stakeholders. They are considered important as they bridge the relationship between academic institutions and other stakeholders i.e. parents, society, employers and satisfaction of these stakeholders is dependent on the satisfaction of students, as students are the primary consumers in HEI.

Service quality is a key driver of marketing strategies and effectiveness in higher education institutions and is highly related to student satisfaction .Student satisfaction is often used to assess educational quality where the ability to address strategic needs is of prime importance(Cheng ,1990).Service quality promotes customer satisfaction stimulates intention to return ,and encourages recommendations(Nadiri& Hussain ,2005).Customer satisfaction increases profitability market share and return on investment.

For higher education institutions student satisfaction is a major challenge and as Arambewela and Hall (2009) posit, it is also the major source of competitive advantage and student satisfaction leads to student attraction, retention and the spread of positive word of mouth communication by satisfied students .Students assess the quality of institutions on the grounds of tangibility(teachers), reliability and responsiveness (methods of teaching) and management of the institute and these factors have direct bearing on satisfaction level of students(Navarro, Iglesias & Torres 2005). In the increasing competition in the educational sector provision of better quality services is the basic strategic tool used by academic institutions. Positive perception regarding service quality of service offered leaves positive image in the mind of students which finally leads them towards higher level of satisfaction (Alves &Raposo, 2010).

In the Ethiopian context, the Government gives higher education a central position in its strategy for social and economic development. In Ethiopia, modern higher education began in 1950 with the establishment of the University College of Addis Ababa, a government institution, which later became Haile Selassie I University and still later Addis Ababa University (Teshome, 1990). In 1991, the country had only two public universities' and six colleges, with a capacity to enroll

only about 10,000. By May 2014, the number of public universities reached 31 with enrollment capacity of more than 300,000. Meanwhile, prior to 1991, private higher education institutions (PHEIs) did not exist in Ethiopia. Since 1992, 76 for-profit private HEIs (one university, three university colleges, 69 colleges, and three institutes) and three nonprofit private colleges have been founded (compiled by the author from various government publications). The total number of privately owned HEIs, universities, university colleges and institutes has now reached to more than 115.

The expansion of HEIs in Ethiopia brought about, as expected, a remarkable increase in student population. Between 1996 and 2003, the student population of the higher education system, including accredited private programs, increased from about 35,000 to more than 100,000. Eighteen percent of that total enrollment in 2003 came from private HEIs (Yizengaw, 2003). By 2010-2011, the total enrollment (undergraduate and graduate) of the HEIs (private and public) in all programs (regular, evening, summer, and distance education) was 467,843, of whom 79,314 or 17% were enrolled in private HEIs (Ministry of Education of Ethiopia [MoE], 2011). In the undergraduate program, where private HEIs are heavily involved, 21% of the enrollment was in private institutions (MoE, 2011).

When it comes to governance, the Ethiopian MoE, is the governing body of education in Ethiopia. PHEIs governance is closely monitored by the MoE through its legally organized agency, Higher Education Relevance and Quality Agency (HERQA). Although private HEIs are controlled by HERQA, public HEIs are established by regulation of the Council of Ministers and hence are not required to be accredited by HERQA. All private HEIs are required to obtain accreditation, renew accreditation, and submit to regular quality audits by HERQA. However, public HEIs are not required to go through HERQA's accreditation and reaccreditation process. The Ethiopian Ministry of Education through HERQA conducts Institutional Quality Audits (IQAs) in HEIs across the country.

The aim of this research is to investigate the effect of service quality on students' satisfaction in the case of private higher education institutions in Addis Ababa by using the HEdPERF model (Firdaus, 2005)

## **1.2. Background of the organization**

The purpose of this study is to assess the students' satisfaction on service quality of private higher institutions in Addis Ababa with the HEdPERF model given by Firdaus (2005) which contains five dimensions of service quality. The PHEIs that are under study are St Mary, Santa, Admas and Rift Valley University.

St. Mary University was established in 1998, is an Ethiopian institution of higher learning located in Addis Ababa. After fifteen years of service as a college first and university college since 2008, it earned university status from the Ethiopian Ministry of Education in September 2013. The University has four campuses in Addis Ababa, 13 Distance Education Regional Centers, and 160 Coordination offices throughout the country.

Admas University, which is one of the pioneer Private Higher Education Institutions in Ethiopia, commenced its operation in October 1998 under the name "Admas Business Training Centre". The Training Centre then started delivering training services in certain tailor-made short term programs. By undertaking deep assessments of further training needs and making preparations in terms of the required human and material resources, the Centre upgraded itself to a college status as of April 1999, and to the status of a University College as of March 2007. Finally, after ensuring that all the requirements of Higher Education have been met, the Ministry of Education of F.D.R.E granted full university status to Admas as of July 2014.

Rift Valley University was established in 2000. Rift Valley University is the largest private university in Ethiopia, with 27 campuses around the country. Known formerly as Rift Valley University College, Rift Valley University was granted full-fledged university status in 2014 by Ethiopia's Ministry of Education.

Santé Medical College is located in the vibrant capital of Addis Ababa, Ethiopia around Birsate Gabriel. It is a private higher education institution established to conduct/teach programs after obtaining accreditation from Higher Education Relevance and Quality Agency (HERQA). The College is a sister company of the renowned Santé Medical Center which also happens to serve a vital role for practical attachment of the trainees in the college.

### **1.3. Statement of the Problem**

Every educational institution needs to understand its internal strength and weakness and external opportunities and threats. The work of (Zeithamal, Bitner and Gremeler, 2009) suggests that one of the prime issues of poor performance in service organizations is ignorance on customer expectation. Higher education institutions are bound to fail if they do not have an accurate understanding of what their customers (students) expect of them. Higher education has become a competitive enterprise among both private and public higher education institutions. Due to the increase of these institutions, private universities face a challenging problem of declining students 'enrolment and poor strategic marketing planning as a result of intense competition among other institutions that offer the same courses. The quality of education is an important factor that is considered for attracting and retaining the students as it is a substantial investment made by their parents. Students' satisfaction plays a crucial role for the success of the institutions. The students' perception about satisfaction can act as an essential tool to enhance the universities service quality.

The Ethiopia education sector shows significant increment in number over the past two decades. In addition, the country has a plan to increase the coverage even more according to education sector development plan (MoE, 2011). Even though there is an increment in number the main concern is on the expansion of higher education system for profit without improving the service quality which may not lead to the attainment of the objectives. This is to mean that their emphasis is on quantity over quality. The PHEIs in our country focus on what is important for them rather than what is important for their students and it is usual to hear students complain about their dissatisfaction.

The other problem that is associated with these institutions is their focus on attracting new students rather than handling existing students' complaints effectively. Students are becoming more conscious of their consumers right and of gaps between their expectations of service delivery and the reality of that service. Majority of PHEIs have serious academic staff shortage with quality implications such as huge teaching loads eventually leading to discontinuation of tutorials and employment of unqualified personnel. The reputation of the public higher institutions hinders the growth of the private higher education institutions. The low level of legitimacy of these institutions is also another problem that PHEIs face. This is to mean that the

level of acceptance and trust is at an average level compared to public higher education institutions.

Furthermore, studies conducted on this subject have been very few in the context of Ethiopia. Little has been done on quality related issues in private higher institutions.

## **1.4. Research Questions**

### **1.4.1 Main Research Question**

What are the effects of service quality on students' satisfaction of private higher education institutions?

### **1.4.2 Sub- Research Questions**

- Which service quality dimension contributes most to students' satisfaction?
- What is the overall level of satisfaction of students towards the service quality in private higher education institutions?
- Which service areas do students consider to be important in improving the service quality in private higher education institutions?

## **1.5 Research Objectives**

### **1.5.1. General objective**

The main objective of the study is to examine the effect of service quality on students' satisfaction of private higher education institutions in Addis Ababa.

### **1.5.2. Specific objectives**

- To identify which service quality dimension contributes most to students' satisfaction.
- To measure the level of students satisfaction towards service quality in private higher education institutions.
- To suggest prior areas for improvement of the service offered in the private higher education institutions.

### **1.6. Significance of the Study**

As there is a tough competition going on all over the world. Enhancing service quality has been demonstrated across many industries, especially in the field of private higher education, quality of service and student's satisfaction plays a crucial role for success. The quality of service that can be applied to universities, especially to private universities differentiates them from the public universities. This study is important because it is going to measure the level of service quality and satisfaction among undergraduate students studying in PHEI. The result from the study can be used to give valuable information on the dimensions, which have been given priority by students in assessing the quality of services and satisfaction. The finding of the study will enable management of the institutions to gain valuable information on the actual practice of the services so as to take corrective actions. In addition to that, this study is going to provide the conclusions and some recommendations, which are hoped that it's going to provide useful information to the private higher education institutions.

### **1.7. Scope of the Study**

The literary boundary of the paper is concerned on examining the effect of service quality issues related to private higher institutions while public higher institutions are excluded. The research is conducted on regular second year and above students pursuing an undergraduate degree from the selected institutions. The reason as to why second year and above students are taken is, because students' are familiar with the institution and their perceptions of the institutions service delivery is dependable. In terms of variables there are other variables which are related to service quality which is not included in this study i.e. the Loading Quality Index (LQI) which consists of the communication and confidence dimensions, the three-component model which consists of service product, service delivery and service environment. The variables this study address are the service quality dimensions (independent) students' satisfaction on service quality (dependent), in doing so the researcher used HEdPERF model. Besides, the research is limited geographically to Addis Ababa. Methodologically, it is delimited to survey.

### **1.8. Limitations of the Study**

The primary limitation is lack of adequate research material conducted in this area within the country. The research only address students even though there are a number of stakeholders like instructors, staff members and others in PHEI .The study is only conducted from selected private

institutions in Addis Ababa .Therefore the findings of the study only describes service quality of this population, so it is not generalized to service quality of other higher education institutions or populations in Addis Ababa. The study is only valid for the period in which the investigation is conducted.

### **1.9. Organization of the Study**

The study is categorized into five chapters. The first chapter deals with introductory part consisting of introduction/background of the study, statement of the problem, objectives of the study, scope and limitation of the study, significance of the study, plan of the study and definition of terms.

Under chapter two, the literature review is presented. In this chapter, various theoretical concepts that relates with service quality dimensions and the approach to measure them and issues related with quality service is reviewed with emphasis on the educational center. Empirical review and conceptual framework is presented. Chapter three is the methodology part and it discusses the reason as to why the various research strategies are selected and the rationale for the sample selection process. Chapter four presents the findings of the study and it contains data presentation, analysis and interpretation of the results. The final chapter provides conclusion, recommendation with research limitation and future research suggestion.

### **1.10. Definition of Key Terms**

**Customer expectations:** are beliefs about a service that function as standards or reference points against which service performance is judged Siddiqi (2010).

**Customer Satisfaction:** is the customer's evaluation of a product or service in terms of whether that product or service has met their needs and expectations (Oliver, 1997).

**HEdPERF:**is a new and more comprehensive performance based measuring scale that attempts to capture the determinants of service quality within higher education sector (Firdaus, 2005).

**Perception:** is the process by which an individual select organizes and interprets information inputs to create a meaningful picture of the world (George, 2004).

**Quality:** it is the conformance to requirements of both the customer's and the products (Crosby, 1979).

**Service:** is any intangible act or performance that one party offers to another that does not result in the ownership of anything (Kotler & Keller, 2009).

**Service quality:** is a relativistic and cognitive discrepancy between experience-based norms and performances concerning service benefit (Roest and Pieters', 1997).

**SERVQUAL:** is operationalized in terms of the relationship between expectations and outcomes (Gilmore, 2003).

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

#### Introduction

This chapter will present an overview of current literature in the frame of the presented research problem. The review will cover discussion on service quality construct and its determinants, models for measuring service quality and the interplay between service quality and customer satisfaction. Key theories and arguments are identified from a wide range service quality, customer satisfaction and higher education literature.

#### 2.1. Theoretical Review

##### 2.1.1. Service Quality

In today's competitive environment delivering quality service is considered an essential strategy for success and survival (Parasuraman, Zeithaml and Berry, 1985). Service quality is a concept that has aroused considerable 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). The reason as to why it is difficult to define and measure service quality is the very essence of services intangibility, perishability, heterogeneity and inseparability of production and consumption as their main characteristics.

There are many researchers who have defined service quality in different ways. Lehtinen U. and J. R. Lehtinen (1982) conceptualized service quality as comprised of three dimensions: physical quality; interactive quality, and corporate quality. Physical quality dimensions refer to the quality of physical elements of service, including tangible products elements that accompany the service offer, supporting equipment and the physical environment where service takes place. Interactive quality dimension refers to the quality of interaction between customer and other elements of service experience, i.e. service personnel, other customers, and machinery and equipment. Corporate quality is the quality dimension which is developed through the years of existence of a service company.

The service quality from the service customer's perspective means how well the service meets or exceeds expectations. Because of the customer – oriented market, service quality is generally defined from the customer's perspective, which is usually termed as perceived service quality (Fisk, Grove and John, 2004). An examination of the available literature suggests that the three themes underlying the concept of 'service quality' are that, firstly, service quality is more difficult for the consumers to evaluate than goods quality. Secondly, that a perception of service quality is the result of consumers' comparison of their expectations with actual service delivery and finally service quality evaluations are not made solely on the outcomes of service, they also involve evaluations of the process of service delivery (Parasuraman et al., 1985).

### **2.1.2. Models for Measuring Service Quality**

During the last three decades, a lot of scientist work on service quality measurement and many measurements suggested but only some of them were acceptable and more used by scientists'. There are mainly two types of service quality conceptualizations that emerged in the 1980s from the Nordic (Gronroos, 1984) and American (Parasuraman, Zeithaml, and Berry, 1985, 1988) schools of thought.

#### **2.1.2.1. Nordic (European) model**

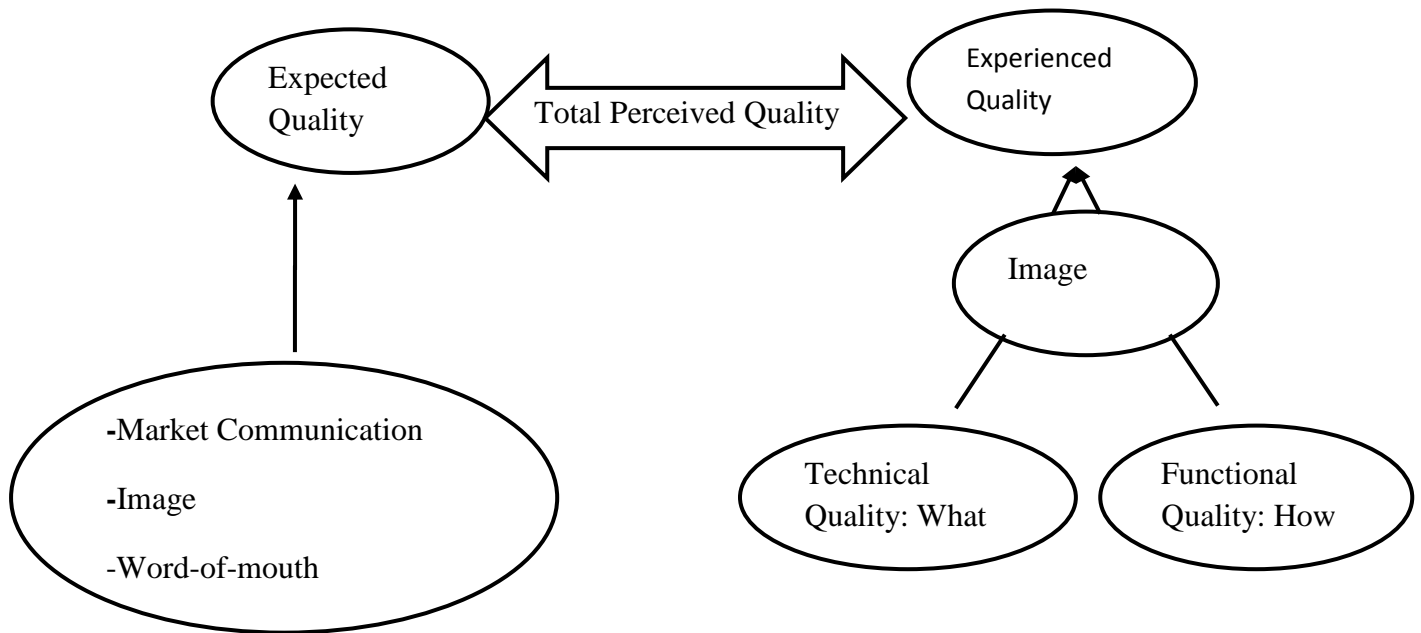
The Nordic model, originated by Christian Gronroos (1988) had found that two fundamental dimensions have an impact on the experienced service and the derived customer's perceived service quality. These two dimensions are the technical or outcome dimension and the functional or process related dimension.

The technical quality represents what the customer actually receives from the total service as a result of the process and is further known as the outcome dimension. Services are designed to produce a somehow tangible outcome and therefore customers can think of the quality of services varying according to the outcome received (Gronroos, 1988).

The functional quality dimension is how the customer receives the service and it concerns the process of delivering the service. The process delivery is conceived of as the moment of truth because it encompasses the pivotal moment in the service experience where the business is truly exposed to the customer through different levels of customer interaction (Svensson, 2006). These personal or non-personal interactions will evidently affect the customers' evaluation of the

perceived service quality. Hence, the evaluation is related to the psychological level of performance and could be based on the behavior of the company’s employees, the skills of the employees or the accessibility of the personnel needed in the process.

A third dimension identified by Gronroos is the corporate image of the service supplier i.e. the customers’ view of the company. The ‘image bubble’ functions as a buffer or filter for the technical and functional quality. Image is considered to have the ability to influence customers’ perception of the goods and services offered (Zeithaml and Bitner, 1996). Thus, image will have an impact on customers’ buying behavior. Image is considered to influence customers’ mind through the combined effects of advertising, public relations, physical image, word of mouth and their actual experiences with the goods and services (Normann, 1991).



**Figure 1: Nordic Model**

**Source: Gronroos (1988)**

Six sub-dimensions of service qualities were identified (Grönroos, 1988): (1) professionalism and skills, (2) attitudes and behavior, (3) accessibility and flexibility, (4) reliability and trustworthiness, (5) recovery, and (6) reputation and credibility. Professionalism and skills were regarded as contributing to the technical quality: reputation and credibility - forming an image;

the other four sub-dimensions are related to process and therefore correspond to the functional quality dimension.

#### **2.1.2.2. Criticism of the Nordic Quality Model**

As per Gronroos(2001),the Nordic model has been introduced conceptually but it lacks operationalization, it does not offer a practical measurement tool. The focus of the Nordic European school was on “the conceptualization of service quality without providing strong empirical evidence to support their position” (Ekinci, Riley, & Fife-Schaw, 1998). The aforementioned critique of the model is a corner stone of the Nordic school overall. In this school, theory generation is considered more important to the development of a discipline as opposed to theory acting as an antecedent to hypotheses-testing. It includes constant comparison between new and existing theory and in certain instances, traditional theory testing (Gronroos & Gummesson, 1985).

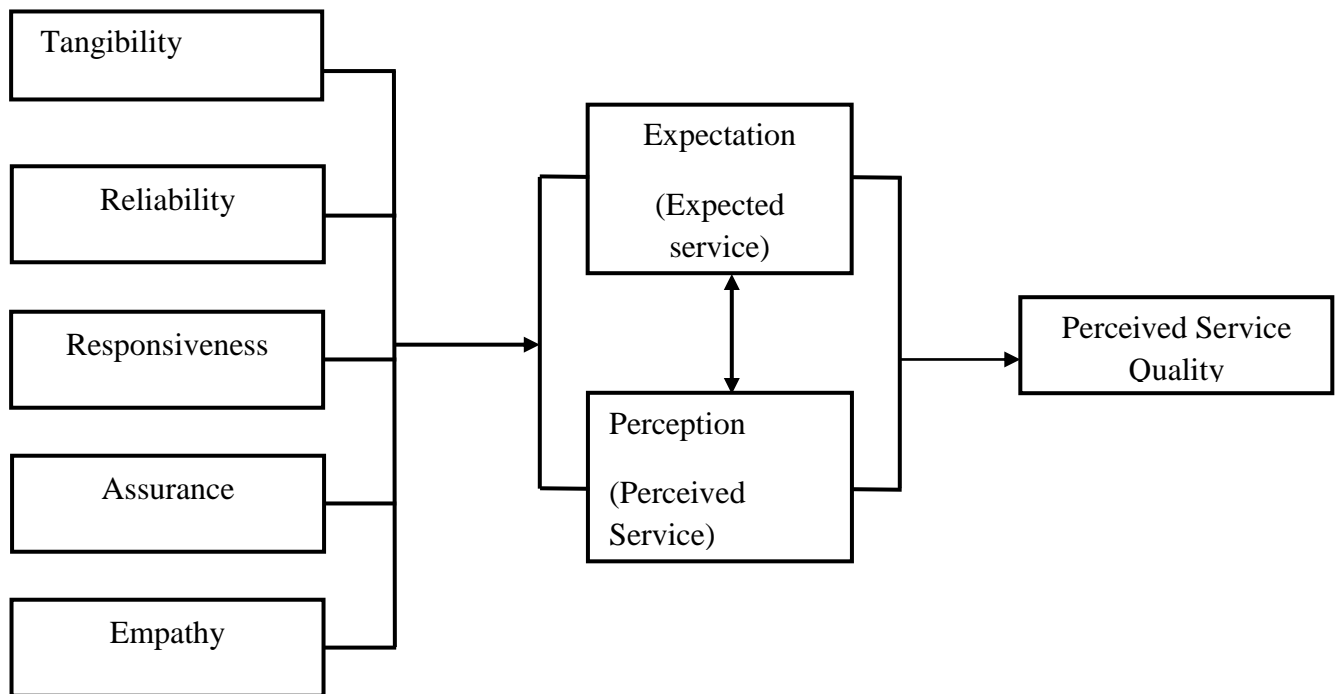
#### **2.1.2.3. American model**

Service quality is viewed as a multi-dimensional concept. Consumers assess and evaluate a number of factors or dimensions. The American approach proposes that service quality consists of reliability, responsiveness, empathy, assurance and tangibles dimension, known as SERVQUAL (Parasuraman et al., 1996). This model is based on expectancy -disconfirmation theory, views that service quality is a gap between customers’ perceptions’ and expectations’ of service performance. They try to cover the weakness of Nordic model by offering a new way for measuring service quality.

SERVQUAL was created to measure service quality and is based on the view that the customer’s assessment of service quality is paramount. It is operationalized in terms of the relationship between expectations and outcomes (Gilmore, 2003) .It is widely accepted that customers compare the service they expect with perceptions of the service they receive in evaluating service quality (Grönroos, 1982); (Parasuraman et al., 1985). The instrument has been designed to be applicable across a broad spectrum of services as such, it provides skeleton through its expectation/perceptions format encompassing statements for each of the five service quality dimensions (Parasuraman, et al., 1988).

The exploratory research conducted by (Parasuraman, et al., 1985) revealed that the criteria used by consumers in assessing service quality fit 10 potentially overlapping dimensions. These dimensions were, tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing customers and access (Parasuraman, et al., 1988) as cited on (Philip and Hazlett, 1997). These were subsequently condensed into five dimensions of service performance known as SERVQUAL namely these five scale items are:

1. **Reliability:** is defined as the ability to perform the promised service dependably and accurately.
2. **Responsiveness:** is the willingness to help customers and to provide prompt service.
3. **Assurance:** is defined as employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence.
4. **Empathy:** is defined as the caring, individualized attention the firm provides its customers.
5. **Tangibles:** are defined as the appearance of physical facilities, equipment, personnel, and communication materials.



**Figure 2: SERVQUAL Model**

**Source: Parasurman, Zeithaml & Berry (1988)**

#### **2.1.2.4. Criticisms of SERVQUAL**

Notwithstanding its growing popularity and widespread application, SERVQUAL has been subjected to a number of theoretical and operational criticisms (Buttle, 1996). SERVQUAL's five dimensions may not cover all service aspects of the organization and are not universal. The number of dimensions comprising service quality is contextually determined; Babakus and Boller (1992) suggested that the number of service quality dimensions is dependent on the particular service being offered. Andersson (1992) pointed to SERVQUAL's failure to draw on previous social research, particularly economic theory, statistics, and psychological theory.

The methodology of comparing the gap between expectation and perception has also attracted criticism. Cronin and Taylor (1992; 1994) argued that SERVQUAL is paradigmatically flawed because of its ill-judged adoption of the disconfirmation model. Babakus and Boller (1992) found that the use of a "gap" approach to service quality measurement is "intuitively appealing", they suspected that the "difference in scores does not provide any additional information beyond that already contained in the perception component of the SERVQUAL scale". They found that the dominant contributor to the gap score is the perception score.

Lewis (1993) criticized the use of a seven-point Likert scale for its lack of verbal labeling for points two to six which may cause respondents to overuse the extreme ends of the scale. Babakus and Mangold (1992) suggested using five-point Likert scale on the grounds that it would reduce the "frustration level" of respondents and increase response rate and quality. The double administrations of perception and expectation questionnaires may lead to boredom and confusion and may also be deemed too time consuming (Carman, 1990).

#### **2.1.3. Service Quality in Higher Education**

Educational service is intangible and it is produced by the service provider (teacher) and consumed by users (students) at the same time. Service quality in higher education institutions cannot be objectively measured, but it is a complex and diverse concept that should be explored (Hameed & Amjad, 2011).

The last decade was characterized by increasing of competition among higher education institutions. High quality service is an essential prerequisite for competitiveness and survival in

the market of higher education. The biggest challenge for academic institutions is which level of quality institutions must achieve in order to remain competitive in the market. To successfully overcome the aforementioned challenges higher education institutions are required to identify students' needs and understand the formation of student perceptions of service quality. Students' expectations significantly affect the assessment of service quality, and students' satisfaction. For the admission to higher education institutions, students' expectations are largely based on their past experiences of high school and the positive experience of students who attend or have attended that program.

Besides taking care about the quality of services, academic institutions are becoming more aware of the importance of student satisfaction since students' satisfaction has a positive influence on their decision to continue their education at that institution. Students' satisfaction influences on student motivation, their attendance and increase of revenue of educational institution (Vranesevic, Mandić, & Horvat, 2007).

#### **2.1.4. Customer expectations**

Customer expectations are beliefs about a service that serve as standards against which service performance is judged (Parasuraman et al., 1994); what customers think a service provider should offer rather than what might be on offer (Parasuraman et al. 1988). Expectations can be formed from a variety of sources such as the customer's personal needs and wishes. The customer's personal philosophy about a particular service, by promises (staff, advertising and other communications), by implicit service promises (such as price and the tangibles associated with the service), by word-of-mouth communication (with other customers, friends, family and experts), as well as by past experience of that service (Zeithaml and Bitner, 1996).

Customer expectations are internal standards that customers use to judge the quality of a service experience. Customers' expectations about what constitutes good service vary from one business to another. Customer expectations embrace several different elements, including desired service, adequate service, predicted service, and a zone of tolerance that falls between the desired and adequate service levels (Lovelock and Wright, 1999).

**1. Desired customer expectation:** the level of service the customer hopes to receive or a combine of what the customer believes about the performance of service.

**2. Adequate service expectation:** the minimum level of service that a customer will accept without being dissatisfied.

**3. Predicted Service:** the level of service quality a customer believes a firm will actually deliver.

**4. Zone of tolerance:** the range or gap in which customers do not particularly notice service performance. It is the extent to which customers recognize and are willing to accept.

### **2.1.5. Perceived Service Quality**

Perceived service quality results from comparisons by consumers of expectations with their perceptions of service delivered by the suppliers (Parasuraman et al., 1988). It is argued that the key to ensuring good service quality perception is in meeting or exceeding what customers expect from the service. Thus, if perception of the actual service delivered by the supplier falls short of expectation, a gap is created which should be addressed through strategies that affect the direction either of expectations or perceptions, or both (Parasuraman et al., 1988).

Chowdhury and Abe (2002) state that customers' perceptions of quality are generally formed on the basis of an array of cues. These cues basically fall into two categories: intrinsic and extrinsic cues. Intrinsic cues refer to attributes that cannot be changed without changing the physical characteristics of the product. Extrinsic cues, however, are attributes that are not part of physical product. Intrinsic cues are considered as the fundamental service qualities while extrinsic cues are the external or non-fundamental service characteristics of a university.

### **2.1.6. Instruments to Measure Service Quality in HEI**

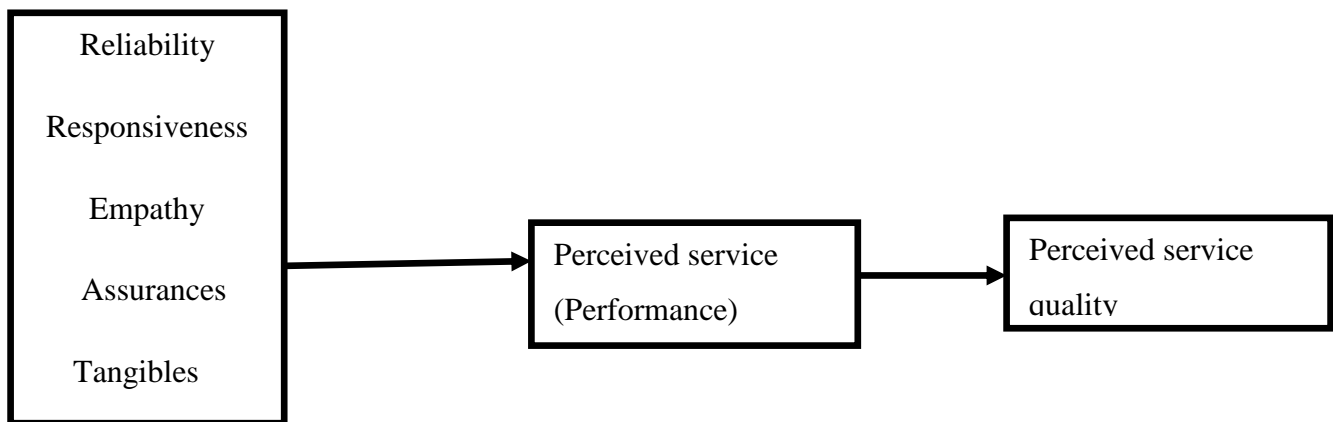
Different researchers have different views on measurement of service quality in higher education. Most of the studies employ SERVPERF, HEdPERF, SERVEQUAL, and Importance Performance Analysis.

#### **2.1.6.1. SERVPERF**

Cronin and Taylor's work (1992; Taylor and Cronin, 1994) on measuring service quality attempted to offer an alternative to SERVEQUAL. They investigated the conceptualization and measurement of service quality and the relationships between service quality, consumer satisfaction and purchase intentions. Their work focused on trying to overcome the 'perceptions-

minus expectations' measurement focus of SERVQUAL. The development of the SERVPERF model aimed to provide an alternative method of measuring perceived service quality and the significance of the relationships between service quality, customer satisfaction and purchase intentions. In investigating these concepts and the interrelationships between them they argued that:

- A performance-based measure of service quality may be an improved means of measuring the service quality construct.
- Service quality is an antecedent of customer satisfaction.
- Consumer satisfaction has a significant effect on purchase intentions and
- Service quality has less effect on purchase intentions than consumer satisfaction.



**Figure 3: SERVPERF Model**

**Source: Cronin and Taylor (1992)**

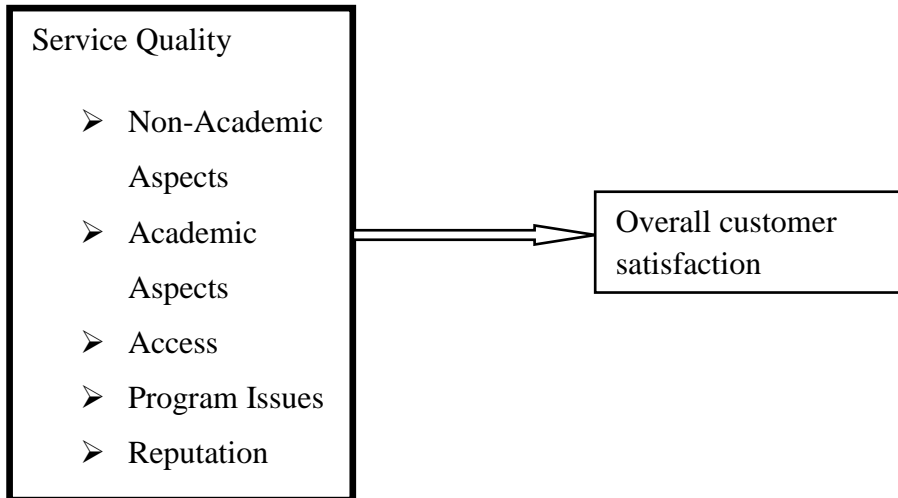
As a result, they presented a performance-based measurement, SERVPERF. The SERVPERF scale was created mainly in response to the criticism of the SERVQUAL scale. It particularly sought not to use disconfirmation-based measures as that was perceived to be a flaw in the SERVQUAL scale. It was built upon the premise that the best operationalization of service quality is achieved through measures of services' firm performance. The measures used in this scale were expectations, perceptions of performance, and importance measures. The SERVPERF scale was also simpler to manage as it required only one administration and so avoided the difficulties of measuring both expectations and perceptions.

However, after an investigation of the psychometric properties of the SERVPERF scale and results of a multi-industry study, Taylor and Cronin (1994) suggest that SERVPERF appears to suffer from the lack of a consistent and generalizable factor structure.

#### **2.1.6.2. HEdPERF (Higher Education Performance)**

A new industry-scale, called HEdPERF (Higher Education Performance) was developed comprising a set of 41 items (Firdaus, 2005). This instrument aims at assessing the relative strengths and weakness of each instrument in order to determine which instrument had the superior measurement capability in terms of dimensionality, reliability, validity and explained variance of service quality. Firdaus (2006a) proposed 41 item measurement tool based on six determinants, namely non-academic aspects, academic aspects, reputation, access, program issues and clear understanding. The measurement scales assess the level of service quality and explore how different dimensions' effect on service quality. Later, sixth dimension "understanding" was discarded.

- 1. Non-Academic aspects**-are factors that are essential to enable the students to fulfill their study obligations. This relates to the duties carried out by non-academic staff. It is concerned with the ability and willingness of administration or support staff to show respect, provide equal treatment among students and safeguard confidentiality of information. Additionally, it describes the importance of having positive attitudes and good communication skills.
- 2. Academic Aspects**-are the sole responsibility of those included in the academics staff. This factor represents the responsibilities of academics.
- 3. Reputation** –factor that relates the importance of projecting a professional image.
- 4. Program issues**- relate the importance of offering wide ranging and reputable academic programs with flexible structure and **Access**-measures the issues related to approachability and ease of contact of the staff and the convenience of the service offered.
- 5. Access:** measures the issues related to approachability and ease of contact of the staff and the convenience of the service offered.

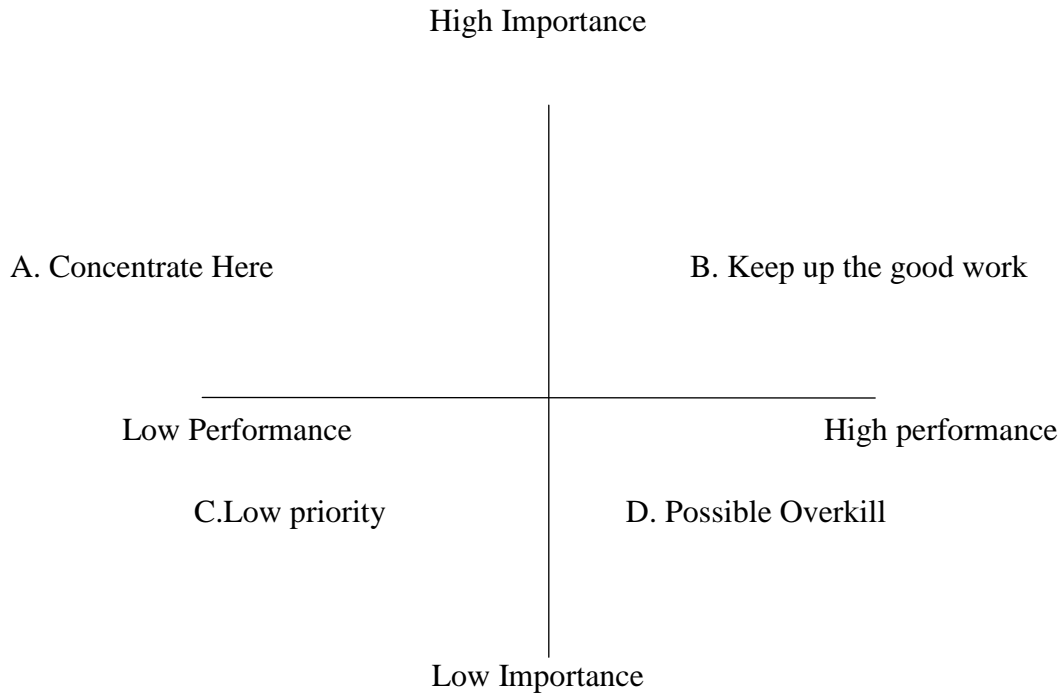


**Figure 4.HEdPERF Model**

**Source: Firdaus, 2005**

### **2.1.6.3. Importance Performance Analysis (IPA)**

Importance Performance Analysis (IPA) was first proposed by Martilla and James (1977), which is one of the simple evaluation tools that can be used to understand and prioritize customer satisfaction attributes for improvement. IPA model is used to determine the priority attribute for improvement and also provide guidance to the company's strategic development plan. IPA is a powerful evaluation tool for practitioners and academics to find out the good attributes and attributes that need to be improved and the need for corrective action so as to increase profits and market opportunities (Wong, Hideki & George, 2009).



**Figure 5: IPA Model**

**Source: Martilla and James (1977)**

Two dimensions of the IPA is the level of importance and the level of performance is divided into four quadrants (Martilla and James, 1977). Quadrant I is concentrate here or priority. In this quadrant there are factors that are considered important or expected consumers, but the company's performance has not been satisfactory, so the company needs to concentrate to allocate its resources to improve performance in this quadrant. Quadrant II is keep up the good work or maintain the achievements, all the attributes that fall into this quadrant is a strength of the organization as well as the pride of the organization. Quadrant III is a low priority. In this quadrant, there are factors that are considered to have the perception or the actual performance levels are low and not too important or not expected by consumers, so companies do not need to prioritize or pay more attention to these factors. Quadrant IV is possible overkill, in this quadrant there are factors that are considered less important and less expected by the customer so that companies better allocate resources related to these factors to other factors that more have a higher priority level.

According to IPA with four quadrants, managers should focus on quadrants I and II because it reflects the high importance and represents the voice of the customer, if the department has performed well in fulfilling requirement of customers, then customers will be satisfied and can manifest loyalty. This is the way to help companies to do business in a sustainable manner

### **2.1.7. Customer Satisfaction**

Customer satisfaction, as a construct, has been fundamental to marketing for over three decades. Customer satisfaction has been treated as one of the most important factors for all company and firms that provide products or service. It is all company's goal to achieve customer satisfaction and through that the company will gain competitive advantages to stay survival. In addition, marketers consider satisfying customers as a key element of business activities especially in competitive market (Anderson et al., 1994).

Parker and Mathew (2001) expressed that there are two basic definitional approaches of the concept of customer satisfaction. The first approach defines satisfaction as a process and the second approach defines satisfaction as an outcome of a consumption experience. These two approaches are complementary, as often one depends on the other. Customer satisfaction as a process is defined as an evaluation between what was received and what was expected, emphasizing the perceptual, evaluative and psychological processes that contribute to customer satisfaction.

As also noted by other scholars, the process of satisfaction definitions concentrates on the antecedents to satisfaction rather than satisfaction itself. Satisfaction as a process is the most widely adopted description of customer satisfaction and a lot of research efforts have been directed at understanding the process approach of satisfaction evaluations This approach has its origin in the discrepancy theory Porter(1961), which argued that satisfaction is determined by the perception of a difference between some standard and actual performance.

#### **2.1.7.1. The Theory of Customer Satisfaction**

The theory of satisfaction has its origins in the discrepancy theory Porter (1961) and other scholars have over the years, used some "form of comparison" to model satisfaction Parker and Matthews (2001). A number of theoretical approaches have been developed to explain the relationship between satisfaction or positive disconfirmation and dissatisfaction or negative

disconfirmation. Satisfaction (Positive disconfirmation) is known to occur when product or service is better than expected on the other hand; a performance worse than the expected results is dissatisfaction (negative disconfirmation). According to Oliver (1980a) these approaches can be seen as variants of the consistency theories and focus primarily on the nature of the “consumer's post-usage evaluation process”. Consistency theory conceptualizes that when expectations and the actual product performance do not match the consumer will feel some degree of dissatisfaction Peyton, Kamery, Pitts, Reginald and Rob (2003) “. In order to relieve this dissatisfaction, the user will make adjustments either in expectations or in the perceptions of the product's actual performance. This theory informed the Morris and Winter (1975) mobility theory of residential satisfaction.

Over the years, a number of authors have used some form of comparison to model satisfaction. Some theoretical approaches which have been advanced amongst others include: assimilation theory, contrast theory, assimilation-contrast theory, and negativity theory.

### **1. Assimilation theory**

This theory is based on Festinger's (1957) dissonance theory. The dissonance theory forms the basis of the assimilation theory. The dissonance theory posits that the users of a particular product make some kind of cognitive comparison between expectations about the product and the perceived product performance. If there is a discrepancy between expectations and perceived product performance then dissonance or negative disconfirmation arises. This view of the consumer “post-usage evaluation” was introduced into the satisfaction literature in the form of assimilation theory by Anderson (1973), in his work on consumer dissatisfaction; the effect of disconfirmed expectancy on perceived product performance. According to Anderson (1973) consumers seek to avoid dissatisfaction by “adjusting perceptions about a given product to bring it more in line with expectations”. Consumers can also reduce the dissatisfaction resulting from a discrepancy between expectations and product performance either by altering expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the dissatisfaction experienced (Olson & Dover, 1979).

The assimilation theory has a number of weaknesses. First, the approach postulates that there is a relationship between expectation and satisfaction but does not specify how disconfirmation of

an expectation leads to either satisfaction or dissatisfaction. Next, the theory also postulates that consumers are inspired enough to adjust either their expectations or their perceptions about the performance of the product (Forman, 1986). According to Peyton et al. (2003) “if the consumer adjusts either expectations or perceptions about product performance then dissatisfaction would not be an outcome of the post-usage evaluation process”. A number of scholars such as Olson and Dover (1979) and Anderson (1973) have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction. Therefore, Bitner (1987) argues that it would seem that dissatisfaction could never occur except the evaluative processes were to begin with negative consumer’s expectations.

## **2. Contrast theory**

The Contrast theory was first introduced by Hovland, Harvey and Sherif (1957). However, Cardozo (1965) claims that the theory presents an alternative view of the consumer “post- usage evaluation process” in contrast to the assimilation theory that hypothesized that post-usage evaluation leads to outcomes in opposite predictions for the effects of expectations on satisfaction. The contrast theory posits that consumers would exaggerate any contrast between expectation and product evaluation. Dawes, Singer and Lemons (1972) define contrast theory as the propensity to magnify the discrepancy between "one's own attitudes and the attitudes represented by opinion statements" validated by persons with opposing views. Whereas assimilation theory suggests that users will seek to minimize the discrepancy between expectation and performance; contrast theory argues that a surprise effect arises leading to the discrepancy being exaggerated.

## **3. Assimilation-contrast theory**

Assimilation contrast theory was introduced by Anderson (1973) in the context of post -exposure product performance based on Sherif and Hovland’s(1961) discussion of assimilation and contrast effect. Assimilation -contrast theory suggests that if performance is within a customer’s latitude (range) of acceptance, even though it may fall short of expectation, the discrepancy will be disregarded-assimilation will operate and the performance will be deemed as acceptable. If performance falls within the latitude of rejection, contrast will prevail and the difference will be exaggerated, the product/service deemed unacceptable (Vavra, 1997).This paradigm posits that

satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance.

Anderson (1973) argues that Cardozo's (1965) attempt at reconciling the two earlier theories was methodologically flawed (Anderson, 1973). The attempts by various researchers to test this theory empirically have brought out mixed results. Olson and Dover (1979) and Anderson (1973) found some evidence to support the assimilation theory approach. In discussing both of these studies, however, Oliver (1980a) argues that only measured expectations and assumed that there were perceptual differences between disconfirmation or satisfaction Peyton et al., (2003).

#### **4. Negativity theory**

This theory developed by Carlsmith and Aronson (1963) suggests that any discrepancy of performance from expectations will disrupt the individual, producing 'negative energy'. Vavra (1997). Negative theory has its foundations in the disconfirmation process. Negative theory states that when expectations are strongly held, consumers will respond negatively to any disconfirmation. "Accordingly, dissatisfaction will occur if perceived performance is less than expectations or if perceived performance exceeds expectations. Carlsmith and Aronson (1963).

##### **2.1.7.2. Customer Satisfaction Measurement**

There are different models used to measure customer satisfaction proposed by different scholars. From the various models described by researchers, two of the models of customer satisfaction are the Kano model and American Customer Satisfaction Index (ACSI).

The Kano model was developed in 1984 by Noriaki Kano and his team. Kano model of customer satisfaction classifies attributes based on how they are perceived by customers and their effect on customer satisfaction. The model is based on three types of attributes basic or expected attributes which are the attributed without any major significance of worth mentioning, performance or spoken attributes which are the expressed expectation of the customer surprise and delight attributes. Are the attributes which are beyond the customer's expectations. Kano model is used to determine the customer expectations regarding product – it is used for analyzing customer needs and determining product requirements.

The American Customer Satisfaction Index (ACSI) is the national indicator of customer evaluations of the quality of goods and services available to U.S residents since 1994. The ACSI model is a cause- and- effect model with indices for drivers of satisfaction, (Customer expectations, perceived quality, and perceived value). Perceived quality is the first determinant of overall customer ,which is the served market's evaluation of recent consumption experience, and is expected to have a direct and positive effect on overall customer satisfaction. Perceived value is the second determinant of overall customer, or the perceived level of product quality relative to the price paid. It is a measure of quality relative to price laid. Customer expectation is the third determinant of over satisfaction, which measures the customer's anticipation of the quality of a company's products or services. Expectations represent both prior consumption experiences, which includes some no experiential information.

### **2.1.7.3. Benefits of Customer Satisfaction Assessment**

Naumann (1995) expressed that the reasons for measuring customer satisfaction may vary among companies, and the success of the measurement depends on if the measurement is incorporated into the firm's corporate culture or not. However, he suggested four reasons for measuring customer satisfaction or four important roles of customer satisfaction measurement:

- **To get close to the customer** – this will help to understand customers more, their needs, the attributes that are most important, and their effect on the customer's decision making, the relative importance of the attributes and the performance evaluation of the firm delivery of each attribute. This process helps to provide enabling communication with customers.
- **Measure continuous improvement** - the important attributes of customers can be incorporated into the internal measurement to evaluate the value-added process in the company. This process involves comparing performance against internal standards (process control and improvement), and comparing performance against external standards (benchmarking).
- **To achieve customer-driven improvement** – the data collected from customers can be developed into sources of innovations and this can help to achieve customer driven improvement. This requires a comprehensive database and not

just records of sales. This process helps to identify opportunities for improvement (quality costing).

- **To measure competitive strengths and weaknesses** - determine customer perceptions of competitive choices and companies.
- **To link customer satisfaction measurement data to internal system**-the market share is not a gauge to measure customer satisfaction; rather it represents quantity of customers.

#### **2.1.7.4. Factors that Affect Customer Satisfaction**

Satisfaction which is vaguely defined as fulfilling the needs for which a good or service was made is viewed differently in various industries, over various demographic backgrounds, as well as for individuals and institutions. Moreover, it has a totally different approach when it comes to services and products. All along we have been trying to understand quality of services, quality of products, and satisfaction both in the arena of comfort and in terms of utility that is, the product or service fulfilling the actual purpose for which it was made and bought. This is however very important but the fore mentioned intricacies about satisfaction cannot be under looked.

It has been identified that human needs, quality of services and products, the user-friendly nature of product and services, and comfort assurance Bailey and Pearson (1983) are some of the important determinants of customer satisfaction. Even though different customers will require different levels and combinations of these variables, they generally are important factors that affect customer satisfaction. Matzler and Sauerwein(2002), went a step forward to classify factors that affect customers' satisfaction into three factor structures;

**1. Basic factors:** these are the minimum requirements that are required in a product to prevent the customer from being dissatisfied. They do not necessarily cause satisfaction but lead to dissatisfaction if absent. These are those factors that lead to the fulfillment of the basic requirement for which the product is produced. These constitute the basic attributes of the product or service. They thus have a low impact on satisfaction even though they are a prerequisite for satisfaction. In a nutshell competence and accessibility

**2. Performance factors:** these are the factors that lead to satisfaction if fulfilled and can lead to dissatisfaction if not fulfilled. These include reliability and friendliness.

**3. Excitement factors:** these are factors that increase customers' satisfaction if fulfilled but does not cause dissatisfaction if not fulfilled which include project management.

### **2.1.8. Relation between Customer Satisfaction and Service Quality**

To achieve a high level of customer satisfaction, most researchers suggest that a high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction (Cronin, Brady, 2001); Anderson, Fornell and Lehmann, 1994; Cronin and Taylor, 1992). However, the exact relationship between satisfaction and service quality has been described as a complex issue, characterized by debate regarding the distinction between the two constructs and the casual direction of their relationship (Brady, Cronin and Brand, 2002). Parasuraman et al., (1994) concluded that the confusion surrounding the distinction between the two constructs was partly attributed to practitioners and the popular press using the terms interchangeable, which make theoretical distinctions difficult.

Interpretations of the role of service quality and satisfaction have varied considerably (Cronin and Taylor, 1992; Parasuraman, Zeithaml, and Berry, 1988). Parasuraman et al. confined satisfaction to relate to a specific transaction as service quality was defined as an attitude. This meant that perceived service quality was a global judgment, or attitude, relating to the superiority of the service. Cronin and Taylor (1992) found empirical support for the idea that perceived service quality led to satisfaction and argued that service quality was actually an antecedent of consumer satisfaction. Asserted that consumer satisfaction appeared to exert a stronger influence on purchase intention than service quality, and concluded that the strategic emphasis of service organizations should focus on total customer satisfaction programs.

The authors reasoned that consumers may not buy the highest quality service because of factors such as convenience, price, or availability and that these constructs may enhance satisfaction while not actually affecting consumers' perceptions of service quality. Cronin and Taylor (1992) later conceded that the directionality of the service quality/satisfaction relationship was still in question and that future research on the subject should incorporate multi item measures. The authors suggested restricting the domain of service quality to long-term attitudes and consumer satisfaction to transaction-specific judgments.

## **2.2. Empirical Review**

DeShields et al.(2005) investigated the determinants of student satisfaction and found that faculty performance , advising staff and lecturing ours were the most important variables that influenced students' college experience and ultimately satisfaction and retention .The result suggested that faculty performance and classes had a positive and significant relationship with student partial experience and advising staff had a positive but insignificant relationship with student partial experience.

A research Kitcharoen (2004) on IPA analysis of service quality of PHEI in Thailand; in the study modified IPA model was used for a sample of students and staff of ten randomly selected Thai universities to investigate the importance of service attributes for service providers' and student's evaluation of services. The gap between importance and performance from both perspectives were also evaluated. The findings of this study discovered that students' satisfaction with a service quality was significantly explained by age, tangible importance, empathy importance, reliability performance, and empathy performance. Meanwhile, staff members' satisfaction with a service quality was significantly explained by tangible importance, reliability importance, assurance importance, and reliability performance. In addition, the study released that students' satisfaction with a service quality positively affected their pride in the universities.

Hassan et al (2008) studied service quality and student satisfaction in Malaysia using a case study of private higher education institutions. The findings indicated that the SERVQUAL dimensions of tangibility, responsiveness, assurance, reliability and empathy had a significant positive relationship with student satisfaction.

Ana (2009) compared instruments for measuring service quality in Higher Education and concluded that SERVPERF and HEdPERF present the best measurement scales for examining SERVQUAL in tertiary education area.

Asaduzzaman et al (2013) also examined service quality and student satisfaction in private universities in Bangladesh using a sample of 550 business students. They study used the SERVQUAL dimensions and the findings indicated a significant correlation among all the dimensions with student satisfaction.

Dennis (2013) assessed SERVPERF and HEdPERF instruments for the appropriateness of them to measure service quality in the context of Hong Kong postgraduate education. The values of the HEdPERF scales are found to be higher than those of the SERVPERF scales, indicating a superiority of specific instruments over generic instrument; however the reliability of SERVPERF can be accepted for employment in the response context.

Mang'anyi and Govender (2015) examined perceived service quality and customer satisfaction using student's perception of Kenyan private universities using a sample of 522 students. The study used the HEdPERF framework to collect the research data. Their findings indicated that the service quality dimensions had a positive and a significant relationship with service quality dimensions had a positive and significant relationship with service quality which in turn influenced customer satisfaction.

Sheeja et al (2014) investigated Higher Education Performance scale in Indian Pharmacy education, it found out that there are four factors which serves as factors for service quality, namely NA,AA,AC and RT. According to Abdullah (2006a) students' perceived access is the most determining factor and it is more important than other dimensions in determining SERVQUAL.

Yen (2013) carried out a research in Vietnam to measure SERVQUAL in HE sectors so to comprehend clearly the perception of SERVQUAL in higher education from Vietnamese students' perspective. In this study, SERVQUAL and SERVPERF scales were both employed to measure the service quality. The research findings showed Vietnamese students are mostly interested in the dimensions of responsiveness, tangible elements and assurance.

Zaharia (2014) conducted a study in one of the biggest cities in Malaysia to examine the quality of services provided to the public. The purpose of research was to measure SERVQUAL in terms of LA by developing FM-SERVQUAL model of Parasuraman. (Zaharia, Dogaru &Boaja, 2014).Research results showed that five variables of technology and six variables of property were less the requirements. Rest of variables displayed minimum quality level.

Randheer (2015) HEdPERF was compared with SERVPERF and HEdPERF-SERVPERF combined measurement instrument. It was found that HEdPERF showed a fair fitness proving right representation of population approximation.

### 2.3. Conceptual Framework and Hypothesis of the Study

A conceptual framework indicates how the researcher views the concept involved in a study, especially relationships between concepts (Veal, Business research methods, 2005). This study will be developed based on (Firdaus, 2005) HEdPERF model. The aim of this model is to capture a context specific view of service quality in higher education, enabling the whole student experience to be measured. Firdaus (2005) has measured service quality in higher education in five aspects as non-academic aspects, academic aspects, access, program issues and reputation. Cronin and Taylor (1994) state the determinants of service quality dimensions should be customers (students) rather than the management or academic staff of the institutions of higher education.

#### 2.3.1 Conceptual Framework

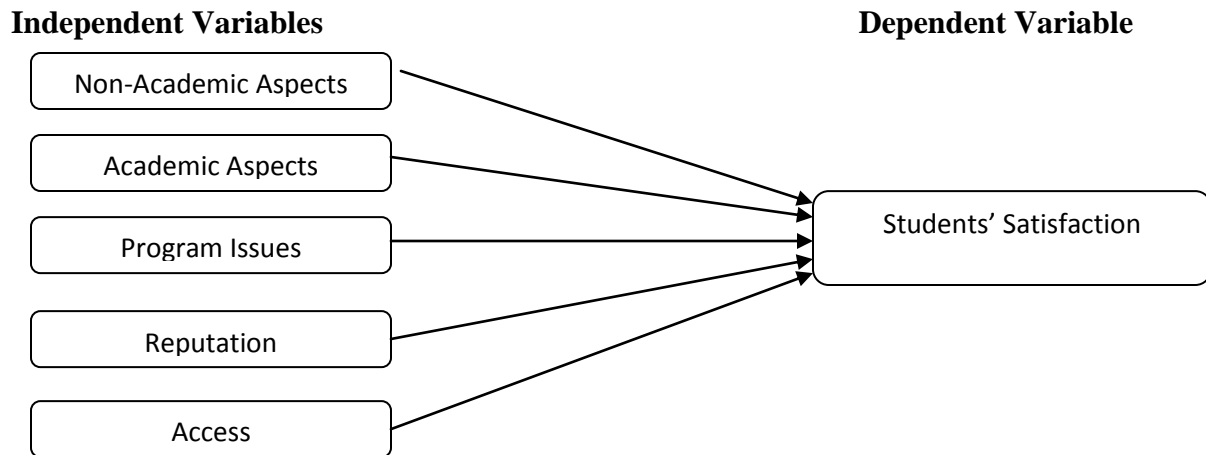


Figure 6. Conceptual Framework

Source: Firdaus, 2005

#### 2.3.2. Hypothesis of the study

In this research, the independent variables are the five variables of service quality, non-academic aspects, academic aspects, program issues, reputation, and access and the dependent variable is overall students' satisfaction. Based on this framework the following hypothesis was formulated to be tested using appropriate statistical tools.

H1: Academic aspect of service quality has a positive and significant effect students' satisfaction.

H2: Non-Academic aspect of service quality has a positive and significant effect students' satisfaction.

H3: Program issue of service quality has a positive and significant effect students' satisfaction.

H4: Reputation aspect of service quality has a positive and significant effect students' satisfaction.

H5: Access aspect of service quality has a positive and significant effect students' satisfaction.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### Introduction

Research methodology is a science of studying how research is done scientifically. It is a way to systematically solve the research problem. This chapter explains the research design and methodology. This part elaborates the research design and approach, data types and sources, the target population, sampling technique, data collection instrument, data analysis technique and ethical consideration. In addition, reliability and validity is presented. The methods selected below are suitable because of their appropriateness for situations in the selected study of area.

#### 3.1. Research Approach

The general approach of a research can be divided into two different categories based on whether research is conducted to develop a theory and hypothesis and design a research strategy to test the hypothesis, or whether the research is designed to collect data and develop theory as a result of the data analysis. The former one is known as deductive approach, and the latter one is known as inductive approach (Saunders, Lewis and Thornhill 2009)

Another classification of a research is based on the approach employed for data collection techniques and data analysis procedure the research can be classified into three research approaches namely quantitative, qualitative and mixed method. Quantitative research is the systematic and scientific investigation of quantitative properties, phenomena and relationships. It also used to explain casual relationships to facilitate generalization and to predict the future whereas qualitative research methods provide a complete picture of the situation by increasing the understanding of social process and interrelations. It involves studies that do not attempt to quantify their results through statistical summary or analysis. Mixed method design combines or associates both qualitative and quantitative forms. Mixed design enables to obtain a more comprehensive understanding.

The general approach that is employed for this study is deductive approach, since this research is based on existing theories. The approach employed for this study concerning the method of data analysis procedure is quantitative research approach because it allows the research to reach its goal efficiently. The quantitative approach is applied to examine the relationship between the

dependent variable (students' satisfaction) and the independent variables (HEdPERF dimensions). Cross sectional survey method is also employed.

### **3.2. Research Design**

Research design is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. According to Kothari (2004), the research design to be adopted depends on the nature of the study. The author has broadly classified the research designs as exploratory, explanatory and descriptive research. Descriptive research sets out to describe and to interpret what is. It aims to describe the state of affairs as it exists. On the other hand, explanatory research aims, at establishing the cause and effect relationship between variables. Exploratory research is less formal, sometimes even unstructured and focuses on gaining background information and helps to better understand and clarify a problem.

In this study, the researcher employs explanatory research design to describe and explain the five variables of HEdPERF and the relationship between service quality and students satisfaction. The researcher used cross sectional survey method.

### **3.3. Data Types and Data Sources**

The relevant data for this study is collected from both primary and secondary data. Primary source are those in which we need to conduct a new survey for gathering information at different levels with regard to the inquiry (Adams, Raeside, Khan and White, 2007). Accordingly ,primary data were obtained from questionnaires distributed to students , which compromises of close-ended questions that are clear and to the point, and easy to understand by respondents. The choice of questionnaire is chosen because it is a quick method to collect data and it is less time consuming. Secondary data for literature review was collected through, published and unpublished documents and the internet that contribute to a better understanding of service quality and students' satisfaction.

### **3.4. Population of the study**

Polit and Hungler (1999) refer to population as an aggregate or totality of all objects, subjects or members that confirm to a set of specifications. Population refers to the total of items about which information is defined. In this study, the populations are regular students pursuing an

undergraduate academic degree of second year and above students of four private higher education institutions which are located in A.A. To assess the students satisfaction second year and above students were selected because of their familiarity and perception of the institutions service delivery is dependable. The second year and above students would have been at the universities for two and more years, so they have an accurate perception of the service quality.

### **3.5. Sampling Technique**

Sampling technique is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. The sample frame for this study will be second year and above students from four selected PHEIs in Addis Ababa.

The total undergraduate students of PHEI are too many, since it will be difficult to approach and address all of them. The sampling technique that is employed for this study is non-probability sampling. In non-probability sampling, since elements are chosen arbitrarily, there is no way to estimate the probability of any one element being included in the sample. This research was done by using convenience sampling. Convenience sampling technique by which proper population of students was chosen based on their relative ease of access to obtain information. This method was used in order to get reliable, accessible data. It is also useful sampling method because it is the quickest; the easiest and cheapest method to conduct a research.

### **3.6 Sample Size**

Considering Malhotra (2007) a sample of over 200 respondents in a survey study is likely to give an acceptable degree of accuracy. Therefore, the stated sample size will be considered to be appropriate to make generalizations about the study population. Based on Krejcie and Morgan's (1970) sampling table, it was appropriate to select sample size of 140.

There are several approaches to determining the sample size. 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. Under this step sample size is selected, implying that the member of customers included in the study will be selected. Since it is difficult to determine the size of the sample and in order to make the right decision, different factors like the nature of

research, time and money must be considered. The sample size was determined by using Yamane's formula of sample size in order to obtain reliable data (Yamane, 1967).

$$n = N/1 + N(e)^2$$

Where, n=required sample size

N=total number of population

e=accepted margin of error ( $\pm 5\%$  of precision)

$$n = 5760/1 + 5760(0.05)^2 = 374$$

No.	Name of Universities	Number of students
1.	St Mary University	3287
2.	Admas University	1000
3.	Santa University	573
4	Rift Valley University	900
	<b>Total</b>	<b>5760</b>

**Sample from x university** = no of students from x university /total population\*sample size

The total population is the sum of all students in the three institutions that is 5760. Here are the institutions with their respective number of students and the sample that will be from each of them.

**Sample from x university** = no of students from x university /total population\*sample size

- St.Mary University: Number of students 3287( $3287/5760*374=213$ )
- Admas University: Number of students 1000( $1000/5760*374=65$ )
- Rift Valley University: Number of students 900( $900/5760*374=59$ )
- Santa University: Number of students 573( $573/5760*374=37$ )

In this research questionnaire was administered to 374 respondents and it was distributed proportionally to the institutions enrolment rate of undergraduate students of private higher educational institutions.

### **3.7. Sampling procedure**

The process of selecting a portion of the population to represent the entire population is known as sampling (LoBiondo-Wood & Haber, 1998; Polit & Hungler, 1999). Sampling can be either probability or non-probability sampling. This research used non-probability sampling method. Convenience sampling was used to choose proper population of students based on their relative ease of access.

### **3.8. Instruments of Data Collection**

Since the questionnaire is one of the most important research instruments for collecting primary data, close ended questionnaire was used as a primary source of data in this study. The researcher will design the questionnaire used for this study in a way that will be clear, brief and understandable to the respondents and made sure it covered the relevant aspects of the model used.

The questionnaire employed for this study will be arranged into a five point Likert scale anchored from “Strongly Disagree” to “Strongly Agree” on the scale. The questionnaire will be made up of three sections. The first section will be made up of general information questions aimed to capture information related to students. The second section will be comprised of questions aiming to address the five dimensions of the HEdPERF variables. The last section will consist of overall satisfaction question.

### **3.9. Data Analysis Technique**

In different research designs, data analysis methods should be suitable with the type of research method chosen for a study. To test the research questions and to investigate the research objectives the data collected was analyzed after sufficient data was collected. The primary information for this research was collected through questionnaires which were processed by using SPSS version 20.0. Only questionnaires that was returned and fully completed was deemed valid and used in the analysis, but the questionnaires which were not returned or not fully completed then it was deemed void. The questionnaires which were valid were coded using the SPSS statistical software program.

Data analysis could be qualitative analysis or quantitative analysis. Qualitative analysis is the analysis of qualitative data such as text data from interview transcripts. Unlike quantitative

analysis it is heavily dependent on the researchers' analytic and integrative skills and personal knowledge of the social context where the data is collected. Numeric data collected in a research can be analyzed quantitatively using statistical tools in two different ways these are descriptive and inferential analysis. The data was analyzed with both descriptive and inferential statistics. Descriptive statistics like mean, frequency, and standard deviation and inferential statistics like correlation analysis was used to examine direction and significant of the correlation of the variables considered under this study and regression analysis to examine the relationship between the dependent variable (students satisfaction) and the five independent variables service quality dimensions (nonacademic aspects, academic aspect, program issue, access and reputation).

Simple mean and tabulation was applied to get a clear picture about the demographic makeup of the respondents. Then, in order to get an implication about the model and its applicability, inferential statistics was used. With the help of bivariate correlation analysis, the researcher tried to observe the influence of academic aspects, non-academic aspects, program issues, reputation and access on the overall students' satisfaction. This was done in order to pinpoint the casual relationship of the independent variables in relation to the dependent variable.

### **3.10. Validity and Reliability**

The precision with which things are measured in a study is expressed in terms of validity and reliability. These two are related because if a measure is valid then it is reliable.

#### **3.10.1. Validity Test**

Validity represents how well a variable measures what it is supposed to measure. Siddiqi (2010) defined the validity as "the degree to which a measure accurately represents what it is supposed to". Validity is concerned with how well the concept is defined by the measure(s). He also mentioned about three types of validity: Content validity, Predictive validity, and Construct validity. Siddiqi (2010) defined the content validity as the assessment of the correspondence between the individual items and concept. The study addresses content validity through the review of literature and adapting instruments used in previous research which is HEdPERF questionnaire repeatedly refined and corrected in higher education.

### 3.10.2 Reliability Test

Reliability is the degree to which the measure of a construct is consistent or dependable (Bhattacharjee, 2012). Cronbach's alpha will be used in this study to assess the internal consistency of variables in the research instrument. Cronbach's  $\alpha$  (alpha) is a coefficient of reliability used to measure the internal consistency of a test or scale; it resulted in a number between 0 and 1 (Zikmund, 2000). Scales with coefficient alpha between 0.6 and 0.7 indicated fair reliability, a Cronbach's alpha score of 0.70 or higher are considered as adequate to determine reliability.

**Table 3.1. Reliability statistics for the general instrument**

Variables	Number of items	Cronbach's alpha
Academic Aspects	9	.845
Non-academic Aspects	12	.879
Program issues	4	.711
Reputation	9	.867
Access	7	.841
Overall satisfaction	5	.856
<b>Reliability of all items</b>	46	.957

Source: Survey Result (2019)

### 3.11. Ethical Consideration

The researcher used the data from customers which are collected through questionnaire. The respondents took part in the research voluntarily and data was collected based on the consent of the individual. The purpose of this research was clearly explained to the respondents. To maintain the confidentiality of the information provided by the respondents, the respondents are instructed not to write their names on the questionnaire and assured of that the responses was only used for academic purpose and kept anonymous. Finally, there was no misrepresentation or distortion of the actual data that was collected from respondents.

# CHAPTER FOUR

## DATA PRESENTATION AND ANALYSIS

### Introduction

In this chapter the data collected from respondents were analyzed and interpreted using quantitative analysis. The methods used in data analysis include descriptive analysis and inferential statistics. Descriptive analysis is used to summarize the general profile of respondents and inferential statistics employed to test the hypothesis and to investigate the influence of the independent variables on the dependent variable. To analyze the collected data in line with the overall objective of the research undertaking, statistical procedures were carried out using SPSS version 20.

#### 4.1. Response rate

The survey was conducted during a one week time. After distributing 374 questionnaires for students, total of 350 answered questionnaires were retrieved, which are 93.5% of the total distributed questionnaires. The remaining 10(2.7%) questionnaires were not retrieved and the rest 14(3.8%) were found to be incomplete.

#### 4.2. Descriptive Statistics

##### 4.2.1. Respondents profile

The questionnaire used for this study was made up of three sections. The first section is made up of general information questions aimed to capture information related to demographic characteristics of students. The second section is comprised of questions aiming to address the basic research questions and has 41 indicator questions headed by five constructs, academic aspects, non-academic aspects, program issues, reputation and access as independent variable. The third section is made up of overall satisfaction questions as the dependent variable.

Before going forward to the analysis of data, discussion on background information of respondents such as demographic data is useful in order to make the analysis more meaningful and interesting for the readers.

As indicated in table 4.1. below the female respondents constituted the largest share of the gender composition representing 55.1% of the total respondents while 44.9% were male. This shows that the majority of the students are female which indicates that females are becoming more participative in learning. The age groups were distributed as shown in Table 4.1.As it is shown in the table, 48% were from 18-21 age groups, 34.3% were from 22-24 age groups, and 13.7% were from 24-27 and the remaining 4% were from above 27 age group.

**Table 4.1. Respondents' profile**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender of Respondents</b>		
Male	157	44.9
Female	193	55.1
<b>Age of Respondents</b>		
18-21	168	48.0
22-24	120	34.3
25-27	48	13.7
> 27	14	4.0
<b>University</b>		
St.Mary	195	55.7
Sante	37	10.6
Admas	61	17.4
Rift Valley	57	16.3

Source: Survey result(2019)

From the institutions St Mary University has the highest respondents which counts 55.7% followed by Admas University 17.4%, Rift Valley University 16.3% and the rest 10.6% of the respondents were from Sante Medical College.

#### **4.2.2. Awareness about Service Quality**

The level of respondents' awareness about the concept of service quality has been assessed using a five point Likert scale ranging from very high, high, medium, low and very low.

**Table 4.2 Analysis of Awareness about service quality by frequency**

<b>Scale</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Very-Low	17	4.9	4.9	4.9
Low	43	12.3	12.3	17.1
Medium	109	31.1	31.1	48.3
High	122	34.9	34.9	83.1
Very-High	59	16.9	16.9	100.0
<b>Total</b>	<b>350</b>	<b>100.0</b>	<b>100.0</b>	

Source: Survey Results (2019)

Table 4.2 shows that 34.9 % of the students’ populations have high level of awareness about the concept of service quality, 31.1% of the respondents have a medium level awareness about the concept of service quality only 16.9% of the respondents have very high about the concept. The remaining respondents have very low and low awareness about the concept of service quality.

#### **4.2.3. Descriptive analysis of variables**

In this part descriptive statistics in the form of mean and standard deviation were presented to illustrate the level of agreement of the respondents. The main objective of the study is to examine the effect of service quality on students’ satisfaction in higher education particularly in private higher education institutions in Addis Ababa. To do so, students of those PHEI were asked to rate the level of agreement to each question under the five attributes namely: Academic aspects, non-academic aspects, Program issues, Reputation and Access on a five point Likert scale with: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

In order to identify the effect of service quality on overall students’ satisfaction, particularly on PHEI in Addis Ababa, a total of 46 questions were grouped into six dimensions, which were: academic aspects, non-academic aspects, program issues, reputation, access and overall students’ satisfaction which is the dependent variable.

**Table 4.3 Mean and Standard Deviation values of Variables**

	N	Mean	Std. Deviation
Academic	350	2.99	1.199
Nonacademic	350	2.82	1.252
Program	350	2.94	1.126
Reputation	350	3.04	1.213
Access	350	2.91	1.190
Valid N (listwise)	350		

Source: Survey Result (2019)

In order to compare respondents overall students' satisfaction, descriptive statistics of mean and standard deviation were used. The mean indicates to what extent the sample group averagely agrees or disagrees with the different statements. The higher the mean the more the respondents agree with the statement while the lower the mean the more the respondents disagree with the statement. In addition, standard deviation shows the variability of an observed response .

As it can be seen from table 4.3 above, the mean scores of all the forty one items ranges from 2.82 to 3.04. Among the dimensions Reputation and Academic aspects has the highest score with 3.04 and 2.99 and standard deviation of 1.213 and 1.199 respectively .These mean value is equivalent to the neutral level ranked on the questionnaire Likert scale of 1-5. This implies that the students were either slightly negative or positive towards service quality. Program issues and Access has 2.94 and 2.91 mean scores and standard deviation of 1.126 and 1.213 respectively. Non-academic aspects have the lowest mean value of 2.82 which falls on disagree level so it is considered to be the worst factor in determining the quality of service of the academic aspects. The descriptive analysis shows reputation has a mean value of 3.04 which implies that second year and above students of the PHEI are satisfied with the reputation dimension of service quality.

#### 4.2.4. Academic Aspects of HEdPERF Model

The mean scores have been computed for all the nine sub constructs of academic aspects dimension that are, knowledge in course content, caring and courteous, responding to request for assistance, sympathetic and reassuring in solving problems, positive attitude, good communication feedback on progress, sufficient and convenient consultation time ,educated and experience academicians. The result is presented in Table 4.5 below:

**Table 4.4 Mean and Standard Deviation values of Academic Aspects**

	N	Mean	Std. Deviation
Knowledge in course content	350	3.12	1.251
Caring and courteous	350	3.01	1.172
Responding to request for assistance	350	2.85	1.170
Sympathetic and reassuring in solving problems	350	2.83	1.175
Positive attitude	350	3.12	1.207
Good communication	350	3.04	1.215
Feedback on progress	350	2.90	1.219
Sufficient and convenient consultation time	350	2.82	1.157
Educated and experience academicians.	350	3.24	1.232
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the mean scores and standard deviation of academic aspects for all the nine items ranges from 2.82 to 3.24. Knowledge in course content have the greatest mean value of 3.24 and standard deviation of 1.232. These mean value is equivalent to the neutral level ranked on the questionnaire Likert scale of 1-5. This implies that the students were either slightly negative or positive towards service quality. Sufficient and convenient consultation time has got the lowest mean score value of 2.82 and standard deviation of 1.157 which falls on the disagree

level so it is considered to be the worst factor in determining the quality of service of the academic aspects.

#### 4.2.5. Non-academic Aspects of HEdPERF Model

**Table 4.5 Mean and Standard Deviation values of Non-academic Aspects**

	N	Mean	Std. Deviation
Individualized attention.	350	2.61	1.210
Sincere interest in solving problem	350	2.66	1.149
Efficient/prompt dealing with complaints	350	2.71	1.157
Responding to a request for assistance	350	2.65	1.150
Accurate and retrievable records.	350	3.01	1.141
Promises kept	350	2.78	1.195
Convenient opening hours	350	3.03	1.199
Positive work attitude	350	2.82	1.192
Good communication	350	2.84	1.199
Knowledgeable of systems/procedures	350	3.06	1.186
Feeling secured and confident	350	2.91	1.210
Services within reasonable time frame	350	2.87	1.241
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the means scores of non-academic aspects for all the twelve items range from 2.61 to 3.06 which indicates that knowledgeable of systems/procedures has got the highest mean score 3.06 and standard deviation of 1.186 .These mean value is equivalent to the neutral level ranked on the questionnaire Likert scale of 1-5.This implies that the students were either slightly negative or positive towards service quality. Individualized attention has got the least mean score value of 2.61 and standard deviation of 1.210 which falls on the disagree level ,so it is considered to be the worst factor in determining the quality of service of the non – academic aspects.

#### 4.2.6 Program Issues of the HEdPERF Model

**Table 4.6 Descriptive Statistics of Program Issues**

	N	Mean	Std. Deviation
Variety of programs/specializations.	350	3.06	1.192
Flexible structures and syllabus.	350	3.10	1.035
Counseling service	350	2.98	1.096
Health care services	350	2.65	1.183
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the mean scores of program issues for all the four items range from 2.65 to 3.10 which indicates that flexible structures and syllabus, and variety of programs and specialization has got the highest mean score of 3.10 and 3.06 and standard deviation of 1.035 and 1.192 respectively. These mean values are equivalent to the neutral level ranked on the questionnaire Likert scale of 1-5. This implies that the students were either slightly negative or positive towards service quality. The students ranked counseling service and health care services as disagree since these factors have mean score value of 2.98 and 2.65 and standard deviation of 1.096 and 1.183 respectively, so they are considered to be the worst factor in determining the quality of service of the program issues.

#### 4.2.7 .Reputation of the HEdPERF Model

**Table 4.7 Mean and Standard Deviation values of Reputation of Service Quality**

	N	Mean	Std. Deviation
Professional appearance/image	350	3.14	1.290
Hostel facilities and equipment	350	3.07	1.190
Academic facilities	350	3.09	1.223
Excellent quality programs	350	3.11	1.212
Easily employable graduates	350	2.93	1.193
Recreational facilities	350	2.89	1.201
Minimal class sizes	350	2.96	1.215
Ideal campus location/layout	350	3.05	1.234
Reputable programs	350	3.15	1.163
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the mean scores and standard deviation of reputation dimension for all the nine items ranges from 2.89 to 3.15 which indicates that reputable programs has got the highest mean score of 3.15 and standard deviation of 1.163, These mean value is equivalent to the neutral level ranked on the questionnaire Likert scale of 1-5. This implies that the students were either slightly negative or positive towards service quality. The students ranked Recreational facilities as disagree since these factors have mean score value of 2.89 and standard deviation of 1.1201, so it is considered to be the worst factor in determining the quality of service of the reputation .

#### 4.2.8 Access of the HEdPERF Model

**Table 4.8 Mean and Standard Deviation values of Access of Service Quality**

	N	Mean	Std. Deviation
Equal treatment and respect	350	2.76	1.234
Fair amount of freedom	350	2.91	1.234
Confidentiality of information	350	2.90	1.171
Easily contacted by the telephone	350	3.06	1.154
Student's Union	350	2.92	1.212
Feedback to improve service performance	350	2.91	1.168
Standardized and simple delivery procedures for providing services.	350	2.95	1.158
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the mean scores and standard deviation of access for all the seven items ranges from 2.76 to 3.06 which indicates that easily contacted by the telephone has got the highest mean score 3.06 and standard deviation of 1.154, whereas equal treatment and respect has got the lowest mean score value of 2.76 and standard deviation of 1.234, students ranked it as disagree, so it is considered to be the worst factor in determining the quality of service of the access.

#### 4.2.9. Overall Students' Satisfaction

**Table 4.9 Mean and Standard Deviation values of Overall Students' Satisfaction**

	N	Mean	Std. Deviation
The university meets my expectations.	350	2.74	1.238
I feel absolutely delighted with the universities services	350	2.84	1.095
The university is able to satisfy my wants and needs.	350	2.85	1.141
I am satisfied with the performance of the staffs of the university.	350	3.13	1.169
Overall I am satisfied with the service quality of the university.	350	2.92	1.152
Valid N (listwise)	350		

Source: Survey Results (2019)

As indicated in the above table, the mean scores and standard deviation of overall students satisfaction for all the five items ranges from 2.74 to 3.13 which indicates that I am satisfied with the performance of the staffs of the university has got the highest mean score 3.13 and standard deviation of 1.169, whereas the university meets my expectations has got the lowest mean score value of 2.74 and standard deviation of 1.238. The overall mean score of students' satisfaction was calculated to be 2.89 which falls on the disagree level, so it is considered that students aren't satisfied with the service quality of the private higher education institutions institution.

#### 4.3. Inferential Statistics

##### 4.3.1. Correlation Analysis

Correlations are the most basic and most useful measure of association between two or more variables. Expressed in a single number called correlation coefficient( $r$ ), correlations provide information about the direction of the relationship, either positive or negative. If two variables tend to move in the same direction they would be considered to have a positive or direct relationship. Alternatively, if two variables move in opposite directions they are considered to

have negative or inverse relationship. Correlation coefficients range from -1.0 to +1.0. The coefficient value itself indicates the strength of the relationship. In general, correlations of  $\pm 0.01$  to  $\pm 0.30$  are considered weak; correlations of  $\pm 0.30$  to  $0.70$  are considered moderate, correlations of  $\pm 0.70$  to  $\pm 0.90$  are considered strong, and correlations of  $\pm 0.90$  to  $1.00$  are considered perfect Marczyk, DeMatteo & Festinger (2005). Table 4.11 indicates the correlation of the variables.

**Table 4.10 Correlation Matrix**

		Academic	Nonacademic	Program	Reputation	Access	Satisfaction
Academic	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	350					
Nonacademic	Pearson Correlation	.614**	1				
	Sig. (2-tailed)	.000					
	N	350	350				
Program	Pearson Correlation	.493**	.592**	1			
	Sig. (2-tailed)	.000	.000				
	N	350	350	350			
Reputation	Pearson Correlation	.594**	.638**	.626**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	350	350	350	350		
Access	Pearson Correlation	.570**	.679**	.551**	.712**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	350	350	350	350	350	350
Satisfaction	Pearson Correlation	.579**	.706**	.593**	.682**	.750**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	350	350	350	350	350	350

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Result (2019)

As it can be seen from the correlation table all the correlation coefficients are significant at 1 percent level of significant and all the correlation coefficients show a positive sign indicating that the variables tend to move on the same direction. The strengths of the variables correlation fall on the range of moderate and strong. The highest correlation is signified by Access ( $r=0.750$ ), followed by Non-academic Aspects ( $r=0.706$ ), Reputation( $r=0.682$ ), and Program Issues( $r=0.593$ ) while Academic Aspects is( $r=0.579$ ) which indicates that there is a positive and significant relationship with overall students satisfaction.

#### **4.3.2 .Regression Analysis**

Regression is a technique used to predict the value of a dependent variable using one or more independent variables (Albaum, 1997). Regression analysis is a statistical tool for the investigation of relationships between variables. Usually, the investigator seeks to ascertain the causal effect of one variable upon another. To explore such issues, the investigator assembles data on the underlying variables of interest and employs regression to estimate the quantitative effect of the causal variables upon the variable that he/she influences. The investigator also typically assesses the “statistical significance” of the estimated relationships, that is, the degree of confidence that the true relationship is close to the estimated relationship (Malhotra, 2007).

#### **4.3 3.Test for Linear Regression Model Assumption**

Meeting the assumptions of regression analysis is necessary to confirm that the obtained data truly represented the sample and that researcher has obtained the best results (Hair Anderson,William&Tatham, 1998).

##### **4.3.3.1. Multicollinearity Test**

Multicollinearity exists when the independent variables are highly correlated .Two values Tolerance and VIF are used to test multicollinearity problem. Tolerance is an indicator of how much of the variability of the specified independent variable is not explained by the other independent variables in the model and is calculated using formula  $1-R^2$  for each variable. If this value is very small(less than0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance).VIF values above 10 would be a concern here indicating multicollinearity

**Table 4.11 Multicollinearity Test**

Model		Collinearity Statistics	
		Tolerance	VIF
1	Academic	.542	1.844
	Nonacademic	.418	2.390
	Program	.540	1.851
	Reputation	.383	2.609
	Access	.400	2.500

a. Dependent Variable: Satisfaction

Source: Survey Result (2019)

As mentioned in the above table, the tolerance value for the independent variables academic aspects, non-academic aspects, program issues, reputation and access are 0.542, 0.418, 0.540, 0.383 and 0.400 respectively which is greater than 0.1. This is also supported by the VIF values 1.844, 2.390, 1.851, 2.609 and 2.500, which are well below the cut-off of 10. Therefore, all the independent variables do not have a multicollinearity problem.

#### **4.3.3.2. Homoscedasticity of the Error Terms**

Homoscedasticity describes a situation in which the error term (that is, the “noise “or random disturbance in the relationship between the independent variables and the dependent variable ) is the same across all values of the independent variables .Heteroscedasticity (the violation of homoscedasticity) is present when the size of the error term differs across values of an independent variable. For homoscedasticity variability in scores for independent variables should be similar at all values of the dependent variables. The scatter plot should show a fairly even rectangular shape along its length. Before running multiple regression there should be homoscedasticity, it means that the residuals (the difference between the values of the observed and predicted dependent variable) are normally distributed ,and that the residuals have constant variance .The graph has demonstrated homoscedasticity of the study .see (appendix 2 b).

#### **4.3.3.3. Normality Test**

A normal distribution is a distribution of the values of a variable that, when plotted, produces a symmetrical, bell shaped curve that rises smoothly from a small number of cases at each extreme

to a large number of cases in the middle. Determining whether variables are normally distributed involves examining each variables Skewness and Kurtosis. Skewness measures the overall lack of symmetry of the distribution, and whether it looks the same to the left and right of the center point. Kurtosis measures whether the data are peaked or flat relative to normal distribution Marczyk et al. (2005)

Skewness and Kurtosis value of 0 means the distribution is perfectly normal. Normal is used to describe the greatest frequency of score in the middle, with smaller frequencies towards the extremes. Positive skewness values indicate a clustered to the left at the low values. Negative skewness values indicate a clustering of scores at the high end (right –hand side of a graph).Positive kurtosis value indicates that the distribution is rather peaked (clustered in the centre), with long thin tails. Kurtosis values below (Pallant, 2002)0 indicate a distribution that is relatively flat.

**Table 4.12 Skewness and Kurtosis**

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Academic	350	.214	.130	-.368	.260
Nonacademic	350	.211	.130	-.641	.260
Program	350	.288	.130	-.788	.260
Reputation	350	.052	.130	-.765	.260
Access	350	.082	.130	-.868	.260
Satisfaction	350	.073	.130	-.689	.260
Valid N (listwise)	350				

Source: Survey Result (2019)

Accordingly, as indicated on the table above, all the variables academic aspects, non-academic, program issues, reputation and access have positive skewness value. This means their scores are clustered to the left .When we see their kurtosis values all the variables have negative kurtosis value and means that they have flat distribution.

#### 4.4 .MULTIPLE LINEAR REGRESSION ANALYSIS

Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable (Field, 2005). Multiple linear regression was conducted in order to determine the explanatory power of the independent variables (academic aspects, non-academic aspects, program issues, reputation and access) to identify the relationship and to determine the most dominant variables that influenced the dependent variable(students satisfaction) .The proposed hypotheses were tested using regression analysis. The significance level of 0.05 with 95% confidence interval was used. The reason for using multiple regression analysis was to assess the direct effect of service quality dimensions variables on the students' satisfaction. The Table 4.13 shows the model summary of the regression analysis.

**Table 4.13 Model Summary for students' satisfaction**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815 <sup>a</sup>	.664	.659	2.29503

a. Predictors: (Constant), Access, Program, Academic, Nonacademic, Reputation

b. Dependent Variable: Satisfaction

Source: Survey Result (2019)

The above regression model presents how much of the variance in the measure of students satisfaction is explained by the underlying HEdPERF variables. R indicates the value of the multiple correlation coefficient between the predictors and the outcome, with a range from 0 to 1, a larger correlation and 1 representing an equation that perfectly predict the observed value(Pedhazur,1982).From the model summary R=0.815 indicates that the linear combination of the five independent variables(academic aspects, non-academic aspects, program issues, reputation and access )strongly predict the dependent variable(students satisfaction).R<sup>2</sup> is a measure of how much of the variability in the outcome is accounted for by the predictors. The linear combination of HEdPERF variables academic aspects, non-academic aspects, program

issues, reputation and access explains 66.4% of the variance in students' satisfaction and the remaining 33.6% is explained by extraneous variables.

The adjusted R<sup>2</sup> gives some idea of how well the model generalizes and its value to be the same or very close to the value of R<sup>2</sup>. That means it adjusts the value of R<sup>2</sup> to more accurately represent the population under study (Pedhazur, 1982). The difference for the final model is small in fact the difference between R<sup>2</sup> and Adjusted R<sup>2</sup> is( 0.664-0.659=0.005) which is about 0.5%.This shrinkage means that if the model were derived from the population rather than the sample it would account for approximately 0.5% less variance in the outcome.

**Table 4.14 ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3575.110	5	715.022	135.751	.000 <sup>b</sup>
	Residual	1811.905	344	5.267		
	Total	5387.015	349			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Access, Program, Academic, Nonacademic, Reputation

Source: Survey Result (2019)

The ANOVA table shows the overall significance /acceptability of the model from a statistical perspective (Pedhazur ,1982).The above ANOVA table shows the overall goodness of fit of the model F- statistic of the model is 135.751 with significant at the 0.000 level which is quite good and entails that model is a good fit at 1% level of significance.

**Table 4.15 Coefficient of Regression equation**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig. (p-value).	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	-.928	.546		-1.699	.090	-2.001	.146
Academic	.042	.025	.070	1.658	.098	-.008	.092
Nonacademic	.114	.022	.247	5.118	.000	.070	.157
Program	.160	.060	.114	2.686	.008	.043	.278
Reputation	.080	.029	.142	2.811	.005	.024	.137
Access	.277	.036	.378	7.648	.000	.206	.349

a. Dependent Variable: Satisfaction

Source: Survey Result (2019)

From the table ,Column B is the value for the intercept(a) in the regression equation on the first row, labeled (constant).The numbers below the column “B “ are the values for the regression coefficients for academic aspects ,non-academic aspects, program issues, reputation, and access. In the multiple regression, the standardized regression coefficient Beta is useful, because it allows you to compare the relative strength of each independent variable’s relationship with the dependent variable Pedhazur (1982).

The above coefficients table shows the constant B and p-value of the variables to examine the significance of the hypothesis. The significance level of each variable (P-value) is: .098, .000, .008, .005, .000 and their unstandardized coefficients are 0 .042, 0.114, 0.160, 0.080 and 0.277 respectively. The p-value of all the independent variables is below 0.05 except academic aspects which is greater than 0.05 which implies that all have a significant relationship with the dependent variable (students’ satisfaction) except academic aspects. The multiple regression equation is:

$$Y(\text{Overall students Satisfaction}) = (y \text{ intercept})+ 0.042 \text{ Academic Aspects} +0.114 \text{ Non-academic Aspects}+0.160 \text{ Program Issues} +0.080 \text{ Reputation}+0.277 \text{ Access}$$

The regression model from table 4.15 above result shows that keeping other variables constant, a one unit increase in Academic Aspects will have a 0.042 unit increase in the overall students satisfaction in PHEI in A.A ,a one unit increase in Non-academic Aspects will have a 0.114 unit increase in the overall students satisfaction in PHEI in A.A, a one unit increase in Program Issues will have a 0.160 unit increase in the overall students satisfaction in PHEI in A.A .A one unit increase in Reputation will have a 0.080 unit increase in overall students satisfaction and a one unit increase of Access will have a 0.277 unit increase in overall students satisfaction in PHEI in A.A.

#### **4.5. Hypothesis**

A hypothesis is often described as an attempt by the researcher to explain the phenomenon of interest. Hypothesis can either be supported or refuted on the basis of the data .The null hypothesis always predicts that there will be no effect or relationship between the groups being studied. While the alternative hypothesis takes the form that there is an effect or relationship. Therefore, a key decision that researcher must make with the assistance of statistics is whether the null hypothesis should be rejected or not .In this case the relationship is between the dependent variable and independent variable.

HO=Null Hypothesis, H1=Alternative Hypothesis

**Table 4.16 Summary of findings**

Hypothesis	Result	Reason
H0: Academic Aspects do not have a positive and significant effect on students' satisfaction.	Supported	$\beta_1=0.042$ $p>0.05$
H0: Non-academic Aspect does not have a positive and significant students' effect on satisfaction.	Not Supported	$\beta_2=0.114$ $p<0.05$
H0: Program issue does not have a positive and significant students' effect on satisfaction.	Not Supported	$\beta_2=0.160$ $p<0.05$
H0: Reputation does not have a positive and significant students' effect on satisfaction.	Not Supported	$\beta_2=0.080$ $p<0.05$
H0: Access does not have a positive and significant students' effect on satisfaction.	Not Supported	$\beta_2=0.277$ $p<0.05$

Source: Survey Result (2019)

**H1: Academic Aspect has a positive and significant effect on students' satisfaction.**

The result of multiple regression analysis of the table 4.16, indicates that in Private Higher Education Institutions in A.A, Academic Aspect does not have a positive and significant effect on overall students satisfaction with a p value  $>0.05$ . Besides, the value of beta (0.042) shows a weak impact on overall students satisfaction caused by a unit increase in Academic Aspect. As a result, the researcher fails to reject the null hypothesis and accept that academic aspect has a negative and insignificant relationship with students' satisfaction of PHEI.

**H2: Non-academic Aspect has a positive and significant effect on students' satisfaction.**

The result of multiple regression analysis of the table 4.16 indicates that in Private Higher Education Institutions in A.A, Non-academic Aspect has a significant effect on overall students' satisfaction with p value of 0.000. And also, the value of beta ( $\beta=0.114$ ) demonstrates that the positive influence of non-academic dimensions on overall students satisfaction. This implies that

a one percent increase in service quality dimension results in 11.4% increase in overall students' satisfaction. This makes non-academic aspects second strongest predictor of overall students' satisfaction. As a result, the researcher may reject the null hypothesis and accept that a non-academic aspect has a positive and significant relationship with students' satisfaction of PHEI.

**H3: Program Issue has a positive and significant effect on students' satisfaction.**

The result of multiple regression analysis of the table 4.16 indicates that in Private Higher Education Institutions in A.A, Program Issue has significant effect on overall students' satisfaction with p value 0.008. And also, the value of beta ( $\beta=0.160$ ) demonstrates that the positive influence of program issue dimension on overall students satisfaction. This implies that a one percent increase in program issues results in 16% increase in overall students satisfaction. As a result, the researcher may reject the null hypothesis and accept that program issue has a positive and significant relationship with students' satisfaction of PHEI.

**H4: Reputation has a positive and significant effect on students' satisfaction.**

The result of multiple regression analysis of the table 4.16 indicates that in Private Higher Education Institutions in A.A, Reputation has a significant effect on overall students' satisfaction with p value 0.005. And also, the value of beta ( $\beta=0.080$ ) demonstrates that the positive influence of reputation dimension on overall students satisfaction. This implies that a one percent increase in reputation results in 8% increase in overall students' satisfaction. As a result, the researcher may reject the null hypothesis and accept that reputation has a positive and significant relationship with students' satisfaction of PHEI.

**H5: Access has a positive and significant effect on students' satisfaction.**

The result of multiple regression analysis of the table 4.16 indicates that in Private Higher Education Institutions in A.A, Access has a significant effect on overall students' satisfaction with p value 0.000. And also, the value of beta ( $\beta=0.277$ ) demonstrates that the positive influence of access dimension on overall students satisfaction. This implies that a one percent increase in program issues results in a 27.7% increase in overall students' satisfaction. This makes access the first strongest predictor of overall students' satisfaction. As a result, the researcher may reject

the null hypothesis and accept that access has a positive and significant relationship with students' satisfaction of PHEI.

#### **4.6. Discussion Part**

The study has revealed a number of different service quality criteria that affect students satisfaction of service quality at the selected private higher education institutions. The service quality criteria used in this study were organized into five main components of the HEdPERF model namely academic aspect, non-academic aspect, program issues, reputation and access.

Under academic aspects the finding revealed that the kind of instructors (knowledgeable and competent) does not influence students' satisfaction on service quality. In a research conducted in Malaysian universities, physical aspects of the HE Institutions showed less importance to students. Meanwhile, the most important factors for them were identified as academic aspects Ibrahim et al., (2012). Le Blanc and Nguyen (1997),Kwek et al.,(2010) have revealed that contact personnel positively influences overall students perception of service quality. However, this finding is consistent with Mangunyi and Govender (2015) established that in respect to private higher education, not all HEdPERF service quality variables are significant, academic aspects of service quality does not necessarily influence students satisfaction. The absence of significant relationship between academic aspects and students satisfaction found in the study maybe as a result of students inferring quality of services from the physical aspects instead of the people who provide service particularly the academic staff. Academic aspect does not have high effect on students' satisfaction so PHEI should give priority to the other aspects.

Under Non-academic Aspect of the model, it was found that knowledgeable of systems/procedure and convenient opening hours had the highest mean values. This indicated that students of PHEI were either slightly negative or positive towards how the school administration have knowledgeable systems/procedure and convenient opening hours. This finding is also supported by Sohali and Shaikh (2004) particularly stated that contact personnel (staff) constitute the most influencing factor in student's evaluation of service quality. In his research, Ana (2009) indicated that five variables of HEdPERF had high correlation with satisfaction of students and their future visits to university. Moreover, this went along with intentions to recommend university to their friends'. In his dissertation, Kayastha (2011)

examined satisfaction with service quality of graduate students in Higher Education of Thailand and found out that non-academic aspects are positively related to students' satisfaction.

Under the program issues of the HEdPERF model, Flexible structure and syllabus had the highest criterion. This was followed by variety of programs and specialization offered by the institutions. This means that variety of programs offered by higher institutions influence students satisfaction of service quality. This finding is supported by many scholars including Firdaus (2005) Ford et al.(1999) and Anderson et al.(2005) who have all supported the idea that program offered by higher institutions influence students perception of service quality. Randheer (2015) Program Issues are service issues related to courses, programs, structures and health services.

Institutional reputation was also considered to be one of the service quality criteria adopted by the students of the PHEI in assessing the quality of service. The reputable program offered by higher institutions was ranked first among the items found in the reputation aspect of the HEdPERF model. This was followed by the fact that the institutions had professional appearance /image. According to research conducted in Saudi Arabia University, tangibility aspect of reputation creates an instant image of the institution in the eyes of parents and students (Randheer ,2015).Dennis (2013) in his research ,conducted the factor analysis on the HEdPERF items and reported that Reputation and Non-academic aspects are saliently exhibit intended dimensions of the HEdPERF model.

Under the access aspect of the HEdPERF model, easily contacted by telephone had the highest influence on the students' satisfaction .The findings indicate that students find it easy to contact their academic staff. Many scholars including Hill (1995),Le Blanc and Nguyen (1997),Kwek ,Lau and Tan ,(2010) and Sohail and Shaikh,(2004) have mentioned in their studies that contact personnel (administrative staff and academic staff)has a strong influence on students perception of service quality. The scholars revealed that it is the responsibility of both teaching and non-teaching staff of tertiary institutions to provide personal attention to their students. Hence, lecturers must schedule their time to make time for their students. According to Firdaus (2006) students' perceived access as the most determining factor and it is more important than other dimensions in determining service quality.

# CHAPTER FIVE

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### Introduction

This chapter presents summary of major findings, conclusion and recommendation obtained from the analysis and interpretation made from the previous chapter and also implications for further research are forwarded.

### 5.1. Summary of major findings

The study was targeted at investigating the effect of service quality on students' satisfaction of Private Higher Education Institutions and to give recommendations based on the concepts in the literature review, and empirical findings of the study. The study applied original HEdPERF service quality measurement tool of Firdaus(2006a). This research aimed at understanding the aspects of service quality in higher education institution with which students are more concerned and the aspects that are needed to be more focused by the administration of the universities. The service quality dimension of HEdPERF model was measured (academic aspects, non-academic aspects, program issues, reputation and access).Accordingly, the following are the major findings of the study:

- Demographic characteristics of respondents show that 55.1% of the respondents were female and 44.9% of the respondents were male.
- Majority of the respondents are grouped under the age of 18- 21(48%), 34.3% of the respondents were grouped under the age of 22-24, 13.7% of the respondents are grouped under the age of 25-27 and the remaining 4 % are above 27 age group. There is a high level of awareness about the concept of service quality.
- The relationship between HEdPERF dimensions and students satisfaction was measured by hypothesis testing through Correlation analysis. The strengths of the variables correlation fall on the range of moderate and strong. The correlation result reveals that there is a positive and significant relationship between the service quality dimensions and students' satisfaction .Access, non-academic aspects and reputation are relatively found to have the highest correlation with students' satisfaction than all other dimensions.

- From the mean result it is observed that students were most satisfied with reputation dimension of service quality followed by academic aspects and program issues of service quality. In the inferential statistics part the following results were achieved. Using the whole sample of 350 students, the multiple regression results showed that, service quality dimensions non-academic aspects, program issues; reputation and access have positive and significant effect on students' satisfaction of PHEI. Academic Aspects aspect had no significant effect on students' satisfaction.
- All the hypotheses were supported except the first hypothesis which states that academic aspects have a positive and significant effect on students' satisfaction is rejected.

## **5.2. Conclusion**

For the purpose of the study, 374 questionnaires were distributed, 364 were collected and out of 364 questionnaires, 14 were incomplete. Analysis was made based on 350 questionnaires. All the respondents were regular undergraduate students from four renowned private institutions - St.Mary, Sante,Admas,and Rift Valley University.

To check the variability of the variables, Cronbach Alpha was computed; for the independent and dependent variables, values of Cronbach Alpha ranged from 0.711 to 0.879.This range is considered as high as the result ensures the reliability of each field of questionnaire .Overall Cronbach's alpha equals 0.957 which indicates very good reliability.

As per the mean score value respondents are most satisfied with reputation, and followed by academic aspects. Students are relatively less satisfied with access and non-academic aspects. The mean score of service quality that is an average overall service quality dimensions indicate that most of the student are slightly moderate (neutral) that the institutions have delivered best quality service to satisfy their needs.

The regression analysis indicated that overall students' satisfaction was found to be positively explained by the sum of the five independent variables by 66.4 % in this study and the remaining 33.6% of the dependent variable (students' satisfaction) was explained by other exogenous variables that are not included in the study. The regression analysis also show that out of all five independent variables, non-academic aspects, program issues, reputation and access were

positive and significant ,the other variable academic aspects were positive but statistically insignificant. Therefore, the researcher accepted all hypotheses except academic aspects..

The regression model from shows that keeping other variables constant, a one unit increase in academic aspects will have a 0.042 unit increase in the overall students satisfaction, a one unit increase in non-academic aspects will have a 0.114 unit increase in the overall students satisfaction, a one unit increase in program issues will have a 0.160 unit increase in the overall students satisfaction. A one unit increase in reputation will have a 0.080 unit increase in overall students' satisfaction and a one unit increase of access will have a 0.277 unit increase in overall students' satisfaction in PHEI in A.A. Access has the highest beta value on the regression model and is dominant service quality dimensions with the highest impact on students' satisfaction.

From these results, it can be concluded that, higher education institutions should give much emphasis on service quality dimensions which have high impact on students' satisfaction. In the study, the four dimensions non-academic aspects, program issues, reputation and access have high effect on students' satisfaction so PHEI should give priority to these aspects.

### **5.3. Recommendation**

The current study has disclosed students' satisfaction of service quality in higher education. The study confirms that there is a significant positive correlation between the five HEdPERF dimensions of service quality (academic aspects, non-academic aspects, program issue, reputation and access) and students' satisfaction. So improving the overall service quality can lead to improving the satisfaction level of students. The researcher forwards the following recommendations based on the research findings and the conclusion drawn in the previous section.

In order to meet and improve the satisfaction level of students Private Higher Education institutions should improve their service quality dimensions in all the five dimensions of service quality. Leaders of HE should make all service be accessible for all students at any part of their institutions.

Administrative staff of private higher education institutions must be aware of the role they play in positively influencing the students' satisfaction of service quality: individualized attention,

sincere interest in solving problems, efficient /prompt dealing with complaints and responding to request for assistance.

HE is encouraged to design and introduce courses with many specializations that are high market demand. The course content of existing courses must be structured to meet the current demand of the students market.

To improve the reputation of the private higher education institutions, the study recommends that academic programs that are recognized by all stakeholders (students, parents, staff, government etc) must be offered in addition to the improvement of facilities

HE service providers' should consider their students as a customer since the institutions cannot exist without them and make needs analysis to provide quality service for all students in order to deliver excellent quality service, improve the service quality and to increase their satisfaction level.

Relationship marketing is also recommended for personnel in higher education institutions so that both academic and non-academic staffs may build strong relationship with students. Hence both academic and non-academic staff of higher institutions must be made to understand that students are customers and for that matter attention must be given to the building of long lasting relationship with them in order to retain them.

The marketers in the area of HE services should realize that .The insignificant relationship between academic aspects and overall students' satisfaction as shown in this research is unexpected. Hence, marketers in the area of HE service should invest more on factors that represents the responsibilities of academics.

Finally, managers should realize that students' satisfaction plays a major role in influencing the consumers' selection process especially in the service industry as it acts as a risk reliever. As a result, focusing on developing and maintaining the service quality will help them in positioning their service in the market and hence influencing the consumers' choice.

### **5.3. Limitations and Directions for Future Studies**

This study measures the effect of service quality on students' satisfaction in Private Higher Education Institutions in Addis Ababa. There are some limitations in this research. First, the

research sample includes only undergraduate students of Private Higher Education Institutions and did not include students from public universities. Students considering to join the Universities and students who have already graduated from the Universities have not been selected to be part of the study as pre-purchase and post purchase behaviors vary. Future studies can apply the measurement instrument in other universities.

Second, the study is geographically limited to Addis Ababa so caution must be exercised in generalizing from these findings to other cities in Ethiopia .Third, the research focuses on the students' perspective of service quality on students' satisfaction and ignored the university's point of view ,which should be analyzed in future research. Fourth, the overall level of students' satisfaction was the only target. However, parents and staffs are accepted as the stakeholders' of education. Future researches can measure parents and staffs satisfaction as well.

In spite of limitations in research, the researcher believes that this study will encourage future studies on service quality on students' satisfaction particularly in HE and it can also serve as a source of competitive advantage and be used to guide marketing activities for accredited Universities and those who will join the sector in the future.

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# **APPENDICES**

# Appendix I

**Addis Ababa University**

**School of commerce**

**Masters of Marketing Management Program**

Dear Respondent

The purpose of this questionnaire is to collect primary data for a study on “**Effect of Service Quality on Students Satisfaction: Assessment on Private Higher Education Institutions in Addis Ababa**”. This is undertaken as a partial fulfillment for the degree of Masters of art in Marketing Management at Addis Ababa University School of commerce. In this regard, I kindly ask you to provide me with reliable information to the best of your knowledge, so that the findings from the study would meet the intended purpose. I strongly assure you of confidentiality of the information you give me, and would like to extend my deepest gratitude in advance for being a volunteer to devote your valuable time in filling this questionnaire.

General Instruction: -

- There is no need of writing your name.
- In all cases where answer options are available please tick (√).

## **Section A- General Information**

**1. Sex:** 1. Male  2. Female

**2. Age:** 1. 18 - 21  2. 22 -24   
3. 25 -27  4. Above 27 years

### **3. Name of your university:**

1. St Mary  2. Santé  3. Admas  4. Rift valley

### **4. What is your level of awareness about the concept of service quality?**

1. Very Low  2. Low  3. Medium  4. High  5. Very-High

## Section B-SERVICE QUALITY ATTRIBUTES

The following statements relate to your feelings about your University. For each statement, please show the extent to which you believe your University has the feature described by the statement. Put a tick mark (✓) on the number you feel most appropriate using the scale below.

(1=Strongly Disagree 2=Disagree 3 = Neutral 4=Agree 5= Strongly Agree)

<b>A</b>	<b>Academic Aspects</b>	1	2	3	4	5
AA 1	Academic staff has the knowledge to answer my questions relating to the course content.					
AA 2	Academic staff assists me in a careful and polite manner.					
AA 3	Academic staffs are never too busy to respond to my request for assistance.					
AA 4	When I have a problem, academic staff shows a sincere interest in solving it.					
AA 5	Academic staff show positive attitude towards students.					
AA 6	Academic staff communicates well in the classroom.					
AA 7	Academic staff provides feedback about my progress.					
AA 8	Academic staff allocates sufficient and convenient time for consultation.					
AA 9	Academic staffs are highly qualified and experienced in their respective fields.					
<b>B</b>	<b>Non-Academic Aspects</b>	1	2	3	4	5
NA 1	Administrative staff provides individual attention.					
NA 2	When I have a problem, administrative staff shows a sincere interest in solving it.					
NA 3	Questions and complaints are dealt with quickly and efficiently.					
NA 4	Administrative staffs are never too busy to respond to a request for assistance.					
NA 5	Administration offices keep accurate and retrievable records.					
NA 6	When the staff promises to do something by a certain time, they do so.					
NA 7	The opening hours of administrative offices are personally convenient for me.					
NA 8	Administrative staff shows positive attitude towards their work and the students.					
NA 9	Administrative staff communicates well with students.					
NA10	Administrative staffs have good knowledge of the systems /procedures.					
NA11	I feel secure and confident in my dealings with the institution.					
NA12	The institution provides services within the expected deadlines.					
<b>C</b>	<b>Program Issues</b>	1	2	3	4	5
PI 1	The institution provides a wide range of programs with various specializations.					
PI 2	The institution provides programs with flexible structures and syllabus.					
PI 3	The institution provides an excellent counseling service.					
PI 4	Health care services provided by the institution are adequate and necessary.					

<b>D</b>	<b>Reputation</b>	1	2	3	4	5
R 1	The institution has a professional appearance/image.					
R 2	The student housing facilities and equipment are adequate and necessary.					
R 3	Academic facilities are adequate and necessary.					
R 4	The institution runs excellent quality programs.					
R 5	The institution graduates are easily employable.					
R 6	Recreational facilities are adequate and necessary					
R 7	Class sizes are kept to minimum to allow personal attention.					
R 8	The institution has an ideal location with excellent campus layout and appearance.					
R 9	The institution offers highly reputable programs.					
<b>E</b>	<b>Access</b>	1	2	3	4	5
A 1	Students are treated equally and with respect by the staff.					
A 2	Students are free to express their opinions.					
A 3	The staff respects my confidentiality when I disclosed information to them.					
A 4	The staff ensures that they are easily contacted by the telephone.					
A 5	The institution encourages and promotes the setting up of Student's Union.					
A 6	The institution values feedback from students to improve delivery of services.					
A 7	The institution has a standardized and simple procedure for providing services.					

**Part Three: Overall Satisfaction**

	<b>Students Satisfaction</b>	1	2	3	4	5
S 1	The university meets my expectations.					
S 2	I feel absolutely delighted with the universities services.					
S 3	The university is able to satisfy my wants and needs.					
S 4	I am satisfied with the performance of the staffs of the university.					
S 5	Overall I am satisfied with the service quality of the university.					

**Thank you for your Cooperation!**

## Appendix 2: SPSS Result

### A. Reliability Statistics and Test

#### Scale: Academic Aspect Reliability Statistics

##### Reliability Statistics

Cronbach's Alpha	N of Items
.845	9

#### Scale: Non-academic Aspect Reliability Statistics

##### Reliability Statistics

Cronbach's Alpha	N of Items
.879	12

#### Scale: Program Issues Reliability Statistics

##### Reliability Statistics

Cronbach's Alpha	N of Items
.711	4

#### Scale: Reputation Aspect Reliability Statistics

##### Reliability Statistics

Cronbach's Alpha	N of Items
.867	9

#### Scale: Access Aspect Reliability Statistics

##### Reliability Statistics

Cronbach's Alpha	N of Items
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.841	7
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**Scale: Overall Students Satisfaction Reliability Statistics**

**Reliability Statistics**

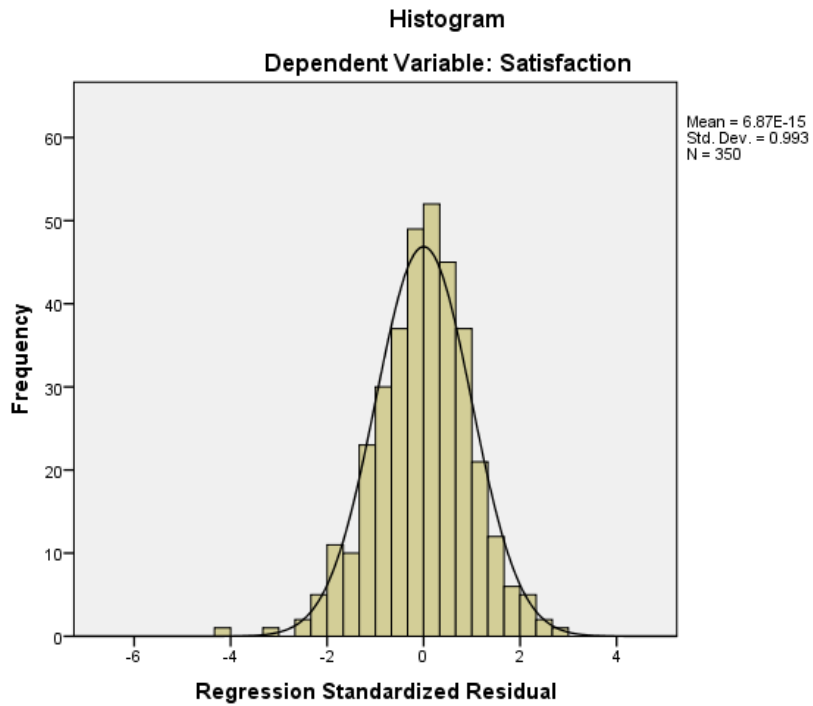
Cronbach's Alpha	N of Items
.856	5

**Scale: Overall Reliability Statistics**

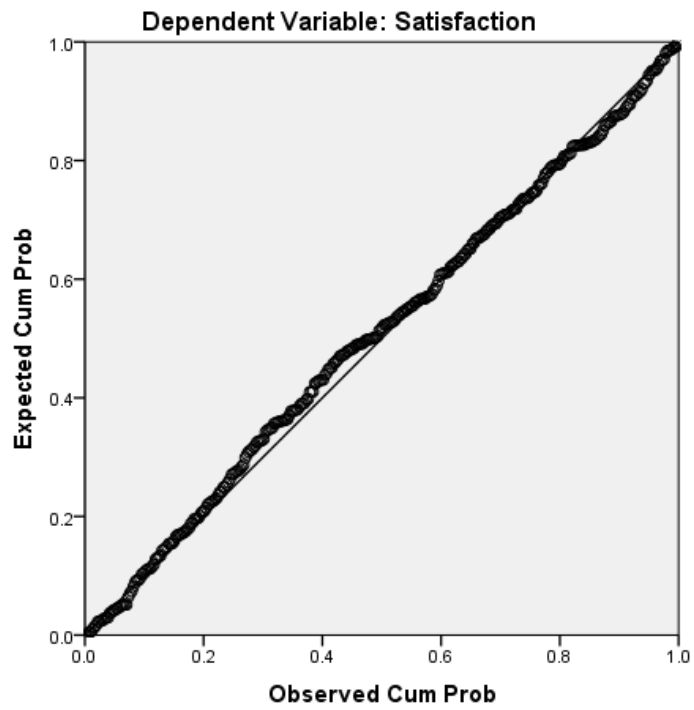
**Reliability Statistics**

Cronbach's Alpha	N of Items
.957	46

**B: Histogram for Normality Test of the Data**



Normal P-P Plot of Regression Standardized Residual



Scatterplot

