STAKEHOLDER PERCEPTIONS OF SERVICE QUALITY IMPROVEMENT IN ETHIOPIAN PUBLIC HIGHER EDUCATION INSTITUTIONS

BY

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ABSTRACT

The study identifies how different stakeholders perceive service quality improvement initiatives in public higher education institutions in Ethiopia. For this purpose, a mixed research methodology was employed. Furthermore, secondary data were collected from a variety of literature and primary data were collected from academic staff and final year students at public higher education institutions using the SERVQUAL scale and through focus group interviews. The collected data were analysed using both descriptive and inferential statistics.

The research findings indicated that all dimensions of the service quality improvement initiatives were perceived by academic staff and studentsto be verypoor. The reasons for these poor or low perceptions were: the high expectationsof the stakeholders, the government's intention to expand, lack of adequate knowledge regarding the implementation of the BPR process, the lack of motivation by service providers, poor management and the lack of good governance by the universities, inexperienced workers, non-empowered and task specific frontline employees, the low quality of the infrastructure, non-value adding hierarchical structures and approval systems, ethical problems with some service providers, the high staff turnoverand the lack of experienced staff. In addition, at all new universities, construction is underway and as a result,there are problems such as the poor state of the dormitories, classes,bathrooms, recreation areas, lounges, TV rooms, sport fields and internet connectivity, while the libraries are not well stocked with books and periodicals either.

This study has recommended that the institutions should have standardised instruments that can be used to measure the status of service quality improvement and deliveryperiodically and to identify the areas that have the highest perceived performance gap scores in order to redeploy some of the resources. It also needs to be pointed out that the service providers lack sufficient knowledge and skillsconcerning the implementation of BPR, thus training is recommended in this regard.It is further recommended that for effective implementation of the BPR process, the importance of the provision of different guiding documents, continuous monitoring of activities and top

management supportshould be kept in mind.

KEY CONCEPTS:

Service quality improvement; Ethiopian Public Higher Education institutions; SERVQUAL; Importance Performance Analysis (IPA); Stakeholder; perceptions; Stakeholder expectations; Stakeholder satisfaction; Service quality dimensions; Business process re-engineering (BPR).

ABBREVATIONS AND ACRONYMS

ACA:	Awassa College of Agriculture
BM:	Benchmarking
BPI:	Business Process Improvement
BPR:	Business process Re-engineering
BSC:	Balanced Scorecard System
CI:	Continuous Improvement
CBE:	College of Business and Economics
CHS:	College of Health Sciences
CLG:	College of Law and Governance
CNCS:	College of Natural and Computational Science
CSSH:	College of Social Sciences and Humanities
CQI:	Continuous Quality Improvement
CSRP:	Civil Service Reform Programme
DCTEHS:	Dilla College of Teacher Education and Health Science
DBU:	Debre Berhan University
EP:	Evaluated Performance
FGI:	Focus Group Interview
FDRE:	Federal Democratic Republic of Ethiopia
HEI:	Higher Education Institutions
HERQA:	Higher Education Relevance and Quality Agency
HU:	Hawassa University
ICT:	Information and Communication technology
IoT:	Institute of Technology
IPA:	Importance-performance Analysis
MoE:	Ministry of Education
MBV:	Management by Value
MU:	Mekele University
OR:	Organisational Restructuring
PHEI:	Public Higher Education Institution

PR: Process Re-engineering

NPRC: National Pedagogic Resources Centre

TOC: Theory of Constraints

TQM: Total Quality Management

WSU: Wolaita Sodo University

WGCF: Wondo Genet College of Forestryand Natural Resources

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION TO THE STUDY

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

CHAPTER 5

INTERPRETATION AND ANALYSIS OF DATA

CHAPTER SIX
SUMMARY OF THE FINDINGS, DISCUSSION OF CONCLUSIONS ANDRECOMMENDATIONS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1. INTRODUCTION

This chapter presents an overview of the study. It begins by presenting the background of the study, which gives a summary of the status of the Ethiopian higher education system and measures taken to improve its overall quality. This is followed by the motivation for the study. In the research problems paragraph 1.4, the main and sub-research questions are stated. Following the research questions, the aim of the study is outlined. This chapter further examines the strategy adopted in the study and the research methods employed. The scope of the study is then demarcated with a discussion on the delimitations of the field of study. Finally, a definition of the key concepts and the structure of the thesis are subsequently presented, followed by a summary of the chapter.

1.2. BACKGROUND TO THE STUDY

Ethiopian higher education has changed extensively over the last two decades. The number of higher education institutions and the intake capacity of undergraduate degree programmes in public higher education are increasing rapidly (Ministry of Education (MoE), 2009:59). However, the rapid increase in the gross enrolment rate has affected the overall quality of educational activities, particularly in the context of severely limited resources. The Ethiopian government has therefore made it one of their top priorities to address the issues of quality in the education sector (MoE, 2005:14; World Bank, 2004:55-57).

The question of quality in education in developing countries has been neglected for the last few decades, particularly in Ethiopia (Teshome, 2003:5). Saint (2004:104-106) states that Ethiopian higher education institutions face a number of problems related to the quality and relevance of programmes of study, as well as a shortage

and inefficient utilisation of resources.

Over the past few decades, Ethiopia's higher education sector has furthermore manifested little or no structural changes (Teshome, 2003:5) and has adhered to an outdated model which, in most cases, was not related to the country's socioeconomic environment (World Bank, 2004:1-2). Limited autonomy, a shortage of experienced academic staff, poor service delivery, declining educational quality, weak research output and outdated curricula all have characterised Ethiopian higher education (World Bank, 2004:56; Saint, 2004:84). Explaining the inevitable practical problems related to quality that the Ethiopian higher education would face, a World Bank (2004: xi) states:

> Three factors suggest that levels of educational quality may be declining. First, expenditures per student have contracted over the past decade. Second, the proportion of senior academic staff with doctoral degrees has been weakening within the system. Consequently the short term generation of sufficient numbers of academic staff, trained at the necessary levels, may be the single most difficult challenge currently faced by the higher education expansion and reform program. Third, rapid enrolment expansion is inevitably bringing progressively less qualified students into the system. Current efforts to double the size of undergraduate student numbers, and to carry out an even greater expansion of graduate training, run the risk of lowering quality further unless major quality assurance efforts are incorporated into the expansion process.

Having recognised these problems, the Ministry of Education (MoE) is currently engaged in a highly motivated effort to reform the country's higher education system so that it contributes to the country's economic development and poverty reduction strategies. Reform in Ethiopian higher education includes expansion and reform programmes addressing many aspects. Expansion of the higher education section includes the opening of new universities, establishing supporting agencies such as the Higher Education Relevance and Quality Agency (HERQA), a Higher Education Strategic Centre (HESC) and the Educational Quality Improvement Programme (EQUIP), introducing new courses and curricula, making new funding arrangements, acquiring student contributions by means of cost sharing, building the necessary

infrastructure, improving service quality through the implementation of BPR (Business Process Re-engineering), recruiting new staff, and developing and procuring teaching materials (Ayalew, Dawit, Tesfaye & Yalew, 2009:162; Saint, 2004:83; Teshome, 2003:5).

The "massification" of higher education poses a number of challenges regarding the attempt to provide quality education. These challenges have contributed to the growing government interest in establishing policy mechanisms to institute comprehensive reforms aimed at ensuring quality and accountability in higher education, so that the sector can assist the national strategy for development and poverty reduction. Currently, quality and related issues (quality assessment, quality assurance, stakeholder satisfaction and quality improvement) in Ethiopian higher education are high on the national agenda. Recognising the importance of quality and relevance in expanding educational system, the government has established the Higher Education Relevance and Quality Assurance Agency (HERQA). The HERQA is both an autonomous body and separate legal entity (HE proclamation No. 351/2003 Article 82) and the aims of the agency are to supervise, assist and encourage the development of a culture of quality in Ethiopian higher education that prioritises and values quality and is committed to continuous improvement (HERQA, 2006:4).

One of the major questions in higher education in many countries is the enhancement of quality and the attempt to define and measure quality in education (Cheng & Tam, 1997; Harvey & Green, 1993:9). This attempt has been found to be complex and there has been no common agreement regarding the definition of quality. Because quality is a "notoriously ambiguous" (Pounder, 1999:156) and multifaceted term, scholars define itin different ways. For example, Cheng and Tam (1997:23-24) view this concept as a set of components that include the input, transformation and output of the education activities by providing services that fully satisfy both internal and external stakeholders meeting their explicit and implicit expectations. According to Becket & Brookes, (2008:41-42) the literature on quality

in higher education suggests that defining and managing quality is challenging for two reasons: Firstly, quality has different meanings for different stakeholders. For instance, internal and external stakeholders may have dissimilar or contradictory interpretations of the concept and this leads to differences in managing and measuring quality. The second reason lies in the complicated nature of the educational product. Educational institutions are composed of human, physical and financial resource inputs and entails certain processes such as teaching, learning, research, community service, service delivery and administration, and knowledge transformation.

Many stakeholders are involved in higher education (students, employers, teaching and non-teaching staff, government, creditors, auditors, non-governmental organisations (NGO), to name only a few. As mentioned above, each of these stakeholders has a different view of quality, influenced by its own interest in higher education. In the quality improvement process Cheng and Tam (1997:23-24) also identify internal and external stakeholders who may have different definitions of quality. As early as in the eighties, Hughes (1988:23-25) made an interesting observation, namely that external stakeholders are mainly concerned with quality audit procedures and the degree to which the result meets an appropriate standard. They are concerned with the control of quality, whereas the emphasis for internal stakeholders is on quality enhancement, which aims at an overall improvement in the actual quality of teaching and learning and service delivery.

In addition, in the nineties, Harvey and Green (1993:10) categorised quality into five related, but different aspects: "Quality as exception, quality as consistency, quality as fitness for purpose, quality as value for money, and as transformative." They argue that different stakeholders are likely to accord different levels of priority to these different dimensions of quality, according to their interests. Differences in methods of assessment also complicate the concept of 'quality.' According to Brennan and Shah (2000:336), this complexity is explained as:

Differences are to be found in who assesses what, how, and how often. A

basic distinction is between external and internal assessment. Where both features are present, a distinction lies in who has the 'last word'…. The 'what' question is partly a matter of level: the whole institution, a faculty, a department, a programme, an individual staff member. It is also a matter of focus: teaching, research, administration.

What can be concluded from the above argument is that the concept of 'quality' in higher education is notoriously complex and contingent upon many factors. Accordingly, its definition and methods of assessment depend on the perceptions and preferences of the various stakeholders. Becket and Brookes (2006:124) agree that even if there is no common way of defining quality, there is substantial agreement that, for any definition of quality to be accepted community-wide, it must include the views of the key stakeholders. Quality in higher education, according to Harvey and Green (1993:13-15), is determined and owned by the stakeholders. Becket and Brooks (2006:125) also suggest that different perceptions held by the stakeholders of higher education must be considered when dealing with quality. Thus, stakeholder involvement has become essential to all quality improvement initiatives at higher education institutions. Higher education institutions (HEIs) are required to have domain-specific standards and to ensure that such standards are implemented effectively in an institution to improve quality and meet stakeholders' needs. Furthermore, Petruzzeluca, D'Uggento and Romanazzi (2006:353) state that higher education institutions have to evaluate their performance in terms of the quality of the service provided and of the resources used to provide it. This could be done by assessing stakeholders' satisfaction on the quality provided and by making comparisons between the expected and provided quality (Baccarani, 2004, in Petruzzeluca *et al.*, 2006:353).

In an effort to define and measure service quality in service sectors, various models have been borrowed from the industrial sectors (Gallifa & Batalle, 2010:158). The service quality approach is one of the approaches used in measuring stakeholder perceptions in higher education and entails the participation of researchers in the field (Gallifa & Batalle, 2010:158; Gronroos, 1984:39). For Smith, Smith and Clarke (2007:336), a service quality model enables the management body to evaluate its

service quality and determine where problems might exist. Regarding the perceptions of service quality, a number of researchers such as Gallifa and Batalle (2010:156) and Smith *et al.* (2007:334) use the Expectancy-Disconfirmation (Gap) model, which was developed by Parasuraman, Zeithaml and Berry (1988).

This present study uses the two most commonly used models, namely, the Expectancy-Disconfirmation (Gap)/SERVQUAL model and the Importance-Performance Analysis model (IPA) to investigate stakeholders' perception of service quality improvement and to show the areas for further improvement. Parasuraman, Zeithaml and Berry (1985; 1988) developed, refined and proposed the Gap/SERVQUAL model to measure service quality by determining the extent of a possible discrepancy between what customers expect and perceive in the performance of the actual quality of service. In addition to the Expectancy-Disconfirmation (Gap)/SERVQUAL model, this research used the Importance-Performance Analysis, which was developed by Martilla and James (1977) to identify the perceptions of stakeholders regarding quality improvements. In addition, according to Joseph and Joseph (1997:16), the Importance-Performance Analysis paradigm is the most appropriate way of measuring service quality in education.

According to Zafiropoulos and Vrana (2008:34), HEIs must understand what service quality stakeholders need and what quality attributes are demanded by stakeholders in order to improve service quality and to satisfy stakeholders. For Berry and Parasuraman, (1997) quoted by Shah (2009:127), institutions can improve the quality of the service they offer if they listen to and take cognisance of the experience of stakeholders.

Assessing the extent of stakeholders' satisfaction regarding service quality delivery in Ethiopian higher education is, according to the researcher, currently not common practice despite the fact that higher education institutions in the country are implementing quality improvement programmesvigorously. Most of these improvement initiatives have been the result of external and internal pressures by

constituent stakeholder groups to respond to their needs and priorities. In 2008, service quality improvement initiatives in Ethiopian public universities started implementing BPR (Business Process Re-engineering) to effect a fundamental change in the current business process, jobs and structures, management and measurement systems, values and beliefs with the aim of increasing quality and productivity that focus on customer satisfaction. This was done by improving service quality, increasing competitiveness and dealing with the rapidly changing environment. However, there hasbeen no study to date that has attempted to investigate the various stakeholders' perceptions of these quality improvement initiatives in Ethiopian public higher education institutions (PHEIs).

In addition to assessing their needs, HEIs must understand the quality attributes held by their stakeholders, according to Zafiropoulos and Vrana (2008:34). For Shah (2009:127), institutions can improve the quality of service they offer if they listen to and incorporate feedback given by stakeholders. Accordingly, the purpose of this study is to investigate the implications of stakeholders' perceptions regarding the service quality improvement initiatives at Ethiopian PHEIs.

1.3.   MOTIVATION FOR THE RESEARCH

The higher education system in Ethiopia is relatively young if one takes into account that secular higher education was initiated in 1950 with the beginning of the University College of Addis Ababa (Teshome, 2003:2; Wanna, 2009:131). Ethiopia's higher education gross enrolment ratio (GER) of 0.8 per cent in 2000, places it among the bottom ranking countries of the world (Saint, 2004:90). However, this situation has changed positively and significantly. The change has been demonstrated by current government policies and priorities, such as the Education Sector Development Plan, and the support given to provide better and equal access to all members of the population, as well as improving the quality of education (Teshome, 2003:4). Because of these efforts, the number of undergraduate students has quadrupled.

There is a concern, however, that the expansion of the higher education system without a concomitant improvement in service quality may not lead to the attainment of the objectives of education. Anticipating the likelihood of rising concerns regarding educational quality within the higher education system, the government has established, the HERQAby means of the Higher Education Proclamation 351/2003,. The purpose of the agency is to maintain and enhance the education quality and relevance of higher education in Ethiopia (HERQA, 2006:4).

Formal quality assessment and improvement in Ethiopian HEIs is a new phenomenon. Formerly, the most common practices used to maintain quality focussed on the qualification of academic staff, the organisation of curriculum and teacher performance evaluation by students, peers and department heads (Ashcroft, 2004:11). Following the institution of the HERQA, the nine old public universities of Ethiopia have established an institutional quality care system and policy, so that they can assess the learning achievements and overall quality of a given programme. Academic Development ResourceCentres (ADRC) have been established at the nine old universities (universities that were established before 1997) to collaborate with the EQUIP to develop guidelines, procedures and subject benchmark statements for quality assessment. Within the ADRC, the quality care unit has been established to support faculties, departments and instructors in quality care matters, mostly in quality advocacy by arranging training in areas related to quality improvement (EQUIP, 2005:1).

In 2008, all the "old universities" carried out formal institutional self-evaluation processes for the first time to highlight good practices and identify ways of enhancing quality in all aspects of the institutions. Each HEI's self-evaluation document was assessed by HERQA's quality audit team and feedback given to each university. HERQA reported the strengths and weaknesses of the institutions but the reaction of the stakeholders to the improvement of service quality remains unassessed. Accordingly, this research is trying to determine the perceptions of internal stakeholder regarding this initiative.

1.4. RESEARCH PROBLEM

The massification of higher education poses a number of challenges in providing quality education. Many stakeholders are involved in higher education, but each of these stakeholders has a different view about quality. In the past the most common practices used to maintaining quality used to focus on the academic staff qualification, the curriculum, and staff performance. The Higher Education Relevance and Quality Agency reported the strengths and weaknesses of Higher Education Institutions and found that the responses of stakeholders concerning the improvement of service quality are not assessed.

1.5. RESEARCH QUESTIONS

In the light of the background stated above, the following research questions guide the study:

1.5.1 Main research question

What are the stakeholder perceptions of service quality improvement initiatives in Ethiopian Public Higher Education Institutions (PHEIs)?

1.5.2 Sub-questions

In attempting to answer the main research question of the study, the following specific questions are addressed:

- How do internal stakeholders (students and academic staff) perceive the service quality improvement initiatives of public higher education institutions?
- Which areas and priorities do stakeholders consider crucial in improving the service quality in public higher education institutions?
- Are there any differences among internal stakeholders of PHEIs regarding their expectations and perceptions of service quality improvement initiatives? If so, why are there such differences or if not, why are there no differences?

- Are there any gaps between the expectations and perceptions of aspects or dimensions of service quality improvement initiatives?

- Is the SERVQUAL scale an appropriate and reliable measure of service quality in Ethiopian public higher education institutions?

1.6. AIM OF THE RESEARCH

The aim of the study is to explore stakeholder perceptions regarding the service quality improvement initiatives of public higher education institutions in Ethiopia. Moreover, the study aims to inform the management of higher education institutions of the implications of stakeholder perceptions of service quality improvement, by identifying the gaps between their expectations and the perceived service quality.

In the light of the above encompassing aim, the objectives of the study are to:

- Gauge perceptions held by different stakeholders of the service quality improvement initiatives in Ethiopian PHEIs.
- Point out the gap between the expectations and perceptions of service quality improvement initiatives, if any.
- Investigate whether there are any differences in perception among the different stakeholders of PHEIs.
- Identify the implications of stakeholders' perceptions.
- Suggest priority areas for improvement and changes to institutional policies for successful implementations of the service quality improvement initiatives.

Table 1.1 shows the summary of objectives, research questions and possible sources of data of the study. The table was used as a guide for the data collection and analysis during all stages of the research process.

Table 1.1: Research propositions

Objectives	Research questions	Possible sources of data
To determine perceptions of different stakeholders of the service quality improvement initiatives in Ethiopian PHEIs	How do the internal stakeholders (students and academic staff) perceive the service quality improvement initiative of the PHEIs?	Literature survey Focus group interviews Structured questionnaires
To assess the perceptions of different stakeholders of the service quality improvement initiatives in Ethiopian PHEIs To identify the implications of stakeholder perceptions	What are the areas and the priorities that stakeholders consider important/crucial to improve service quality in public higher education institutions?	Focus group interviews Structured questionnaires
To investigate whether there are any differences in perception among different stakeholders of PHEIs. To suggest changes to be incorporated into institutional policies for successful implementation of the improvement initiatives	Are there any differences among internal stakeholders of PHEIs in their expectations and perceptions of service quality improvement initiatives? If so, why are there such differences or if not, why not?	Focus group interviews Structured questionnaires
To pinpoint possible gaps between the expectations and perceptions of service quality improvement initiatives, if any	Are there any gaps between the expectations and perceptions of service quality improvement initiatives?	Literature review Focus group interviews Structured questionnaires

1.7.   CONTRIBUTION OF THE STUDY

As stated in the background paragraph 1.2, quality improvement in Ethiopian PHEIs has been a neglected field of study for many years. However, in the competitive higher education environment, Ethiopian PHEIs are now engaged in massive reform and quality improvement initiatives. As a result, they have planned to conduct regular internal and external quality assessments. It was hoped that this study would reveal how different stakeholders perceive the service quality improvement initiatives of public higher education institutions in Ethiopia. In addition, the study aimed to recommend service quality priority areas that need to be improved, based on the implications of stakeholders' perceptions.

1.8.   RESEARCH DESIGN AND METHODOLOGY

1.8.1 Research design

The research design chosen for this study was the mixed methods design. Mixed-methods research provides researchers with an in-depth look at the context, processes, interactions and precise measurement of attitudes and outcomes (Lodico, Spaulding & Voegtle, 2006:17). In addition, it utilises the advantages of both quantitative and qualitative research (Creswell, 2009:203). A mixed methods approach is defined by Tashakkori and Teddlie (2003:711) as "a type of research design in which QUAL and QUAN approaches are used in types of questions, research methods, data collection and analysis procedures, and/or inferences." Most pragmatic researchers use a mixed-methods approach to answer their research questions (Lodico *et al.*, 2006:9).

As a policy implementation study, this study applied the sequential exploratory strategy. Sequential exploratory designs for this study involved quantitative data collection and analysis as its first phase, followed by a second phase, namely qualitative data collection through focus group interviews (Creswell, 2009:206–209).

According to Lodico *et al.* (2006:285), sequential exploratory designs have been widely used by programme evaluators to develop and to create accurate quantitative surveys. Creswell (2009:211) also suggests that the purpose of sequential exploratory methods is to use quantitative data and its results to support the analysis of qualitative data.

The research design used in this study is discussed extensively in chapter 4 paragraph 4.5.

1.8.2 Population and sample

The quality of a research study mostly depends on the suitability of the sampling strategy employed (Lodico *et al.*, 2006:139-40). The decision, regarding which information is needed, depends on the nature of the sampling population. The concept of 'population' refers to the group of individuals to which the researcher wants to generalise his/her results (Muijs, 2004:37). Therefore, it is important to obtain clarity on what the study population is. Based on the above assumptions, the population for this study included all regular students pursuing an undergraduate academic degree from selected sample universities as well as full-time academic staff.

Out of a total of 22 public universities which are owned by the Ministry of Education nine are old universities, while thirteen have been newly established. From the 22 universities which opened before 2011/12, four universities were selected using a stratified random sampling method. In this study, stratification was used to include both new and old universities; while random sampling was used to select students and academic staff from different colleges of study. (See chapter 4 for details of the sampling procedure). The following map depicts the locations of the four selected public universities in Ethiopia.
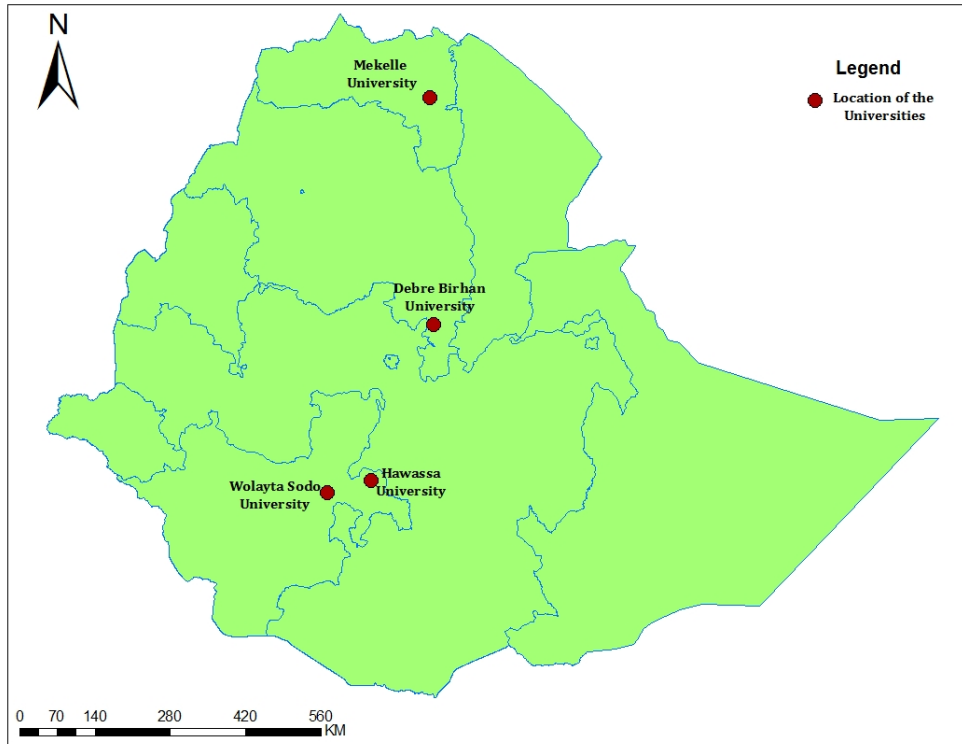
Figure 1.1: The locations of the four selected public universities in Ethiopia (study area/site)
Source: adapted from the Ethiopian Mapping Agency, 2012

1.8.3 Data collection

The choice of data collection techniques is determined by the extent to which it allows the researcher to obtain information needed to address the research questions. To get a fuller picture of the problems under investigation and to find statistical relationships between variables, different data collection tools were used (Johnson & Christensen, 2004:162-63). Accordingly, the survey data were collected through the modified version of the SERVQUAL scale (Parasuraman, Zeithaml & Berry, 1991). On the other hand, qualitative data were collected through focus group interviews with students and academic staff from sampled universities. (See chapter 4, paragraph 4.9 for more details).

1.8.4 Data analysis

Data analysis is usually conducted to reduce, organise and accord meaning to the data collected. In this study, the data were analysed both quantitatively and qualitatively. In this regard,.the quantitative data were analysed using descriptive and inferential analysis techniques. The analysis is mainly determined and informed by the research objectives and questions. In this research, the quantitative data were analysed using the Statistical Software Packages, SPSS version 15 (Statistical Software Package for Social Sciences) and SAS version 9.1 (Statistical Analysis System). In addition, the qualitative data (focus group interviews) were organised and grouped for analysis question by question   (See paragraph 4.10 for more details).

1.9 DELIMITATIONS OF THE STUDY

Presently, higher education institutions in Ethiopia have undergone a number of reforms as part of the service quality improvement initiative. This study was confined to issues related to the perceptions of internal stakeholders (students and academic staff) of the service quality improvement initiatives in PHEIs. Therefore, the external stakeholders' perceptions for service quality improvement initiatives were not assessed. Furthermore, the service quality improvement initiatives of private higher education institutions were not included because of time, financial and administrative constraints.

1.10 DEFINITION OF KEY CONCEPTS

The operational definitions of terms used in this research are as follows:

Higher Education Institutions
Higher education refers to "… education in the arts and sciences offered to undergraduates and graduate students who attend degree programmes" (FDRE, 2009:4977).

Perception

A perception is defined by the Collins Dictionary (1991:1156) as "... the act or effect of perceiving; insight or intuition gained by perceiving; awareness." In this study, a perception refers to how different stakeholders perceive and value the current service quality improvement initiatives.

Public institution

A public institution is referred to as "… an institution whose budget is allocated by the Federal or State Government, as the case may be" (FDRE, 2009:4978).

Quality

In this context, quality refers to the ability of a product or service to continually meet or exceed the requirement of the customer/*stakeholders* [researcher's emphasis] continually (Oakland, 2003:4).

Quality improvement

Quality improvement is the change and enhancement regarding every aspect to deliver first class service to the stakeholders (Johnston & Kong, 2011:6; Schroeder, 1994:3).

Quality attributes

Quality attributes are measurable factors, criteria or items that are related to service quality, which are most valued and strongly emphasised by stakeholders (Pantouvakis, 2010: 366; Chen, Yang, Shiau & Wang 2006:489), for example, tangibles, courtesy, reliability, responsiveness. Some of these attributes are similar across sectors while others are specific.

Stakeholders

Stakeholders are individuals, groups or organisations exerting a direct influence on or influenced by the activities of higher education institutions. Originally, this concept originated from business literature and was defined by Alves, Mainardes and

Raposo (2010:163) and Bryson (2004:22) as a person, group of persons or organisations who have the power to affect the objective of the institutions directly or indirectly. From this definition, it can be inferred that stakeholders in this context include government, employers, current students, academic and administrative staff, institutional managers, prospective students and their parents, taxpayers, funding organisations, parents, accreditation organisations, professional associations, and the boards of universities (see also Jongbloed, Enders & Salerno, 2008:305).

Service quality

According to Kitchroen (2004:14) and Kassim and Zain (2010:238), service quality can be defined as the degree to which the service delivery level matches or exceed stakeholders' expectations. Abdullah (2006:74) defines it as judgment about the superiority of service.

1.11 STRUCTURE OF THE THESIS

This thesis has six chapters. The first chapter contains the introduction, background of the study, the problem statement, the aim/purpose of the study, descriptions of the methodology, the contribution of the research and definitions of key concepts.

The second chapter consists of a review of the conceptual literature, which provides the conceptual foundation for the study on how service quality improvement initiatives are implemented. The following themes were selected for discussion: the conceptualisation of quality, the importance of quality improvement in HEIs, quality improvement methods, service quality, an Expectancy-Disconfirmation (Gap) model of service quality, the conceptual relationship between stakeholder satisfaction and service quality improvement and finally, service quality models for measuring service quality improvement.

The third chapter investigates service quality improvement initiatives in the Ethiopian higher education institution context. This includes the background regarding quality improvement in Ethiopian HEIs, the higher education system and its status in

Ethiopia, quality improvement initiatives in Ethiopian PHEIs, strategic support to quality improvement in Ethiopian PHEIs, major concepts in quality improvement initiatives, methods used in service quality improvement and finally an analysis of the applicability of the models in the Ethiopian context.

The fourth chapter presents a short description of Ethiopia and the sample universities, a philosophical worldview of the study, the research theory, time horizon, research design and methodology, which indicates the research process, sample selection procedures, data collection instruments, procedures and data analysis techniques, validity and reliability and ethical considerations.

The fifth chapter deals with the findings and discussion of the results. Finally, the sixth chapter presents conclusions drawn, and the recommendations of the study.

1.12 CONCLUSION

This chapter provides an overview of the study, including the background of the research, motivation of the study, research problem, research objectives and questions, the research design, population and sample, data collection tools and procedures, data analysis methods, delimitations and definitions of key terms.

CHAPTER 2

REVIEW OF RELATED LITERATURE: CONCEPTUAL ANALYSIS

2.1. INTRODUCTION

This chapter provides a review of the literature pertaining to stakeholder perceptions regarding service quality improvement and describes many important issues related to the concepts 'quality,' 'service quality in higher education,' 'stakeholders' expectations and perceptions,' as well as the models used to assess service quality expectations and perceptions of stakeholders. According to Frankfort-Nachmias and Nachmias (2006:558), scholarly research is mostly based on the findings and insights of other scholars. O'Lary (2004:66) explains: "The production of new knowledge is fundamentally dependent on past knowledge." Therefore, this review of the related literature attempts to summarise and analyse past research in order to determine whether the topic is worth studying and it provides insight into ways in which the researcher can limit the scope to the area that needs inquiry (Creswell, 2009:23). For O'Lary (2004:66), a literature review is useful in terms of informing, educating and enlightening researchers. Neuman (2003:96-97) and Struwig and Stead (2001:38) note that the purpose of reviewing literature is to acquire a knowledge base, insight into and background regarding the topic under study and to avoid duplication. With these objectives in mind, a wide variety of relevant sources were reviewed to gain insight into concepts, principles, theories and perspectives related to the topic.

2.2. CONCEPTUALISATION OF QUALITY

A large body of literature has recently been developed concerning service quality in educational settings, but 'quality' is one of the most difficult concepts to define in the social sciences and education. Thus, there is no commonly agreed and accepted definition of this concept (Becket & Brookes, 2008:2; Houston, 2007:3; Eagle

&Brennan, 2007:47; Barrow & Leu, 2006:1). Even though it is difficult to define quality, some of the definitions put forward by different scholars are presented here.

Oakland (2003:4) describes quality as the fitness for use, the ability of a product or service to continue meeting the requirements of the stakeholders and also as dependent on current and future stakeholders' needs. Deming, in Arcaro (1995:5), who is considered the "father of quality," defines quality in more practical terms as "a predictable degree of variation for adopted standards and dependability at low cost." He adds that quality is customer- and market-focussed. Considering the multi-faceted nature of quality, Adams in the nineties (1993:12-13) identifies the characteristics of quality on the basis of the different meanings it has for different individuals. The definition of quality can also change contextually and over time and furthermore, it can be assessed either qualitatively or quantitatively and it varies according to values, cultures or traditions.

Scholars also try to define quality in an educational setting. In their frequently cited article on quality in higher education, Harvey and Green (1993:3) and Giertz (2000:297), indicate that quality is relative in two senses: Firstly, the context and period in which quality is defined, resulting in different understandings by different people. Due to different interests and priorities, the same individual may have a different conceptualisation of 'quality' according to the context (Becket & Brookes, 2008:2). This point raises another critical question, namely, "whose quality?" Secondly, there are different purposes for higher education institutions. Importantly, higher education encompasses heterogeneous activities (teaching, research, community service, etc). If quality is defined as "fitness for purpose," the criteria according to which quality is judged will change. Thus, quality is relative and there is no absolute way of judging the concept of 'quality.'

Juran, in Arcaro (1995:5), defines quality as 'fitness for use' and adds that HEIs have to develop programmes of study and services that meet or exceed the requirements of the stakeholders as their primary mission. Dew (2009:4) defines

quality in higher education from five perspectives. First he sees quality as endurance and this relates to the institution's capability to maintain its reputation of quality education for a long period. Secondly, regarding quality in terms of luxury and prestige, Dew indicates that if an institution has a beautiful or prestigious campus, buildings, cutting-edge research facilities, IT facilities, and investment in scholarship, that institution is associated with good quality. Thirdly, quality is seen as conforming to the prescribed requirements. This approach to quality is related to a set of specified attributes. These attributes are usually set out by accreditation agencies and institutions are considered quality institutions when they meet the stated requirements. Fourthly, in the term "quality as continuous improvement," quality means achieving the fastest rate of innovation and improvement in all aspects of higher education and finally, quality as value added: this suggests that improvement must be seen in student performance.

The dimension of quality is also used to define quality in higher education. One of the repeatedly cited definitions of dimensions of quality in higher education is that of Harvey and Green (1993:3). They note that quality can be seen in terms of "five different but interrelated dimensions." Quality can be viewed as exceptional: according to this dimension, quality is regarded in terms of high standards, which means something special or exceptionally high standards. The second dimension is "quality as consistency." This dimension defines quality in relation to processes and specifications targeted at meeting the standard. This definition emphasises doing the correct thing well. Thirdly, in terms of the dimension of quality as "fitness for purpose," the meaning of quality is related to the purpose of the product or service and judged by the extent to which the product or service fits its purpose. The meaning of quality as "fitness for purpose" is related mostly to customers. The problem with the "fitness for the purpose" approach is that it leads to the question "whose purpose?" and the difficulty in finding what the purpose of higher education should be (Houston 2007:64). Next, quality as "value for money" is the fourth dimension. According to this approach, quality is seen in terms of efficiency, effectiveness and accountability. This is due to the scarcity of resources in higher

education and is directly related to costs; you get what you pay for. Finally, quality as "transformation": here quality refers to fundamental change, or to a process that should ideally bring about qualitative change and that result in significant improvement and enhancement of customer satisfaction (Teelken & Lomas, 2009:261).

Owlia and Aspinwall (1996:162) argue that the importance of quality is evaluated differently by different stakeholders based on their motives and interest in quality. For instance, "quality as value for money" is most likely to be understood differently by different stakeholders. Students may see it as "value for money" according to the amount of money paid for tuition against contact time supplied. On the other hand, the head of a department may relate quality with the proper and effective utilisation of resources in relation to student numbers. Considering the difficulty of defining quality in higher education, Green (1994), in Lagrosen, Seyyed-Hashemi and Leitner (2004:61), argues that it is necessary to formulate criteria as clearly as possible to be used by each stakeholder when judging and defining quality, taking all competing views into consideration.

In the literature, different perspectives have emerged in terms of which definitions and categorisations of quality can be developed. Amongst these, the stakeholder viewpoint regarding the definition of quality has gained popularity. Watty (2005:121) comments that when defining quality, different stakeholders' views must be taken into consideration. In addition, O'Neill and Palmer (2004:40) contend that quality should be defined by the customers. Therefore, organisations could supply goods and services that should be based on stakeholders' or customers' specifications. According to Lagrosen *et al.* (2004:24), understanding quality from the stakeholders' viewpoint is crucial. Thus, HEIs must address different perspectives of stakeholders when dealing with quality issues (Becket & Brooks, 2006:125). Quality as defined from the stakeholders' perspective in HEIs, is seen as the satisfaction of key stakeholders and these key constituencies are academic staff, students, management board members, parents, alumni and officers in the national

educational department.

Service quality improvement is considered a useful tool to gain a competitive advantage in HEIs. Therefore, delivering quality service has become a priority for most HEIs and while they strive to provide high quality services, they need to improve service quality to compete for students. For this reason, HEIs are currently engaged in measuring stakeholder satisfaction to understand their viewpoints and decisions about academic choices better (Zafiropoulos & Vrana, 2008:35; Voon, 2008:216).

In general, as the researcher has mentioned in the previous pages, quality cannot be encapsulated in a single definition or dimension. After reviewing a number of articles, Jackson, Helms and Ahmadi (2011:392) and Owlia (2010:1217) conclude that educational quality is multi-dimensional and is understood and defined differently by different people. Therefore, it is difficult to define this term using only one indicator or dimension. For the purpose of this research, a stakeholder-related definition of quality that defines quality as "meeting or exceeding stakeholder expectations" is used. This choice ensures that the theme of this study is addressed directly.

2.3. IMPORTANCE OF QUALITY IMPROVEMENT IN HEIs

With increased national and international competition and greater stakeholder expectations for quality service/products, organisations are engaged in the improvement of both quality and stakeholders' satisfaction (Mizikaci, 2006: 37; Gapp & Fisher, 2006:111; Koslowski, 2006:277). In the present competitive market, the success of organisations depends on the quality of services rendered. According to Mehralizadeh and Massoud (2010:175), organisations are now shifting their focus to comprehensive quality improvement to cope with the demand of markets. In support of this idea, Smith *et al.* (2007:334) proclaim that HEIs are facing similar challenges due to rapidly changing technology, growing international and national competition

for students, staff, research output, accountability by accrediting agencies and the public.

According to Giertz (2000:299), quality in higher education can be studied from two perspectives. Firstly, by clarifying what is meant by quality and by, specifically, high or low quality. The answer leads to the formulation of a standard and an evaluation of excellence. In terms of this viewpoint, quality is defined as something that meets required standards. Another approach to studying quality is by understanding HEIs. Unless we understand higher education, it is difficult to understand quality in higher education because higher education quality is necessarily different from quality as defined by industry. Giertz (2000:299) goes on to remark that this approach leads to yet another question, namely "What aims, purpose and functions is higher education for?" In effect, higher education serves many purposes and has many functions. It is preferable to discuss its qualities, rather than 'quality' alone and this leads to the formulation of criteria for quality associated with "fitness for the purpose" in higher education.

On the other hand, Becket and Brooks (2008:42) explain that quality is at the centre of any educational system. It helps to determine the contents of the curricula, how well students learn and what advantages they derive from their education. Similarly, Ji (2009:9) adds that quality is a "lifeline" for HEIs and that improvement of quality is a timeless theme. Furthermore, Chen *et al.* (2006:485) state that the importance of quality improvement in HEIs is linked to the objectives of HEIs, which are the provision of in-depth knowledge, educating students, seeking academic development and the coordination of national development needs; thus improvement of quality is non-negotiable. Quality improvement is emphasised in HEIs for a number of reasons, namely, the expectations of students as customers/stakeholders and the diversity of the student body, students' demand for increased flexibility in the provision of higher education (HE) and competition worldwide. Other aspects that are stressed are the role of higher education in stimulating the complete development of a country and the need to increase a

knowledge- and skills-based economy (Becket & Brooks, 2008:40).

In order to compete with their national and international counterparts, HEIs have to produce graduates with sufficient knowledge, skills and experience relevant to national and international needs. Different countries try to address quality issues through external control, audits, assessment or accreditation (Harvey, 2002:5). The objectives of external control are to check conformity to a given standard or specification. External control for Harvey (2002:5) is "bureaucratic" and the "pedagogy of the confined" for Gibbs and Iacovidou (2004:113). A number of problems are associated with external control and as a result, HEIs have shifted to implement internal quality assessment systems, which emphasise quality improvement and the identification of quality characteristics by different stakeholders (Becket & Brooks, 2008:41). Even though the reasons for quality improvement vary from organisation to organisation, Johnston and Kong (2011:18) contend that the major reasons for improving service quality in HEIs are concerned with improvement of stakeholder satisfaction and winning their loyalty, increasing confidence of stakeholders in the institutions and developing a strong attachment with customers.

In general, quality improvement, as set out in the preceding pages, helps higher education institutions to attract stakeholders and to create good perceptions of the service delivered. Thus, to be competitive both nationally and internationally, quality improvement in HEIs is a prerequisite. In order to carry out quality improvement activities in HEIs, different quality improvement methods are used in the literature and the following paragraph discusses some of those methods.

2.4. QUALITY IMPROVEMENT METHODS

According to Lemark and Reed (2000:81), the successful implementation of quality improvement initiatives in the service sector is lagging behind that of the manufacturing sector, due to a misconception that quality improvement initiatives are inapplicable to the service sector or are too difficult to implement. A number of

current quality improvement methods originated during and following the Second World War, especially in the United States of America, and were imported by Japan where they were improved (Grunberg, 2003:89). Womark, et al. (1996) in Grunberg (2003:89); assert that the development of different improvement methods in Japan sparked a new line of thinking in the West resulting in the development of new and improved methods in the West in reaction to those developed in Japan. The literature suggests that when it comes to measurement, these methods are static (Grunberg, 2003:90). Grunberg adds that the selection of the most appropriate methods for improvement initiatives is important in any investigation. This could be made possible by selecting key factors to be improved in terms of focused methods.

The most commonly used methods in quality improvement initiatives are:

- Total Quality Management (TQM).
- Continuous Improvement (CI).
- Business Process Re-engineering (BPR).
- Business Process Improvement (BPI).
- Process Re-engineering (PR).
- Benchmarking (BM).
- Theory of Constraints (TOC) and
- Organisational Restructuring (OR).

All these methods are aimed at improvement initiatives of operations; however, they differ in terms of implementation and scope (Grunberg, 2003:89). Some of these will be discussed below.

2.4.1. Total quality management (TQM)

Total Quality Management has been a commonly used method in the business sector for many years and has been accepted as an appropriate method for higher education as well (Hodgkinson & Kelly, 2007:81; Srikanthan & Dalrymple, 2003:134; Toremen, Karakus & Yasan, 2009:31; Quinn, Lenay, Larsen & Johnson, 2009:139).

At the beginning of the 1990s a well-known industrial quality model - Total Quality Management (TQM) - that aims for customer satisfaction and continuous improvement in the processes of the organisation was introduced into higher education quality assessment (Pratasavitskaya & Stensaker, 2010:38; Selladurai, 2002:613). The use of TQM increases the efficiency and effectiveness of the performance of HEIs, according to Lemark and Reed (2000:68). The application of the general principles of TQM in HEIs is strongly advocated by some authors (Lemark & Reed, 2000:68; Pratasavitskaya & Stensaker, 2010:38). TQM, as defined by Tannock (1991:355), is "... a philosophy of working, which emphasises a process of continuous improvement, based on human factors, team-work and motivation, with a customer-centred approach driven from the highest level in an organization."

TQM aims for long-term success through stakeholder satisfaction, improvement of the business process to satisfy stakeholders, training and empowerment of staff and high quality products at low cost (Wiklund, Klefsjo, Wiklund & Edvardsson., 2003:99; Selladurai, 2002:613; Walsh, Hughes & Maddox, 2002:299). TQM has the potential to encompass the quality perspectives of stakeholders whose perception is mostly determined by the satisfaction they get from the service (Becket & Brookes, 2008:43). According to Toremen *et al.* (2009:31), TQM ensures that the organisation consistently meets and exceeds stakeholders' requirements and involves all divisions, departments and levels of an organisation. Stakeholder satisfaction in TQM is viewed as a condition for quality, as the needs of the stakeholder are considered and determined to achieve high quality (Toremen *et al.* 2009:32; Walsh *et al.* 2002:299).

According to Eagle and Brennan (2007:45), HEIs are required to implement TQM principles to respond to the needs and interests of stakeholders. Furthermore, they advocate that the principles of TQM should be adhered to by HEIs during the implementation stage. Applying these principles can help to achieve the aim of securing present and future stakeholder satisfaction, as well as securing the participation and involvement of stakeholders in deciding how to improve quality and

how to motivate the stakeholders through feedback. In addition, knowledge of the current status of products or services and the scope for improvement, is extremely important.

According to Walsh *et al.*(2002:300), the success of TQM depends on top management commitment, the empowerment and involvement of the employees, trust and support of employees in support of management and continuous training on the application of new techniques and methods. The implementation of TQM in HEIs, according to Walsh *et al.* (2002:301) resulted in improved performance and reputation, reduced costs and duplication and increased efficiency, effectiveness, employee motivation and stakeholder satisfaction.

Even though the general principles of TQM are applicable to HEIs, some problems have been identified in this regard, such as:

- Low management commitment.
- Employee resistance to new methods.
- A lack of confidence to practise TQM by the management.
- The failure of academic staff to accept teamwork.
- Resistance amongst academic staff regarding market concepts and customer strategies when attempting university-wide implementation of TQM, are some of the major obstacles identified by Quinn *et al.* (2009:150) and Walsh *et al.* (2002:304).

In summary, the successful implementation of the TQM philosophy as a quality improvement method depends largely on HEI management and its ability to employ proper planning, monitoring and reviewing. In addition, other essential aspects are comprehensive employee training, employee commitment and motivation, the availability of the necessary information and budget and a realistic time frame to allow for the development of an understanding and appreciation of the benefits of TQM.

2.4.2. Continuous Quality Improvement (CQI)

Worldwide, there is a strong emphasis on the delivery of high quality products or services delivered with maximum efficiency. According to Brown and Marshall (2008:205), in the quest for excellence every institution should ask itself how it can design programmes and curricula to meet or exceed the expected learner needs and programme outcomes. This can be achieved through adopting a continuous quality improvement (CQI) approach. Continuous quality improvement is defined by Yasin and Alavi (2007:357) as "... an organizational philosophy, which promotes organizational change based on an ongoing pattern of planning, execution and evaluation of results related to all operations of an organization for the purpose of forever improvement." CQI is a people-focussed approach that aims for the continuous improvement of performance (Evans & Lindsay, 2001:65).

Even though it is one of the most widely implemented initiatives (Yasin & Alavi, 2007:361), implementing a continuous improvement initiative in HEIs is challenging (Temponi, 2005:17). In HEIs, continuous quality improvement, according to Temponi (2005:17), means exploring the needs and expectations of different stakeholders and re-evaluating the effectiveness of programmes and quality improvement initiatives. For Yasin and Yavas (2001:38), continuous quality improvement is a quality improvement initiatives method that facilitates change in an organisation through the process of planning, execution and evaluation with the aim of permanent improvement. They add that, through the CQI approach, institutions get a chance to look ahead in order to satisfy stakeholders by delivering high quality service.

According to the CQI approach, every activity in the institution has room for improvement. The process of continuous improvement includes people, equipment, supplies, materials and producers. Deming and Shewart developed and presented the continuous improvement cycle (Temponi, 2005:19). They named this CI cycle the "P-D-C-A cycle" which has four steps that can be applied cyclically in the process of continuous improvement. The following are the four major steps that are involved in the cycle:

- P (plan) – at this stage the objectives and processes necessary for improvements are established (Temponi, 2005:19). Identification and definition of the problem are the main concerns at the planning stage. Questions like the following are asked: *What is to be done to improve the existing practices.What resources are available?Which stakeholders will be surveyed? Which data are available? How will the gathered data be interpreted?* (Schroeder, 1994:8). According to Brown and Marshall (2008:210), this stage helps HEIs to increase stakeholders' satisfaction through improved practice and introduction of new ways of doing things.

- D (do) – during this step, the planned processes are implemented (Schroeder, 1994:8; Temponi, 2005:19). In HEIs, this can be done by means of student and staff engagement and different research activities.

- C (check) – this step refers to monitoring and evaluation of the processes and results checked against the set objectives and specifications, and finally reporting the outcome (Temponi, 2005:19). According to Schroeder (1994:8), at this stage, the process is checked to determine the effectiveness of the changes and to determine what needs to be improved for better performance. According to Brown and Marshall (2008:210), the evaluation can be done by means of student and staff feedback on the performance of the university.

- A (act) – this cycle relates to taking actions based on the outcomes of necessary improvement. In other words, reviewing all the necessary steps (P-D-C-A) and if possible, modification of the processes for the next implementation (Temponi, 2005:19). For Schroeder (1994:8), this is a step in which the institutions refine or improve their system. The cycle can be graphically represented as can be seen in Figure 2.1.
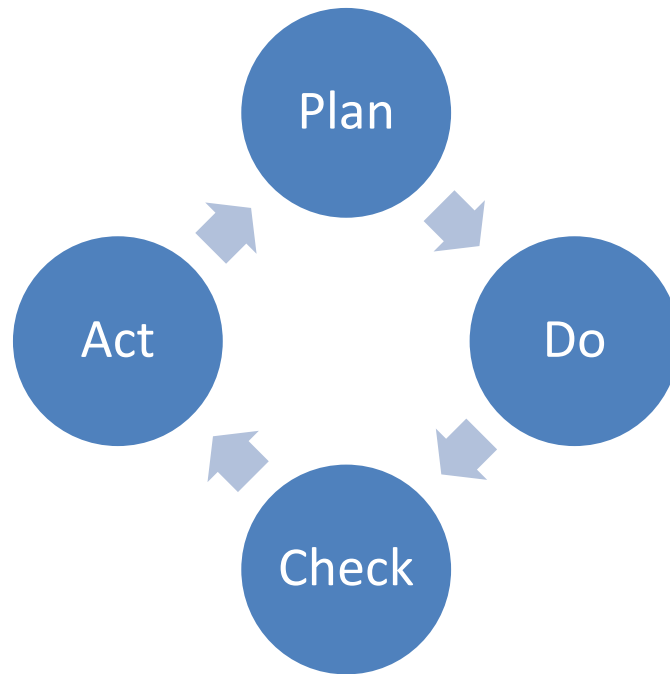
Figure 2.1: The PDCA cycle

(Source: Temponi, 2005:19)

Institutions that have applied this cycle have benefited positively from the CQI principles. According to Temponi (2005:33), if CQI is implemented in HEIs, stakeholders become involved, engaged, motivated and satisfied regarding the activities of the HEIs, and a strong relationship is formed between stakeholders and the HEIs. In addition, the reputations of the institutions are improved, because of the service it delivers and stakeholder satisfaction and collaboration are improved.

The unique environment of education makes the implementation of CQI challenging in academic institutions. According to Temponi (2005:18), some of these challenging attributes are related to students, staff, employing organisations and the environment. He also lists some other obstacles to the implementation of CQI, which include problems by top management to understand quality management and involvement, failure to follow the agreed actions by departments, lack of support to teamwork and a mismatch between skills and resources in the project.

In general, excellence through a continuous quality improvement process is

achieved when the existing gap between the old and the needed new culture is explored. The introduction of a new culture due to CQI within HEIs requires the involvement of administrative and academic staff, and the engagement of all stakeholders in the institution (Walsh *et al.*, 2002:300).

2.4.3. Benchmarking (BM)

Benchmarking (BM) is a method frequently used in association with other quality improvement initiatives. BM is a quality improvement method that helps institutions with identifying the best practices through a comparison of different processes and operations. Benchmarking is defined by Isoraite (2004:269), as "finding out why there are differences in performance and about learning from others best practice." Nazarko, Kuzmicz, Szubzda-Prutis and Urban (2009:497) explain benchmarking in HEIs as a method that results in increments of competitiveness, improves the quality of teaching-learning and research activities of institutions, and has proved successful at many American and Australian universities.

With BM, comparisons can be done either with similar processes among different units within the institutions or by outsiders (Yasin & Yavas, 2001:36; Isoraite, 2004:270). BM increases organisations' responsiveness to stakeholders' needs and preferences and aims at promoting institutions' improvement initiatives (Tillema, 2010:69; Yasin & Alavi, 2007:357). According to Yasin and Yavas (2001:40), one of the benefits of BM is the identification of the root causes of problems, thereby assisting management in taking corrective action. For Nazarko *et al.* (2009:498), BM has both direct and indirect aims: the direct aims include identifying processes with best practices, comparing them with other processes, analysing the respective strengths and weaknesses with those of the ideal practice, gaining valuable experience from others and improving practice. On the other hand, the indirect aims include upgrading the skills of management, getting support and willingness from outside, increasing the satisfaction of stakeholders and competiveness of the institution. These aims are the basis for the categorisations of BM.

Yasin and Yavas (2001:40) and Nazarko *et al.* (2009:498) also divide BM into two categories: internal and external benchmarking. The internal BM refers to looking for best practices within the institutions and has the advantage of simplicity in translating the objectives of the institutions across departments and an immediacy of impact. The second category is external benchmarking, which helps institutions to compare best practices implemented by their competitors or in different branches within the same institution. Nazarko *et al.* (2009:503) explain that the application of BM in HEIs begins with the comparison and analysis of poor performance in that institution with external good practices of other competitive institutions and then adapting those good practices.

In general, according to Nazarko *et al.* (2009:503), even if the implementation of BM is difficult and challenging in public sectors, it helps HEIs to become competitive by improving service quality, to identify areas that are in need of improvement, to facilitate cooperation among HEIs and help to overcome problems related to assessment by providing points of reference. In addition to that, BM assists HEIs in developing best practice and with taking actions that will act as a guide to improve service quality and stakeholders' satisfaction. In addition, it improves efficiency and effectiveness and illuminates waste and weakness in HEIs (Nazarko *et al.,* 2009:503).

2.4.4. Process Re-engineering (PR)

Process Re-engineering is a technique that aims at improvement. In order to remain in a competitive market, organisations have to make improvements to their products or services. PR is defined by Champy (1995), as quoted by Love and Gunasekaran (1997:184), as "... the fundamental re-thinking and radical design of business processes to achieve dramatic performance improvements in critical and contemporary measures of performance such as cost, quality service and speed." ForDavies (1997:177), PR is revolutionary because it is a new way of doing things, focussing on processes and requiring the use of technology to make changes to

existing practices.

In terms of PR methodology, good practices must be communicated and should be accessible to all the parties involved. To make use of these good practices and effect changes, management training should take place in the institutions (Yasin & Yavas, 2001:37). According to Love and Gunasekaran (1997:184), the application of process re-engineering is highly significant when a comprehensive approach is adopted regarding changes that focus on top-level manager guidance and leadership. Other prerequisites are knowledge of why and how processes are improved, selecting appropriate techniques and tools that help with redesigning the process, implementation of IT technology, application of change management to bring people into the new culture of doing things and the use of continuous improvement techniques to maintain the improved performance of the organisation.

2.4.5. Business Process Re-engineering (BPR)

Business Process Re-engineering (BPR) as a quality improvement initiative is commonly applied in the business sector for attaining efficiency, effectiveness and for making the activities customer-focused. It is a new phenomenon in the HE context (Walker & Black, 2000:195). For Vakola and Rezqui (2000:239), BPR provides an opportunity for monitoring and evaluating the progress of the re-engineering effort. Regarding the aims of BPR, Selladurai (2002:614) as well asTissan and Heikkila (2001:331) deem it an improvement of business processes through the implementation of radical and rapid changes by removing the way of doing through replacement and formation of new processes.

Vakola and Rezgui (2000:239) state that BPR is used in quality improvement initiatives for a number of reasons. Firstly, BPR methodology provides the means of codifying experience, knowledge and ideas that can be evaluated and tested. Secondly, BPR methodology allows for planning and monitoring activities in the institutions. It enables them to develop a clearer picture of its core processes and

associated problems. Thirdly, those involved or affected by the re-engineering activity have a clear understanding of their roles and tasks. In addition to that, it facilitates communication between those individuals who are leading BPR and different parties with the result that progress is seen as a result of monitoring activity of the overall process re-engineering. Finally, BPR allows for the identification and development of standards for required skills. The key skills required for BPR include process modelling, organisational development techniques and the skills to deal with resistance to change.

The implementation of BPR methodology also has its own limitations. Vakola and Rezgui (2000:239) point out that BPR prevents creativity and innovation. This has a negative impact on the implementation process. Several factors responsible for the failure of BPR have been identified by Vakola and Rezgui (2000:241), such as a lack of clear understanding due to a misapprehension of BPR as an intuitive, creative endeavour, which is similar to TQM. Another factor is the unrealistic expectations of what can be achieved through BPR in a short period of time. Additionally, a lack of expertise regarding the implementation of BPR leads to its failure. Furthermore, the researchers list the following problems concerning the implementation of BPR: methodological problems, problems with re-conceptualising the process, identifying the wrong process objectives, problems related to recognition of the potential benefits, an over-dependence on information technology and low commitment by an institution's executives. The focus of BPR is on rethinking and the radical redesign of a business process in order to achieve radical improvement in the performance of the institutions with respect to costs, quality, service and time-to-market (Yasin & Alavi, 2007:357). Therefore, HEIs have to be aware that BPR is feasible only when viewed as a part of a comprehensive quality improvement strategy.

This paragraph has emphasised several quality improvement methods currently employed by HEIs for quality improvement. Associated with each of these methods are certain inherent benefits, limitations and difficulties encountered during the implementation process. The next paragraph will discuss aspects related to service

quality.

2.5. SERVICE QUALITY

While the literature on service quality is very limited, over the last two decades certain debatable issues have been raised in the marketing literature (Brady & Cronin, 2001:35). An examination of the available literature suggests that the three themes underlying the concept of 'service quality' are that, firstly, the evaluation of service quality is very difficult for consumers who compare the quality of goods. Secondly, that a perception of service quality is the result of consumers' comparison of their expectations with actual service delivery and finally, that service quality evaluation includes both outcomes and processes of service delivery (Parasuraman *et al.*, 1985:42).

There are different definitions of service quality in the literature; therefore, it is difficult to reach consensus regarding this term (Schneider & White, 2004:9). After reviewing the research of different authors, Brysland and Curry (2001:391) define service quality as "providing something intangible in a way that pleases the consumer and that preferably gives some value to that customer." Parasuraman *et al.* (1988:14) provide a comprehensive definition of service quality: "The discrepancy between consumers' perceptions of services offered by a particular firm and their expectations about firms offering such services." In other words, service quality is the function of perceptions of service quality minus expectations of service quality delivered. From a service quality point of view, service quality is defined as the extent to which the service delivery level matches customers' expectations (Kitchroen, 2004:14; Kassim & Zain, 2010:238; Parasuraman *et al.*, 1985:41). Similarly, Prakash and Mohanty (2012:9) define service quality as "… service quality is customers thinking that they are getting better service than expected associated with actual delivery, where expectation is the level of service the customer hopes to receive." The varied nature of stakeholders in HEIs (students, faculty members, professional bodies, employers, government, sponsors and society) makes it difficult

to define service quality as the degree to which the service performance meets or exceeds stakeholder expectations. Hung, Huang and Chen (2003:79) also defined service quality as the extent to which the service delivery meets the needs or expectations of individuals.

Even if it is very difficult to describe and assess service quality in HEIs, the numbers of research studies comparing the product quality through service quality measurement are increasing rapidly. According to Quinn *et al.* (2009:140) and Parasuraman *et al.* (1988:13), service quality may be understood in terms of the attributes related to the service delivery, the degree of customer satisfaction and/or the interaction of different parts of the operational system of the institutions.

The success and failure of an organisation depends on the excellence of the service provided (Parasuraman *et al.* 1985:42). It is common that most people hear about poor service delivery rather than good service quality and "... negative word of mouth can have a devastating" effect on results and on an organisation's effort to attract new customers (Smith *et al.*, 2007:335). Smith *et al.* also add that poor service will have a negative effect on an organisation's reputation. If the service sectors view quality as important in terms of it making a positive contribution to the competitive world, then providing excellent service should be of prime importance (Slade *et al.* 2000, in O'Neill & Palmer, 2004:40).

2.5.1. Characteristics of service quality

The information available on the quality of goods is not sufficient to understand service quality. The four well-documented characteristics of service provide a clear understanding of what service quality is (Parasuraman *et al.*, 1985:42-43). The first characteristic is intangibility, which refers to the fact that services are performed, which cannot be measured, counted or inventoried. Thus, it is difficult for institutions to know how stakeholders perceive and evaluate the service quality of their institutions. The second characteristic is heterogeneity, which indicates that there is

variation in the perception of service quality from producer to producer, stakeholder-to-stakeholder or even over time. What the stakeholders perceive may be completely different from what the institutions may deliver. Hence, assuring uniformity in quality is difficult. The third characteristic is the inseparability of production and consumption. In some service organisations quality occurs at the time of service delivery, mostly in the form of the interaction between the stakeholders and the contact person from the service organisation. In some cases, the inputs of stakeholders become important for the quality of service delivery. Prakash and Mohanty (2012:2) and Hill (1995:10) add a fourth characteristic, namely perishability. They go on to state that perishability refers to the fact that goods/service can be consumed only as long as the activity or the process continues. That means that services cannot be stored for a long period like products and are stopped when the organisation discontinues the process.

2.5.2. Education as service sector

Service quality has become a key strategic issue at HEI management level. Service quality practitioners and academics in higher education are looking for ways to measure service quality accurately in order to understand its essential antecedents and consequences better and to establish methods for improving service quality in their institutions, as well as to achieve a competitive advantage and build customer loyalty (Abdullah, 2006:71).

According to Gbadamosi and Jager (2009:880), service quality in higher education is determined by the extent to which stakeholders' needs and expectations are satisfied. Sahney, Banwet and Karunes (2004:297) also suggest that education, as a service industry, needs to adopt the techniques of other service industries in measuring the quality of its service and the satisfaction of its stakeholders. According to Hodgkinson and Kelly (2007:78), higher education institutions, as service providers, should exhibit all the features required and expected by their stakeholders. Okunoye, Frolick and Crable (2008:10) add to this idea by stating that

meeting the needs and expectations of stakeholders and complying with their values is an important competitive factor for the success of HEIs.

2.6. HIGHER EDUCATION INSTITUTION STAKEHOLDERS

Studies analysing HEI stakeholder management remain scarce. Stakeholders are the key contributors to organisations' better and improved performance. To make use of their contribution, the identification of all relevant stakeholders should be undertaken by HEIs. This stakeholder identification may help the management of HEIs know who the key stakeholders are and what would satisfy them (Bryson, 2004:24, 26). One of the fundamental and challenging steps in the improvement of service quality is the identification of key stakeholders (Jongbloed *et al.,*2008:309). According to Okunoye *et al.* (2008:15), stakeholders exist in many different forms within an organisation and they have a stake in the behaviour and effective performance of the organisation. Importantly, HEIs provide an education service for diversified groups of people and their degree of involvement differs from participant to participant. By identifying their stakeholders, HEIs may ascertain their needs and interests and this identification helps to set up the means of meeting and satisfying these needs (Alves *et al.,* 2010:168).

For Alves *et al.* (2010:163), stakeholders are individuals or groups of individuals who have the power to impact on an institution or affect the objectives of the institution. Bryson (2004:22,24) defines a stakeholder as a person, group of persons or organisations who are considered by management to have the power to influence the fate of the organisation directly or indirectly. Okunoye *et al.* (2008:29) describe the staff, faculty and students as immediate users or key stakeholders of the service provided by HEIs, while the success of any implementation of activities within an organisation depends on how thoroughly such activities are embraced by the respective stakeholders. Jongbloed *et al.* (2008:305) classify stakeholders as internal stakeholders (students and staff, including administrative staff and management), whom they refer to as the "community of scholars," and the external

stakeholders such as communities, alumni, employing organisations, governments and professional associations. Similarly, Johnson (1993) in Toremen *et al.*, 2009:31) categorises the people and organisations outside an institution that benefit, use or are affected by the output of the institutions, as "external stakeholders." This includes the parents, the community, potential students, employers in the labour market, government, alumni and others. Internal stakeholders, on the other hand, are individuals within the institution such as academic and administrative staff and students.

In their study of service quality improvement in the public service, Brysland and Curry (2001:392), using the SERVQUAL scale, employ the terms "customer" and "stakeholder" interchangeably. On the other hand,Venkatraman (2007:99) and Jackson, Helms and Ahmadi (2011:392), are of the opinion that "customers" in education literature refer to "stakeholders" and Lagrosen *et al.* (2004:62) suggest that using the term "stakeholder" in an HEI context, instead of "customer," is less controversial when discussing service quality in higher education. Thus, this study also makes use of "stakeholders" rather than "customers." Similarly, Sahney *et al.* (2004a:151) suggest the use of "student" and "stakeholder" in place of "customer" for educational institutions.

2.7. CONCEPTUAL RELATIONSHIP BETWEEN STAKEHOLDER SATISFACTION AND SERVICE QUALITY IMPROVEMENT

Presently, the literature on service quality satisfaction in many disciplines is increasing rapidly. Stakeholder satisfaction through the delivery of service quality could be explained in many ways. For example, Zeithaml, Berry, and Parasuraman, (1993:7) suggest that stakeholder satisfaction is the result of the stakeholders' assessment of service/product quality and price. Satisfaction is the difference between stakeholders' expectations and their perception of the quality service improvement. The higher the perceived service quality improvement, the higher stakeholders' satisfaction will be (Sigala 2004, in Petruzzeluca *et al.,* 2006:351).

Knowledge of the stakeholders' expectations helps HEIs to reduce the gap between their expectations and service delivery. It also aids in identifying the strengths and weaknesses of the service delivery of institutions. As a result, the institution improves its performance (Jackson *et al.,* 2011:393; Chen, Yang, Lin & Yeh, 2007:163; Petruzzeluca *et al.*, 2006:354).

Brysland and Curry (2001:393) and Jongbloed *et al.* (2008:303) also note that knowledge of what satisfies stakeholders and a consideration of their role in society are important steps in quality improvement initiatives for HEIs in the delivery of service quality and the assessment of their relationships with different stakeholders. Chen *et al.* (2006:484) note that employee satisfaction in their current working environment leads to a greater willingness and efficiency in performing organisational activities. They continue by declaring that the degree of teacher satisfaction has an influence on the performance of the institutions. Greater stakeholder satisfaction leads to an improvement in loyalty, the further consumption of the service and invitations from other stakeholders (Petruzzeluca *et al.*, 2006:352-354; Chen *et al.*, 2007:163; Juga & Juntunen, 2010:506).

It can therefore be seen that there is a positive correlation between satisfaction and loyalty, where an increase in satisfaction leads to an increase in loyalty (Jones & Sasser (1995) in Douglas, Douglas & Barnes, 2006:253; Chen *et al.,*2007:162). The loyalty of stakeholders, according to Jones and Sasser (1995), in Douglas *et al.* (2006:253), has implications for institutions and is manifested through returns to the organisation; the behaviour of the customers to re-purchase through recency, frequency, amount, retention, longevity and stakeholders refer potential stakeholders to institutions through word-of-mouth. In his study investigating the impact of quality on satisfaction, revenue and cost as perceived by providers of higher education, Shah (2009:125) has also found that quality improvement has led to an increase in satisfaction and reduction in costs.

Jongbloed *et al.* (2008:304) also note that HEIs should frequently evaluate their level

of commitment and degree of involvement in serving the demands of stakeholders. As observed by Weaver (1995, quoted in Toremen, Karakus & Yasan, 2009:31) and Jongbloed *et al.* (2008:305), superior quality is achieved in an institution when stakeholders' needs are identified. Kitchroen (2004:20) contends that the dissatisfaction of stakeholders in HEIs is expressed by a reduction in student admissions. Therefore, the extent of stakeholder satisfaction is the most important criteria in quality improvement initiatives and HEI management has to evaluate the extent of their stakeholders' satisfaction periodically.

2.8. CONCEPTUAL RELATIONSHIP BETWEEN STAKEHOLDER PERCEPTIONS AND SERVICE QUALITY IMPROVEMENT

Perceptions of what constitutes service quality in higher education differ amongst individuals (Giertz, 2000:296). Identifying stakeholders' perceptions of service quality is an important matter for HEIs (Gallifa & Batalle, 2010:157). Knowledge of the perceptions of stakeholders helps institutions and their management to try to maximise satisfaction and minimise dissatisfaction (Douglas *et al.*, 2006:252). In support of this idea Jackson *et al.* (2011:393), add: "Educational institutions, like businesses, are forced to confront the fact that, since perception is reality to customers, it is the perceptions must be considered if improvements are to be recognized." According to Giertz (2000:297) and Shah (2009:128), stakeholder perception of quality is one of the determinants of their attitude towards quality work and based on their perception of quality, they will be attracted to some products/services. In support of this view, Faganel (2010:213) observes that academic staff's service quality perceptions are improved by ensuring that the service is accurate, reliable and clear to customers during service delivery. In return, this improvement leads to higher satisfaction. He goes on to remark that a negative response from stakeholders is the result of a failure to meet or exceed their expectations. This serves as an indication to management where changes need to be made and also pinpoints areas for further improvement.

In support, Srivastava, Shervani and Fahey (1998), in Shah (2009:128), state that if stakeholders are satisfied with the quality of service delivery, they have a positive regard for the institutions, they are willing to pay more, they promote its reputation and remain loyal to the institution for a longer period. To put it differently, the implications of stakeholder perceptions of the service quality assists HEIs to identify the extent of stakeholder satisfaction with service quality through student retention within an institution and their willingness to recommend the HEI to friends, relatives and others. In general, according to Chen *et al.* (2007:163), identified low stakeholder satisfaction assists an institution to determine improvement priorities.

2.9. SERVICE QUALITY MODELS FOR MEASURING SERVICE QUALITY IMPROVEMENT SATISFACTION

Quantifiable improvement presupposes a degree of measurement. The degree of service quality improvement mostly depends on reliable assessment and measurement techniques (Nadiri, Kandampully & Hussain, 2009:525; Quinn *et al.*, 2009:145). The measurement of service quality is a prerequisite for improvement, because "... you cannot improve what you cannot measure" (Owlia, 2010:1217). However, finding the appropriate instrument for measuring service quality is a controversial matter, according to Abdullah (2006:72).Accordingly,a few conceptual models for measuring customer satisfaction on service quality have been developed.

 Although there are many quality measurement models, all are imperfect, complicated, each with its own advantages and limitations and developed on marketing concepts (O'Neill & Palmer, 2004:41). In recent education literature on education service quality, a number of models have been proposed, namely, the SERVQUAL model (Parasuraman, *et al.*, 1988), the SERVPERF model (Cronin & Taylor, 1992), the Evaluated Performance (EP) model (Teas, 1993a, b), the IPA model (Martilla & James, 1977) and the HEdPERF model (Firdaus, 2006). The SERVQUAL model reveals the gap between customer perceptions and expectations of service quality, while the SERVPERF model only gives an indication of the

perceptions of service quality. The EP model also measures the gap between perceived service quality and the ideal quality of service, while the importance-performance analysis model describes the absolute performance measure of customer perceptions. On the other hand, the HEdPERF (Higher Education Performance) model is employed to identify valid determinants of service quality in higher education institutions (Firdaus, 2006:569).

There is no universally agreed single model suitable to all circumstances to be employed in HEI service quality management and measurement (Becket & Brooks, 2008:40; Nadiri *et al.,* 2009:523; O'Neill & Palmer, 2004:39). Therefore, this research makes use of the two most popular models (SERVQUAL and IPA) to measure the improvement initiatives of service quality in Ethiopian higher education by identifying the gaps between stakeholder expectations and their perceptions of service quality and areas for further improvements. Further motivation for using this model will be provided in the next paragraph.

2.9.1. SERVQUAL model

In improving service quality, HEI management must begin by getting an understanding of the stakeholders' view of service delivery through valid measurement instruments (Wang, Feng & Hsieh, 2010:1103). A number of research studies measuring the perception of service quality, namely those of Gallifa & Batalle (2010:156), Smith *et al.* (2007:334), Yeo (2008:266), Faganel, (2010:214), Ramseook-Munhurrun, et al., (2009:541), Pantouvakis, Chlomoudis & Dimas (2008:449) have followed the best known quality measurement model, the Gap/SERVQUAL model, which was developed and refined by Parasuraman *et al.* (1985, 1988, 1991). The SERVQUAL model is also easy to apply to the public sector, is statistically valid, is designed to identify key service quality dimensions and allows for the determination of perception, expectations and gaps between the perceptions and expectations (Brysland & Curry, 2001:393). Brysland and Curry (2001:392) add that SERVQUAL is a tried and tested model used reasonably often

as a benchmarking tool. It was also developed in response to a lack of conclusive measuring tools designed for gauging service quality. The SERVQUAL model reveals the gap between customer perceptions and expectations of service quality, in order to determine the perceived service quality and to target these identified gaps for improvement (Parasuraman *et al.*, 1988:15; Faganel, 2010:213; Chen *et al.*, 2007:163; Nadiri *et al.*, 2009:525; Brysland & Curry, 2001: 394; Chen *et al.*, 2006:486; Quinn *et al.*, 2009:145; Wright & O'Neill, 2002:25).

According to Parasuraman *et al.* (1985:47; 1988:15), the SERVQUAL model is also referred to as the disconfirmation paradigm or the gap model and can be represented mathematically by the following formula:

$$SQ = \sum_{j=1}^{k} (Pij - Eij)$$

Where:

SQ = Service quality

P_{ij}= Performance perception of stimulus i concerning attribute j

E_{ij}= Expectation of service quality for attribute j, which is the relevant norm for stimulus i

I ij = Importance of stimulus i concerning attribute j

k = number of attributes

This formula shows the gap between stakeholder perceptions and their expectations of service quality improvement in order to determine perceived service quality improvement. The wider the gap between stakeholder expectations and perceptions, the larger the weakness in service quality improvement (Parasuraman *et al.* 1985:46). A number of studies, both theoretical and empirical, have been conducted using SERVQUAL models. They are:

- Amongst undergraduate university students (Faganel, 2010; Nadiri *et al.*, 2009; Pariseau & McDaniel, 1997; Gallifa & Batalle, 2010; Zafiropoulos & Vrana, 2008; Hill, 1995).

- With service departments at a university (Smith *et al.*, 2007).

- In the public sector (Brysland & Curry, 2001).

- Measures of teaching effectiveness and improvement of teaching quality (Chatterjee, Ghosh & Bandyopadhyay, 2009).

- Healthcare service (Lonial, Menezes, Tarim, Tatoglu & Zaim, 2010; Lee, 2006; Lam, 1997).

- Employee satisfaction (Ramseook-Munhurrun *et al.*, 2009).

- In the transport system service (Wang *et al.*, 2010).

- In the hotel sector (Fernandez & Bedia, 2005).

Gallifa and Batalle (2010:33) used the SERVQUAL model to measure the importance of students' perceptions of service quality improvement in HEIs in their study conducted at University X between 2002 and 2006. Their sample consisted of final year students because it was assumed they would have a clear and critical perception and could evaluate the quality of service they had experienced reliably. The research reveals that student perceptions of quality are useful in the identification of deficiencies in quality and in the composition of a university profile based on student perceptions of service quality.

Faganel (2010:215) demonstrates how SERVQUAL can be used to assess stakeholders' perceptions in higher education in his study of a Slovenian business school and its two dominant internal stakeholders: students and academic staff. The results show that there was a difference in the understanding of quality between the two groups of stakeholders. The finding also challenges the SERVPERF model by establishing important determinants of service quality for both students and staff. Smith *et al.* (2007:334) also used the SERVQUAL scale in their exploration of service quality at an IT service department at an HEI and their evaluation of the

SERVQUAL instrument. Their findings confirm the previous findings that the use of SERVQUAL in the public sector produces different dimensions than those found in private service sectors (Faganel, 2010:215). It has also been found that the relative importance of the five dimensions of SERVQUAL scale was similar for internal stakeholder groups, students and academic staff.

Zafiropoulos and Vrana (2008:33) have tried to analyse how students and staff viewed the quality of education at HEIs in Greece using the SERVQUAL model. They investigated the perceptions of students and staff with regard to their university and its provision of quality education. Accordingly, they used a standardised SERVQUAL scale designed for the educational context and their findings revealed that there was indeed a gap between students' perceptions and their expectations of service quality at their institution. In addition, they found that the staff had higher expectations than the students, while their perceptions were lower than those of the students. Nadiri *et al.* (2009:523) also demonstrated how the use of SERVQUAL could be used to evaluate students' perceptions of service quality in HE in a study to identify the applicability of a perceived service quality measurement scale to students to diagnose the degree of student satisfaction in HE.

Pariseau and McDaniel (1997:212) used the SERVQUAL scale to assess the service quality of business schools in the USA. The primary objective of their study was to identify determinants of service quality at this institution. Data were collected from a sample of faculty members and students at two universities by means of a questionnaire based on SERVQUAL. The results indicated that neither school delivered quality service, in terms of the views of students. In other words, the finding shows where the schools are failing to meet students' expectations and how to manage the situation or where more resources for service quality improvement should be allocated.

Ramseook-Munhurran *et al.* (2009:541,546) used a modified SERVQUAL questionnaire to assess the perceptions of service quality of a cell phone call centre

in Mauritius to explore the predicting factors for employee satisfaction. They found that tangibles were the best predictor of employee satisfaction and they identified three composite dimensions of call centre service quality, namely, assurance-empathy, reliability-responsiveness and tangibles. Wang *et al.* (2010:1104) and Ramseook-Munhurrun *et al.* (2009:551) suggest that the SERVQUAL model can help management with deciding where to invest and also to identify stakeholder needs for service quality. In support to the above ideas, Carr (2007:109) suggests that the Gap model has made a substantial contribution to understanding service quality as well as the importance of stakeholder reactions to service.

The initial Gap model (Parasuraman *et al.*, 1985:47) revealed ten dimensions pertaining to evaluating service quality, namely, tangibility, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding of customers, which they termed "service quality determinants". In the later investigation, Parasuraman *et al.* (1988:23) refined the scale by removing overlapping quality dimensions and they then identified twenty-two attributes distributed over five dimensions. Using these attributes as questions in the SERVQUAL model, the gap between the score of perception of the performance and the score of expectation in each dimension can be calculated.

Table 2.1 on the following page depicts the comparison of the old and the new model's dimensions.

Table 2.1: The relationship between the old and the refined models' quality dimensions

Original 10 dimensions	The refined five quality dimensions				
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Tangibles	🟥				
Reliability		🟩			
Responsiveness			🟦		
Competence Courtesy Credibility Security				🟦	
Access Communication Understanding of the customer					🟨

Source: Zeithaml, Parasuraman & Berry (1990:25)

As shown above in Table 2.1, the first three dimensions remained the same, while the other seven dimensions were combined into two dimensions in order to avoid overlapping. They labelled and defined the five new dimensions as follows (Parasuraman *et al.*, 1988:23):

- Tangibles: the physical facilities and surroundings, the equipment used in the delivery of the service and appearance of the personnel (number of items: 4).
- Reliability: the ability of the service provider to deliver dependable and accurate service as promised (number of items: 5).
- Responsiveness: the institution's willingness to assist its stakeholders by providing prompt service (number of items: 4).
- Assurance: the service provider's knowledge and ability to provide confidence to stakeholders (number of items: 4).

- Empathy: readiness for provision of individualised care and attention to stakeholders (number of items: 5).

According to Parasuraman *et al.* (1985:46) regardless of the type of service, stakeholders basically used similar criteria in evaluating service quality. These criteria seem to fall into 5 dimensions of service quality,which are labelled by Parasuraman *et al.* as "service quality determinants"Figure 2.2 below shows the function of stakeholders' comparison of their expectations of service quality improvement initiatives with perceived service quality improvement, with reference to the five quality dimensions. According to Parasuraman *et al.* (1985:46), judgements of service quality by stakeholders depend on how they perceive the actual service delivery, with respect to what they expected.
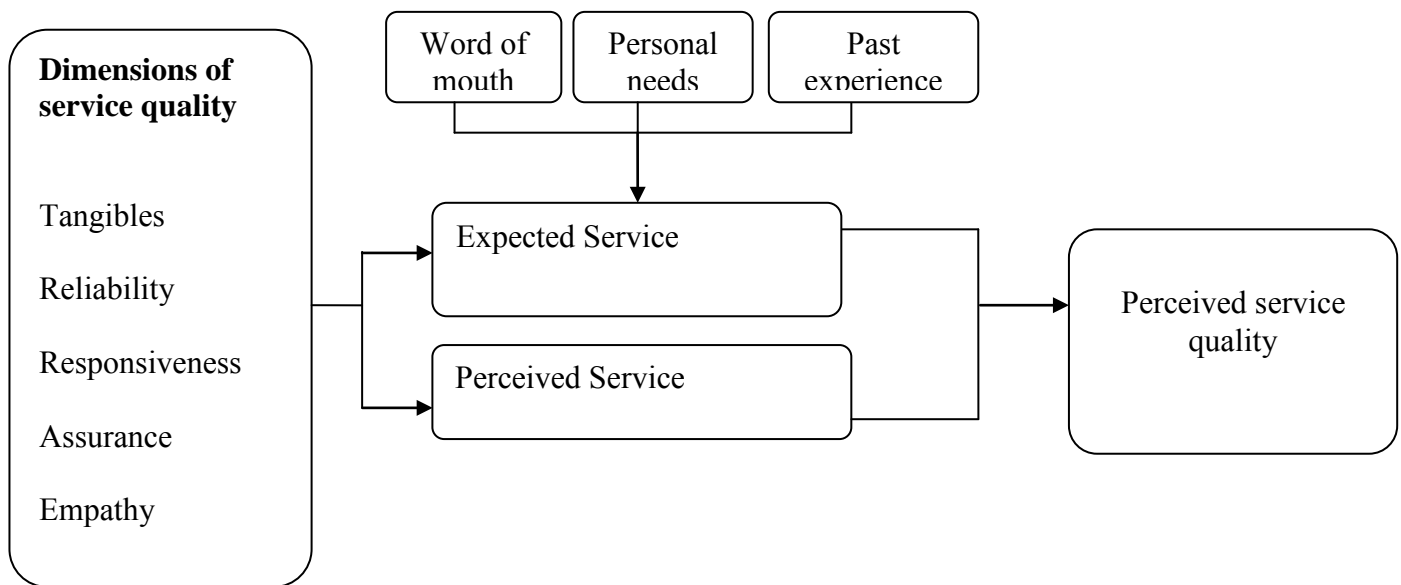
Figure 2.2: Determinants of perceived service quality

Source: Parasuraman, et al.,1985:48

As stated in the preceding paragraphs, the SERVQUAL model is a significant conceptual model, which describes different determinants of service quality. However, despite its popularity, the SERVQUAL model has been criticised (for example, Cronin & Taylor, 1992:56; Teas, 1993a:21; Joseph & Joseph, 1997:16; O'Neill & Palmer, 2004:42). According to Joseph and Joseph (1997:16), the

SERVQUAL framework is inappropriate in the context of education for the following reasons: Firstly, the identified five dimensions of service quality are questionable when applied to education. Secondly, there are problems related to answering the SERVQUAL questionnaire, particularly the expectation part (Chen *et al.,* 2006 486; Teas, 1993a:21). Thirdly, the standards against which performance measurements are measured, are based on assumed previous knowledge and experience of the service. For example, when students enter an HEI, they have little or no prior knowledge or experience of the institution. Fourthly, there are problems associated with psychometric testing (O'Neill & Palmer, 2004:42). Finally, the number and nature of dimensions in the SERVQUAL construct may be industry-related. Because of such criticism of the SERVQUAL model, this research makes use of the modified SERVQUAL model (Parasuraman *et al.*, 1991) and the IPA model. This decision aims to overcome the weak points of the traditional SERVQUAL model and to identify areas for improvement that were not identified by the SERVQUAL model. The following sub-paragraph will discuss the second model which will be used in this study.

2.9.2. The importance of the performance analysis method

For a service sector practitioner it is important to be able to measure the extent of satisfaction and the importance of service attributes to users. Accordingly, satisfaction is a function to the fulfilment of the needs of stakeholders by all the service attributes (Schneider & White, 2004: 29). Thus, it is of considerable importance for the management section firstly, to identify service attributes that are in need of improvement and then to improve these areas, thereby increasing stakeholder satisfaction. To this end, different techniques are in use of which the most commonly used is the IPA that is a technique which emerged from the earlier work of Martilla and James (1977). Unlike SERVQUAL, the importance-performance technique is best described as an absolute performance measure of customer perceptions. This technique seeks to identify the underlying importance ascribed by consumers to the various quality criteria being assessed (Wright & O'Neill, 2002:26).

According to Joseph and Joseph (1997:161), the importance-performance analysis (IPA) paradigm is the most suitable model for measuring service quality satisfaction in education. The objective of the IPA is to identify which attributes or combinations of attributes are most influential in stakeholder satisfaction. Martilla and James (1977:77) state that stakeholder satisfaction is the result of certain important attributes and their judgment of attribute performance. They add that the IPA tries to assess the underlying importance accorded by consumers to the various quality criteria under judgment.

O'Neill and Palmer (2004:43) stress the fact that the importance of the IPA can be seen as a reflection of the value placed by customers/stakeholders on different quality attributes. Furthermore, it indicates the direction for improvement deemed most important by the stakeholders. In addition, Wang *et al.* (2010:1106) pronounce that the IPA helps to identify the levels of relative importance and performance service attributes. The importance of the importance-performance technique suggested by Wright and O'Neill (2002:35) lies in the assessment technique of how a service is performing according to different quality attributes. In addition, it is relevant for indicating which attributes are deemed most important and/or relevant by the stakeholder. Importantly, the IPA is a low cost, easily understandable model, which indicates to managers where they should devote more resources and time as well as those areas where too many resources are utilised. O'Neill and Palmer (2004:43) used this tool in their study of service quality evaluation in higher education institutions and found that IPA was widely applicable because of its simplicity, ease of application and diagnostic value.

Several empirical studies in various fields have been conducted using IPA models to assess service quality, for instance, in higher education (Wright and O'Neill, 2002), amongst university students (Angell, Heffernan & Megicks, 2008; Douglas *et al.*, 2006; O'Neill & Palmer, 2004; Joseph & Joseph, 1995) and in the transport service sector (Wang *et al.*, 2010). Wright and O'Neill (2002:23) investigated the service quality at Western Australian higher education institutions by employing the IPA

model. Two hundred and sixty-nine students responded to the questionnaire. The results reveal that students consider the core service quality dimensions to be significant. The finding also reveals the usefulness of the IPA technique in evaluating service quality in an HE context.

Douglas *et al.* (2006:251) measured student satisfaction at Liverpool John Moores University in the United Kingdom, using the IPA model. They selected a sample of 864 students and tried to identify the areas of university service that the students considered important and their degree of satisfaction with it. Their findings reveal that the most important areas are those associated with teaching and learning and that the least important areas are those related to the physical facilities. Accordingly, their findings have important implications for HEI management regarding the investment of resources in order to increase student satisfaction.

Angell *et al.* (2008:236) also used the IPA model for identifying the service factors used for quality evaluation by postgraduate students, to analyse the appropriateness of IPA in the assessment of service quality and to provide a working example of IPA's application at a British university. Their findings show that "the 'academic' and 'industry links' aspects of service quality are the most critical to postgraduates." They also confirm that the IPA is a suitable tool for measuring service quality in HEIs.

Furthermore, when Joseph and Joseph (1997:15) examined university students' perceptions of service quality at New Zealand HEIs, they used an IPA approach. Accordingly, they collected data for the study in two stages, which involved a series of focus group interviews and a survey of a thousand respondents. They found that the least important factors at the universities performed the best; in other words, that the universities were performing poorly in what was regarded as the most important areas while excelling in those dimensions considered to be the least important.

To apply the IPA model for service quality measurement, Martilla and James (1977:79) advise that the following methodology should be applied:

- Firstly, the attributes to be measured, must be determined if various qualitative data collection techniques are used. A list of attributes must be developed that are key features in quality improvement initiatives.

- Secondly, the importance and the performance measures must be separated. If both importance and performance are measured together, bias will be introduced and that will make the whole exercise invalid. Separating both importance and performance helps the respondent to progress naturally from general to specific questions.

- Thirdly, the vertical and horizontal axes must be positioned on the grid. This helps to identify relative, rather than absolute, levels of importance. Usually, a five or seven point scale is recommended in order to divide the grid in the middle position.

- Finally, median values must be used as a measure of central tendency. If the mean and median scores are reasonably close together, use the mean to avoid discarding the additional information they contain, otherwise use the median.

As explained by Martilla and James (1977:77), the most attractive feature of the IPA is that the importance and performance mean values can be displayed graphically in a two-dimensional grid to facilitate easy interpretation (see Figure 4). The grid is divided into four quadrants to enhance the interpretation of the mean importance and performance measures associated with each of the quality attributes. The four quadrants are described as follows:

- **Concentrate here**: This quadrant indicates that the respondent feels that a particular quality attribute is highly important, but the attribute's performance causes low satisfaction.
- **Keep up the good work**: The quality attribute in this quadrant is regarded by the respondent as both important and indicates a satisfactory performance.

- **Low priority**: The quality attribute here is rated low in terms of performance, but respondents do not regard the attribute as highly important.
- **Possible overkill**: Here the performance of certain quality attributes in the institution is judged as being good, but respondents attach slight importance to it.

High importance

Quadrant II	Quadrant I
Concentrate here	Keep up the good work

Low performance ———————————— High performance

Quadrant III	Quadrant IV
Low priority	Possible overkill
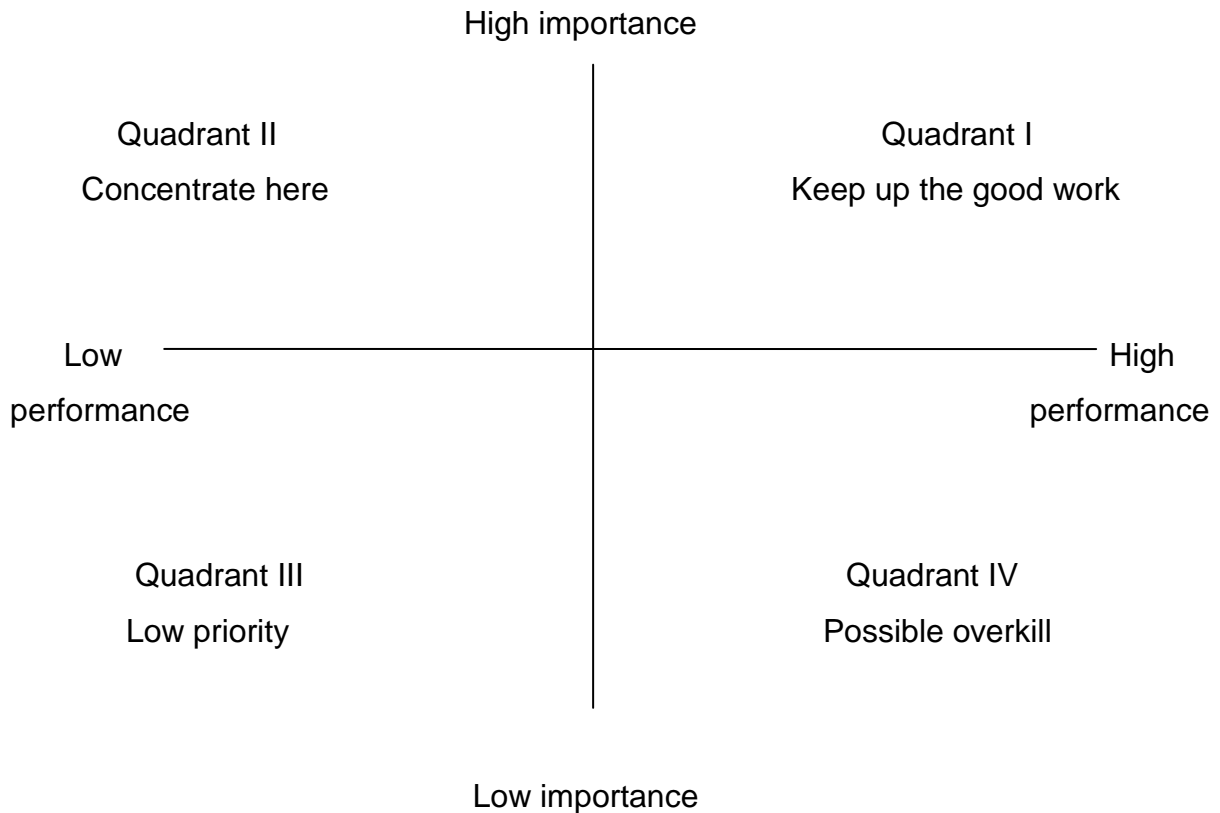
Low importance

Figure 2.3: Importance-performance analysis

Source: *Adapted from Martilla and James, (1977:78)*

Even though the IPA model has several important attributes in terms of measuring service quality improvement, it is not free from criticism. For example, Tontini and Picolo (2010:565) have found in their case study that the IPA model has led to wrong improvement decisions. In addition, they argue that the IPA is based on the performance of current attributes. It focusses on stakeholder satisfaction and

considers the performance of the attributes in linear terms. Another problem they encountered was that there was an independent relationship between attribute performance and importance in the IPA model. However, other researchers, for example, Mikulic and Prebezac (2008:562), have found that the attributes of performance and importance are not independent of each other. The importance of an attribute may change with a change in performance.

Because of a growing dissatisfaction with the SERVQUAL model among researchers, this research has attempted to merge the SERVQUAL and IPA models. It is believed that merging the two models will provide insight into service quality improvement and stakeholder perceptions that would not be attainable with any single model. Parasuraman *et al.* (1991:445) suggest that the SERVQUAL model should be supplemented with other qualitative and/or quantitative research to find the causes for the key problem areas or gaps identified by the SERVQUAL. To the knowledge of the researcher, no research, except that of Mostafa (2007), has used both models to assess stakeholder perceptions of service quality. Mostafa (2007:83) used this approach in order to understand student perceptions of service quality at private universities in Egypt. Even though his results do not support the five dimensions of SERVQUAL, the study provides some valuable findings regarding the service quality of HEIs in a non-Western setting.

2.10 CONCLUSION

This literature review discussed the conceptual aspects of service quality improvement and stakeholder satisfaction and perceptions. The chapter also attempted to emphasise the multifaceted nature of quality and to define quality in general and service quality, in particular. In addition, the importance of quality improvement in HEIs, different quality improvement tools, HEI stakeholders, the conceptual relationship between stakeholder satisfaction and service quality improvement and service quality models for measuring service quality improvement were the main themes of the chapter. It was noted that there are different models to

assess service quality, but that there is disagreement amongst scholars in the field regarding the suitability and efficiency of measurement models. Some of the points of criticism include the charge that all measurement models are necessarily imperfect, complicated, with their own advantages and limitations and are developed in line with marketing concepts.

As discussed in the preceding pages, several studies have analysed service quality improvement initiatives aimed at an increase in stakeholder satisfaction. Where stakeholders were satisfied with the service performance of the institutions, they had a positive perception of the institution, and the institution in turn maintained its reputation. Assessing stakeholder perceptions of service quality in HEIs is a common practice in the West and other parts of the world. Unfortunately, no such studies have yet been conducted at Ethiopian HEIs. The next chapter will present quality improvement initiatives at Ethiopian higher education institutions.

CHAPTER THREE

SERVICE QUALITY IMPROVEMENT INITIATIVES IN ETHIOPIAN PUBLIC HIGHER EDUCATION INSTITUTIONS

3.1. INTRODUCTION

The conceptual literature discussing issues relevant to education quality in general, and service quality improvement in particular, was reviewed in chapter two. The aim of this chapter is to investigate service quality improvement initiatives in the higher education system in the Ethiopian context. It also considers the status of Ethiopian public higher education institutions (PHEIs) regarding the strategic support to achieve quality improvement. This chapter is therefore aimed at providing background to developments aimed at the improvement of education quality in Ethiopian PHEIs and servicequality improvement initiatives in these institutions. In addition, this chapter also provides an overview of the BPR implementation and major changes in the current business process as service quality improvement initiatives.

Most of the previous service quality in higher education-related research studies relevant to the current research have been done in the USA, Europe, and in Australia. Therefore, it was extremely difficult to find sufficient and current research articles situated in the Ethiopian context. Therefore, a number of old and limited sources were consulted for this research study, as there were no other sources to use in this research. This underscores the scarcity of references in the Ethiopian context.

3.2. HIGHER EDUCATION STATUS AND REFORMS IN ETHIOPIA

3.2.1. Higher education status

The Higher Education Proclamation (FDRE, 2003:6) regards "HEIs" as an umbrella

term for all universities, university colleges, colleges and institutes. Article 11 of the proclamation defines a university as an institution with a minimum enrolment capacity of 2,000 regular undergraduate and graduate students in at least three academic units larger than departments. In addition, in terms of these criteria, a university should have completed at least four consecutive graduation cycles in the relevant degree programmes. A university is an institution that conducts research and publishes its research products. A university teaches curricula that comply with the national standards and are allocated a minimum requirement of material and human resources, as prescribed by the ministry. Despite the criteria stipulated by the proclamation, most of the public new universities do not meet the required standards. Some of the existing colleges were transformed to universities without fulfilling the criteria and obtained the status of university, for instance Dilla College of Teacher Education and Ambo Agricultural College were transformed to universities (Melis, Ashcroft, Macfarlane, Rayner, Tesfaye & Teshome, 2008:14). As these two colleges are now public universities, it would seem that the policy was formulated only for private institutions and that public universities have been exempted, even though this has not been stated explicitly.

According to Teshome (2007:13), the basis for grouping higher education institutions in Ethiopia are the levels of qualification they offer as well as their ownership. According to Article 10 of Higher Education Proclamation No. 650/2009, HEIs are those institutions that offer programmes leading to bachelor degrees (BA/BSc), to medical (MD) or veterinary medicine (DVM) degrees, to masters' degrees (MA/MSc) and doctoral degrees (PhD) or its equivalent, or any other degree that may be determined by the academic senate. With regards to ownership, higher education institutions in Ethiopia are classified as federal, regional, private and non-governmental (Teshome, 2007:13; MoE, 2009:59). The status of other institutions, such as university colleges and colleges, is grouped in terms of age (period since establishment) or by the extent to which they fulfil the requirements as stipulated in the proclamation. In this respect, the focus of this research is thus on institutions that have the status of universities.

The Higher Education Proclamation No. 351/2003 (FDRE, 2003) has paved the way for a 'massification' policy in Ethiopian education to increase the number of universities. In 2010/11, there were 26 government HEIs including the Ethiopian Civil Service College, Defence University College, Telecommunications and Information Technology College and Kotebe Teachers Education College and 64 accredited non-governmental institutions (MoE, 2011:59). In the government sector alone, the enrolment rates have increased by over 33% per year (MoE, 2009:59; Wanna, 2009:141). With the establishment of an additional nine new universities, the enrolment rate at HEIs has increased rapidly over the past few years. Total enrolment at higher education institutions escalated from 203,399 in 2006/07 to 447,693 in 2010/11 (MoE, 2011:60). At public universities the annual intake capacity of undergraduate students has increased dramatically.

The government has made provision for private higher education as a key component of its expansion strategy and the number of private and non-government higher education institutions has grown rapidly as a result. The number of students enrolled in private higher education increased rapidly. This demonstrates the effect of both the new education policy and the government's decentralisation effort to expand the HE system throughout the country (MoE, 2009:59). Importantly, it should be noted that the majority of Ethiopian students attend public universities. Despite these achievements, accessing HE is still limited in terms of secondary school completion rate figures.

Table 3.1: Enrolment status of HEI students for the year 2010/11

Programme	Government			Non-government			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under-graduate degree	273368	95886	369254	53401	25038	78439	326769	120924	447693

Source: MoE: Education Statistics Annual Abstract (2011:59)

However, the number and qualifications of academic staff are not sufficient to meet

this increased enrolment rate. For example, the number of Ethiopian instructors (lecturers) in 2006 was around 6,357. Of these instructors, only 890 (14%) had a PhD degree, while 2,182 (34.3%) had obtained a second degree and 3,286 (51.7%) had an undergraduate degree (MoE, 2007:6). By 2007, the total number of Ethiopian instructors had increased to 7,166 (Wanna, 2009:148). Even though the enrolment ratio has increased rapidly, the number of academic staff has not been able to increase at the same rate. Moreover, at all the public universities, with the exception of Addis Ababa University, the qualification levels of the academic staff do not meet the minimum requirement stipulated by the MoE. The MoE's benchmark for a university is that only 20% of the staff are first degree holders while at least half hold a masters degree and 30% have a PhD. Significantly, at many of the HEIs, more than half of their academic staff (52%) only have a diploma or a bachelors' degree, while those with PhDs comprise about 9% of the staff (Taye, 2008: xxi). The situation is most problematic at the nine new universities and those universities far from urban areas.

In effect, the expansion of higher education has been accompanied by limited numbers of academic staff, many of whom are inexperienced. This situation has been exacerbated by limited funding and insufficient infrastructure that have had a negative effect on the quality of education offered, resulting in stakeholder dissatisfaction. In this regard, Ashcroft (2004:31) warns that if the 'massification' policy is not supported by the expansion of teachers in terms of both numbers and in qualifications, it will lead to a change in teaching and assessment methods, which will affect the quality of education dramatically. She adds that individual tutorial classes have decreased, that student project supervision was limited to fewer contact hours, that there was too much written guidance for students instead of face-to-face contact, that class sizes have increased that, in turn, has led to a change in lecture presentations and assessment methods which result in stakeholder dissatisfaction in quality service delivery. Thus, to improve these conditions different service quality improvement initiatives were undertaken in public HEIs. The following paragraphs will discuss these initiatives.

3.2.2. Higher education reforms

The history of higher education in Ethiopia goes back to the opening of the university college of Addis Ababa in 1950 (Saint, 2004:84; Wanna, 2009:133). Even though it is older than 60 years, it still remains highly underdeveloped, compared to other Sub-Saharan countries. Higher education is considered a major factor for socio-economic development worldwide (Teshome, 2005:2). According to Fergany (2000:5), there is a strong correlation between economic development and the spread of higher education. In support of Fergany's viewpoint, the Federal Democratic Republic of Ethiopia (2002:295) describes the relationship thus: "Expansion of education, training and research institutions with the required standard and quality is essential to realize the national capacity building and overall sustainable development of Ethiopia."

In a country that is beset by poverty, HIV/AIDS and malaria with limited health and education coverage, a poor public service and based on a traditional agrarian economy, the important role of HEIs is a priority (Teshome, 2007:1). HEIs should be at the vanguard of eradicating these problems, together with capacity building and sustainable development. The economic and social contribution of HEIs in Ethiopia has been summarised by Teshome (2007:2) as follows:

> …greater productivity; National and regional development; Reduced reliance on government support… increased potential for transformation from low-skills industry to knowledge-based economy; Democratic participation, increased consensus and perception of a society based on fairness and opportunities for all citizens.

Following political changes in 1991, significant reforms have been undertaken in the education sectors (Nwuke, 2008:71; Taye, 2008: viii; Teshome, 2003:5; Wanna, 2009:138-40). Accordingly, a number of higher education policies have been formulated and implemented, for example, the new education and training policy which was introduced in 1994 and the Higher Education Proclamation adopted in

2003. Not only do they attempt to improve access to tertiary education, but they also highlight the relevance of higher education institutions and the importance of quality in education.

An important decision was taken by the Ethiopian government after 1997 with regard to the fact that the higher education system had to contribute to economic growth and poverty alleviation. According to Nwuke (2008:71), Taye (2008: viii), Saint (2004:85) and Teshome (2003:6), reforms have affected the overall system and its institutions and the academic programmes. At the macro level, an expansion policy was designed to increase the number of public universities, to initiate the private provision of HE, to increase the enrolment ratio by addressing geographical and structural imbalances and to improve service quality delivery. In this regard, the National Pedagogical and Resource Centre (NPRC) has been established in 2000 (Wosenu, 2009:102) to upgrade the pedagogical skills of HEI staff. At the institutional level, ideally the reform provides autonomy to the universities and university senior management are elected by the university staff. In addition, the allocation of block grants is based on a funding formula, complemented by various financial initiatives such as income diversification and cost sharing to strengthen the financial position of HEIs. Strategic planning and ICT development are encouraged, as is a revision and change of curricula, the introduction of new study programmes and an increase in enrolment at postgraduate level.

At academic programme level, changes were made to degree programmes as a result of the reforms, reducing them from four to three years. Several new study programmes are currently being introduced to respond to the market demand. Furthermore, graduate programme enrolment has increased to supply the expanding HEIs, while an institutional pedagogical centre has been established at the old universities (those established before 1997) to upgrade the pedagogical skills of the instructors and civil service reform was designed to improve the quality of service delivery (Saint, 2004:85; Wosenu, 2009:102; Teshome, 2003:6). Taye (2008: viii) reports that, as a result of the reform process, modest salary adjustment

were made to improve the remuneration of academic staff. In order to satisfy the stakeholders' needs a number of reforms have taken place in service delivery such as change in the current business process, jobs and structures, management and measurement systems, values and beliefs aiming at radically increasing quality and productivity by focussing on stakeholders' satisfaction, increased competitiveness, and to cope with the dynamically changing global environment.

However, despite all these reforms, policies and supporting agencies, the expected improvement in HEIs has not yet been realised. Considering the inadequacy of the reforms to bring about the expected improvement in the service quality of education and to make it possible for HEIs to act as agents for change and poverty reduction, the Ministry of Education set up a Higher Education Systems Overhaul Committee of Inquiry in March 2004 (named the HESO Team). According to the HESO team (HESO, 2004:5), the main objectives were "... to examine and analyze the leadership, governance and management of the higher education sector and to suggest ways that the higher education system should be overhauled to enable it to better meet the development needs of Ethiopia." Based on these objectives and after assessing several public and private HEIs, the HESO team identified the following three key problems and challenges which require additional reforms. Firstly, the HEIs, government and its agencies were unprepared for the implementation of the new system of autonomy and accountability. Secondly, the prevailing culture at the HEIs obstructed the development needs of the country and thirdly, HEIs, the government and its agencies were slow in their response to address the challenge of HIV/AIDS (HESO, 2004:5).

In addition to the above mentioned reforms, there are two further support systems, namely the Higher Education Relevance and Quality Agency (HERQA) and the Higher Education Strategic Centre (HESC), that were established in 2003 (FDRE, 2003:3). The development of two different policies and a civil service reform programme have been put in place since 2001 in order to improve the quality of education and service delivery in the HEIs.

3.2.3. Establishment of supporting agencies

To support and strengthen these quality improvement initiatives, the government has established different agencies and centres. The two supporting agencies, namely the Higher Education Relevance and Quality Assurance Agency (HERQA) and the Higher Education Strategic Centre (HESC), were established with the promulgation of the Higher Education Proclamation (FDRE, 2003:3). In addition to these agencies, the National Pedagogic Resources Centre (NPRC) has been established to support higher education institutions.

HERQA was established as an autonomous body with the aim of assuring and enhancing quality and the relevance of academic programmes, so that graduates meet the requirements of the world of work (FDRE, 2003:3). Article 80 of the proclamation provides HERQA with a contextual adaptation of best practices, benchmarks and relevant quality standards worldwide. Importantly, HERQA has assumed a number of powers and duties such as ensuring that higher education and training offered at any institution are up to standard, relevant and of high quality, evaluating the institutions at least once every five years and submitting its findings to the Ministry and informing the public of the current situation in the HE sector (HERQA, 2006:7).

The Agency develops guidelines and procedures that assist with quality improvement and assessment, with ten focus areas for quality assessment. These focus areas are:

- Vision, mission and educational goals.
- Governance and management systems.
- Infrastructure and learning resources.
- Academic and support staff.
- Student admission and support systems.
- Programme relevance and curriculum.

- Teaching, learning and assessment.

- Student progression and graduate outcomes.

- Research and outreach activities.

- Internal quality assurance.

All the old PHEIs based their first self-assessment reports on these areas (HERQA 2006:3). The HERQA conducted its first quality audit in 2004/5 at Debub University (as it was then known) and St. Mary University College, with a second quality audit at Adama University and Unity University College in 2006. Self-assessment reports were submitted to HERQA and external assessors, selected from different universities, were led by HERQA experts in auditing the PHEIs (Dawit, 2006:121).

The agency also undertook quality audits at nine old public universities and four private higher education institutes. The quality audits have suggested the following problems related to quality: a shortage of reference material in libraries, a lack of sufficient academic support for students, no clear teaching and assessment policies, low morale amongst insufficiently qualified academic staff and an absence of stakeholder participation in curriculum development and revisions (Yohannes, 2009:41).

In the short time since its establishment, the HERQA has undertaken a number of quality enhancement activities, despite not being well-endowed with human, material or financial resources. The agency has organised different courses of training and workshops for HEI management and academic staff. HERQA is further involved through its advisory services and has evolved to be a discussion forum where professionals from HEIs can network (HERQA, 2006:6; Teshome, 2007:83).

However, the agency is not performing as expected, HERQA's mandate is the development and dissemination of best practices and benchmarks, but it does not act in this respect. HEIs see the HERQA as an auditor rather than an enabler and most new universities could not gain enough support for the agency.

The HESC, on the other hand, was established with the aim of formulating a vision and strategies for the compatibility of Ethiopian HEIs with the country's needs and international development with respect to education, training and research (FDRE, 2003:5). In addition, the HESC has been mandated by Article 89 of the proclamation to guide the development, reform and restructuring of the Ethiopian higher education sector and to advise the national higher education reform plan and strategy. HESC was established with the aim of assisting in policy and strategy formulation, governance, leadership and management, the improvement of teaching and learning as well as the coordination of academic staff development (Solomon, 2006:3).

The National Pedagogic Resources Centre (NPRC) was founded in 2000 with the aim of improving the teaching and learning process at both private and public HEIs. According to Wosenu (2009:102), the centre offers training courses to academic staff on themes such as instruction skill, professional ethics, curriculum development and evaluation, the preparation of teaching material, guidance and counselling.

As in the case of the HERQA and the HESC, the centre is not fulfilling its planned role. For the last decade, according to Wosenu (2009:103), the centre has trained a meagre 150 participants. The centre consists of only one permanent and two part-time workers and is not allocated a budget from the MoE or the government. This would suggest that the centre was only established for the sake of public relations.

All of these agencies function autonomously. However, they are generally located far from the country's HEIs and their activities are not as visible as the HEIs expected and would have wished. The MoE has undertaken different measures as quality improvement initiatives such as addressing academic staff shortcomings by graduate training for Ethiopians in Ethiopia and overseas, and use of expatriate academics. The first measure has been the institution of the process of quality assurance and accreditation of public and private tertiary education institutions. In addition, it has undertaken major construction and renovation programmes at all the universities (MoE, 2005:15-16; World Bank, 2004:58-62).

3.2.4. Development of policies

In addition to the above supporting agencies, two different policies were developed to improve quality in HEIs, namely, the Education and Training Policy of 1994 and the Higher Education Proclamation. Both polices have already been referred to in paragraph 3.2.2 and will be discussed below.

3.2.4.1. Education policy

The end of communism necessitated the adoption of a new market-oriented ideology that has led to a number of reforms in the education system in Ethiopia. The New Education and Training Policy in 1994 is among these reforms and was designed to respond to the government's socio-economic transformation of all sectors (TGE, 1994:2-3).   In relation to this, Teshome (2004:3) points out the following:

> …free market economic policies, improved environment for private investments, and the relatively better and steady growth of the economy, as well as openness to the world and the spread of information and communication technologies have required more personnel with higher education and training.

The New Education and Training Policy (TGE, 1994:2) acknowledged the complex problems of relevance, quality, accessibility and equity in the Ethiopian higher education sector. A major emphasis is placed on the curriculum, educational structure, educational measurement and evaluation, teacher training and development, educational support and resources, educational organisations and management. Importantly, the policy encourages the development of a problem solving culture in education.

The policy also incorporates the structure of education in relation to the development of student profiles, educational measurement and evaluation, media of instruction and language teaching, the recruitment, training, methodology, organisation,

professional ethics and career development of teachers. It is also stated that the financing of education must be sufficient and must be used to promote both equity and quality of education (TGE, 1994:5-6). The policy gives direction and guidance for HEIs on resource allocation in order to meet or exceed stakeholder expectations.

3.2.4.2 Higher education proclamation

To counteract a decline in the quality of education, the Ministry of Education pays due attention to quality in its Higher Education Proclamation No 650/2003 (FDRE, 2003:3). Article 22 states that every institution should have a reliable and continuously improved internal system for quality enhancement, which will provide clear and comprehensive measures regarding the professional development of academic staff, course contents, teaching and learning processes, student evaluation, assessment and grading systems. These measures should also include student evaluation of course contents, examinations and grading. The quality enhancement system should be applied to all processes affecting the quality of study programmes, beginning with the information provided to potential applicants and ending with student evaluation upon completion of the course. Institutions are expected to develop quality standards, undertake periodic academic audits and to follow up and rectify the deficiencies revealed by these audits (MoE, 2009:11).

All appropriate documentation of such audits, activities and analysis must be submitted regularly to the HERQA and it is incumbent on HEIs to effect the recommendations made by the Agency. The internal regulation of institutions should contain details of institutional systems of quality enhancement. The Ministry and the relevant agencies guide institutional quality enhancement by means of the national qualification framework that will, as the case may be, determine or indicate core learning outcomes or graduate competencies (MoE, 2009:11).

The policies and the proclamation discussed above demonstrate the federal government's commitment to quality improvement and stakeholder satisfaction.

Despite this, there are still several problems in delivering the expected quality. According to Taye (2008:xv-xvi), some of these are the mismatch between the increasing enrolment and the limited capacity of the HEIs, under-resourced libraries, limited internet access and low research output by staff due to heavy teaching loads. Other problems are insufficient academic support and student guidance, traditional teaching and assessment methods, low or no stakeholder participation in curriculum development, insufficiently qualified teaching staff, the irregularities of civil servants, rigid organisational structures, the low level of institutionalisation of quality control mechanisms and the lack of follow-up studies on stakeholder satisfaction.

In addition to the support systems and the policies as stipulated in the higher education proclamation, HEIs, themselves, have a responsibility to strive for high quality education at their respective universities. Most universities have quality improvement and assurance procedures and the departments responsible for these activities are headed by the directorate. According to Ashcroft (2004:32), "... this heralded a move away from individualized systems of course development, assessment and design based on tutor or departmental preference….". Despite the establishment of the office of quality assurance, HEIs do not have any mechanisms in place to ensure unbiased assessment, to compare the academic achievements of similar universities or to determine the relevance of the courses to the economy and the labour market. Assessing the contents of academic programmes, the graduate profile and whether assessments meet stakeholders' needs, are important activities carried out by the quality improvement initiatives at the old universities, which includes the pedagogical training provided by the Academic Development and Resource Centre (ADRC) to newly recruited academic staff as part of an induction programme. HEIs are accountable and willing to improve quality, standards and relevance of their service quality in order to satisfy their stakeholders. In addition, a BPR at most universities in Ethiopia were completed in 2009 and its findings have been adapted as quality improvement initiatives and civil service reform (Hawassa University, 2009b:11). The following paragraph will deal with these initiatives.

3.2.5. Civil service reform

The history of a "modern civil service" in Ethiopia dates back to 1907 when Menelik II, Emperor of Ethiopia, initiated the formation of a few ministries with the aim of improving the work of government (Getachew & Common, 2006:5). After that, there was a series of reforms and improvements in the operation of government organisations' service delivery. The Ethiopian civil service was hampered by different problems that impeded the realisation of expected outcomes. According to Mehret (1997) in Getachew and Common (2006:6), some of the problems commonly observed in the Ethiopian civil service include: irregularities that resulted from the rampancy of several ills (during the period of monarchy), the eviction of skilled and experienced officials and civil servants and their replacement with new recruits and political supporters, the centralisation of administration, corruption and inefficient service delivery (during the Dergue regime from 1974-1991).

Considering these problems and the World Bank's recommendations, the government of Ethiopia introduced a new Civil Service Reform Programme (CSRP) in 2001, which embarked on multiple public service reforms in public organisation, including HEIs. This reform programme aims at building a fair, responsive, reliable, transparent, efficient and effective civil service. In this reform programme five key areas were identified of which quality of service delivery is one of the core areas (Ministry of Capacity Building, 2004:24). Despite all these reforms, policies and supporting agencies, the expected improvement in HEIs has not yet been realised. Even though the expected improvement in service quality has not been attained, the reform programme was the basis for the launching of Business Process Reengineering (BPR) in 2003 as part of the civil service reform in all public organisations of Ethiopia in order to bring radical change to the service delivery quality improvement initiative (Getachew & Common, 2006:7; Adebabay, 2011:9). Paragraph 3.3 below will discuss the implementation of BPR in Ethiopian HEIs as a service quality improvement initiative.

3.3. BPR IMPLEMENTATION AS SERVICE QUALITY IMPROVEMENT INITIATIVE

In chapter two, paragraph 2.4.5 Business Process Re-engineering (BPR) was defined as a quality improvement method employed at all HEIs. According to Adebabay (2011:9), BPR was introduced in 2003 as part of the reform of the Ethiopian civil service. According to AH Consulting (2010) in Adebabay (2011:9), as a change initiative BPR was implemented in public organisations in order to improve the capacity of civil service organisations to improve service delivery to stakeholders/customers. Even though all the public universities in Ethiopia have officially declared that they have implemented the BPR process in order to solve several problems related to service quality delivery that are identified by HEIs, Naod's (2011:73) findings indicate that only 40% of the BPR process was implemented by public universities.

Hawassa University and Mekelle University's BPR teams found that the majority of staff lacked professional training and that the institutions were understaffed and that the service rendered was not stakeholder-oriented. Furthermore, information and communication technology (ICT) development was lagging behind at these institutions. In addition, procurement procedures were lengthy, leading to delays in service provision. Other areas of concern were staff punctuality, the state of medical service on campus, security on campus and the lack of fencing around campuses, hygiene at campus cafeterias, waste and sewerage removal and too few personnel. Further problems were the unsatisfactory clinic service and inexperienced personnel, the low standard of recreation services, ethical problems concerning drivers and the lack of corrective measures to address this problem, the absence of a prompt corrective and disciplinary system in transport departments, the lack of staff punctuality and problems of ethics, the absence of vehicles for waste removal, the lack of timely maintenance of the pipelines and toilets, and the problem of sustained checking of despatching and receiving of goods, guests and vehicles. Moreover, the lack of full autonomy for the university, together with the highly centralised internal system, lack of a shared vision by the university community, the

non-empowered and lack of task specific frontline employees, the ageing infrastructure, and the lack of capacity expansion to meet the increased demand for higher education, poor teamwork and inappropriate values and beliefs all pose difficult challenges (HU, 2009b: 6-9; MU, 2008:2). All these problems render the current work situation of HEIs difficult and laborious in terms of providing satisfactory service quality to stakeholders.

Inevitably, these problems have forced the universities to restructure the activities of the institutions and to start implementing quality improvement initiatives themselves using BPR as a tool. Regarding this re-design process, the committees of different universities identified certain points/areas for improvement. The committees of the Hawassa and Mekelle Universities have made the following suggestions to provide the best service to satisfy its stakeholders (HU, 2009b:14-23; MU, 2008:18):

- The curriculum ownership should belong to an academic unit, but it should be accessible to all students and staff online, with sufficient course information on academic content, means of assessment and learning objectives.
- A regular monitoring system for curricula should be in place.
- Administrative costs should be reduced or eliminated and work flow processes should be simplified.
- Services like waste management and landscaping should be outsourced to reliable service providers and monitored tightly by the university.
- Student disciplinary guides should be made available to students, and student disciplinary measures need to be taken when necessary.
- Reception areas and other marketing centres should be restructured as income generating units.

In addition to these recommendations, the Mekelle University BPR team (MU, 2008:20) also recommended that support services should be accessible to academic units and that senior academic staff should be empowered in terms of budget, income generation policy and, crucially, academic freedom. Staff morale can

be improved by a competitive and transparent system of staff promotion, by greater incentives and bonuses with a benefit sharing system at academic programme level. In addition, the staff areencouraged to consider the interests of students, by making use of standardised examinations and external examiners to ensure unbiased marking. A larger online component to courses is suggested, with the possibility of online submission, exam registration and announcement of exam results. Student selection and placement policies need to be improved and student facilities, such as laboratories and libraries, also have to be upgraded and modernised to address poor attrition rates. In addition, transparent grading, criterion reference scaling grading system, quality staff, sufficient facilities and the timely availability of results should be ensured. Furthermore, better policies regarding student selection and placement, better information dissemination systems of the university programmes, student handbooks and printed information, availability of sufficient offices, classrooms, laboratories and workshops, better facilities and a better library system are also recommended by the committee. Finally, there should be access to ICT, printing and publishing facilities, audiovisual aids, sufficient accommodation facilities, fast and prompt services, a clear policy of service entitlement, improvement of student welfare and participation at all levels of decision-making.

To perform these activities and to provide a quality service to stakeholders, the Hawassa University BPR committee has developed a set of job descriptions for the service providers (HU, 2009b:24-26).

Based on the BPR redesigns in terms of the BPR principles, public HEIs are now claiming that they are progressing in terms of attaining increased stakeholder satisfaction and improved service quality. However, the following questions may be asked in this regard: *Have they really put in place what they are propagating? What is the perception of stakeholders of the reforms they have implemented? Are they trying to improve the service quality as the BPR team recommended?* Accordingly, this study aims to ascertain key internal stakeholder perceptions of the service quality improvement initiatives.

3.4. CHANGES TO THE EXISTING/OLD BUSINESS PROCESS

The increased competition between companies in the global economy creates the need for continuous improvement to help companies to compete. As stated in chapter 2 paragraph 2.4, improving quality could enable any institution to become effective, focussed and to improve the quality of performance. Quality improvement, as defined in paragraph 2.4.2 indicates that quality improvement demands changes and incremental improvement in terms of every aspect of the institution. According to Ji (2009:7-9), the needs of the government and society can be met more adequately if institutions of higher education diversify, adopt new ways of implementing change and deepen education reform to promote quality education. Quality improvement in higher education require changes to existing business processes which encompass the organisational mission, continuous improvement, empowerment, customer orientation, leadership commitment and a focus on process. Some of these have been discussed in paragraph 2.4 and the remaining concepts will be discussed below from paragraph 3.4.1 to 3.4.5 in relation to their application in Ethiopian HEIs.

3.4.1. Organisational mission and vision

The mission of an HEI should be extended beyond its teaching and research activities. It should incorporate services to the community and establish partnerships with the community and stakeholders (Jongbloed *et al.,* 2008:305). According to Bryson (2004:25), HEIs should state the degree of attention accorded to key stakeholders clearly in their mission statements, because the survival and success of an HEI depends mainly on stakeholder satisfaction. The mission statement should clearly indicate the purpose for student learning and the commitment to service quality improvement (Arcaro, 1995:63).

Jongbloed *et al.* (2008:307) suggest that the mission of an HEI should be stated in terms of its teaching, research and outreach obligations. However, a mission statement is mostly stated in general terms and it reflects how an institution meets

its expected contributions to society. In the business sector, for example, mission statements are translated into business plans, which in turn are translated into strategies, policies and budgets - the means for achieving the organisation's goals. Therefore, an HEI mission could be clearly defined by means of the questions listed in Table 3.2.

Table 3.2: Questions to be stated in mission statements of HEIs

Facts	Objectives
What is your institution's current status?	What should your institution be in the future?
Who are your students?	What do you expect of your students?
What opportunities are there?	What opportunities are there?
What resources do you have?	How should you arrange your resources?

Source: Jongbloed et al. (2008:307)

In addition, Schroeder (1994:5) asserts that in order to achieve the mission, the mission must be communicated, understood and valued by everybody in the institution and used continuously to direct all the activities in the institutions. In relation to the mission statement the Mekelle University BPR team found that lack of a shared mission is a problem in relation to vision and mission (MU, 2008:15). Therefore, HEIs should design their mission statement with the intention of providing quality education and striving for continuous service quality improvement. Furthermore, the mission statement plays a critical role in deciding whether or not the improvement process will be based on an investigation of stakeholder needs and expectations. For example, Hawassa University and Wolaita Sodo University explicitly acknowledge stakeholder expectations in their mission statements (HU, 2009a:13; WSU, 2011:1). Mekelle University's vision was also designed by the BPR team to address the capacity building need of the national development strategy and to achieve excellence in the quality of educational programmes and to cater for the needs and desires of students and other stakeholders (MU, 2008:28).

According to Teshome (2003:8), in order to consolidate the reform agenda in the

Ethiopian higher education system, a document called "The future direction of higher education in Ethiopia" was prepared by the MoE in 1997. The document describes the problems and challenges faced by Ethiopian HEIs, among them, a lack of clarity in terms of vision and mission. At consecutive conferences at Debrezeit and Nazreth arranged by the MoE, the following areas of a mission statement were revisited and outlined. These areas are the production of qualified citizens able to contribute to the overall development of the country, the production of research to generate, transfer and apply knowledge for the development of the country and the provision of services to all citizens.

Based on these guidelines, each university has developed a mission and vision statement to satisfy its stakeholders and to make quality the centre of their focus. Here, for example, are the vision statements of both Hawassa University and Wolaita Soddo University: "Hawassa University aspires to be internationally competent higher learning institutions in teaching, research and public services…" (HU 2009b:13) and: "the Wolaita Sodo University aspires to be nationally prominent and internationally recognized in providing quality and relevant education, research and community service" (WSU, 2010:14).

The mission statement of Hawassa University is:

> The mission of HU is to advance knowledge, enhance technology creation and transfer, promote effective entrepreneurship, and inculcate a responsible and democratic attitude through training, research, and public services; thereby, contributing to the development of the nation" (HU, 2009b:13).

In addition, the mission statement of Wolaita Sodo University is as follows:

> … to produce competent, skilled and responsible graduates by providing quality and relevant Education; and to undertake research and community services that generate knowledge and address the economic, social and cultural demands of the surrounding community, the country and beyond (WSU, 2011:1).

The vision and mission statements of both universities demonstrate the extent of

their desire to be competitive, internationally and nationally, and their major theme is the provision of improved service to the community and meeting the public needs in order to contribute to the development of the nation. This can only be attained by their concern for and commitment to quality improvement.

3.4.2. Empowerment

Empowerment, according to Schroeder (1994:7), is "... placing decision making as close as possible to the front line of service, or as helping others to use the personal, professional, or situational power that they already possess." This can be done through promoting participation and shared authority. Ji (2009:10) and Kate (2002:226) support this idea by commenting that training personnel is the fundamental mission of institutions of higher education, in order to improve service quality. The strategic plan for public universities exhorts them to strive to maintain good staff development systems with regular long and short-term training programmes to improve the quality of the academic staff (HU, 2009b:36). The degree of participation and involvement in personnel empowerment not only improves quality, but also increases job satisfaction. The matter of staff empowerment in the Ethiopian public university sector was identified as a major problem by the Mekelle BPR team. In relation to this, the Mekelle University BPR document indicates that top management did not pay attention to middle level managers in building the technical skills and training in planning, reporting and measurement mechanisms and overall management efficiency. As a result, middle level managers plan without adequate interest, fail to prepare clear work guidelines, externalise problems in reporting and resign from positions. All these contributed to a *laissez-faire* attitude, lack of commitment, role confusion, redundant work, poor team work, poor service delivery and lack of good governance (MU, 2008:15-16). The redesign principles were put in place with the belief that the implementation of BPR can bring improvement in problems related to empowerment.

3.4.3. Stakeholder/customer orientation

Quality is defined in 2.2 as meeting and exceeding customer or stakeholder expectations, clearly shows the necessity to identify the relevant stakeholders and their individual needs and requirements. Without a clear understanding of stakeholders' needs, it is difficult for institutions to provide quality service (Schroeder, 1994:6). Importantly, quality education requires that everyone at an HEI must take into consideration that their output is destined for customers or stakeholders. Teachers must meet with students to discuss academic matters to pinpoint areas that need improvement. Additionally, HEIs must satisfy stakeholders' needs (Arcaro, 1995:31).

The primary stakeholders in the Ethiopian higher education sector are direct beneficiaries (students and communities), academic and administrative staff, the university management, research collaborators, other institutions, funding organizations and potential employers. Secondary stakeholders include former graduates, part-time instructors, professional associations, defence forces, international organisations, visiting professors, employing organisations and adjunct staff (HU, 2009b:16-17). One of the driving forces of BPR implementation in Ethiopian public higher education institutions is the failure to satisfy external (government and community) and internal (students and staff) stakeholders of the university (HU, 2008:6).

According to the Mekelle University BPR team (MU, 2008:16), during the implementation of BPR practices a number of recommendations were made to meet the needs and expectations of stakeholders:

- A flat organisational structure (in order to empower the academic units).
- A support service directly accessible by academic units.
- Empowering senior academic staff (in terms of budget, income generation policy, academic freedom).

- The establishment of staff affairs office, alumni office, student affairs office at vice-president level and other offices that have more autonomy, such as the quality assurance office.

3.4.4. Measurement

Measurement is an important requirement for quality improvement initiatives. If institutions fail to measure their activities and students' performance, they will not know the current situation and which areas to improve. Conversely, institutions cannot improve what they cannot measure. If their activities are not measured, they will not know whether they meet the quality standards set by accreditation agencies, professional associations or standards established by stakeholders (McCormick, 2002:226; Arcaro, 1995:32).

In every aspect of the management functions, measurement is a fundamental issue. There are different measurement tools that enjoy wide popularity in the assessment of BPR, such as the performance dashboard, the Malcolm Baldrige national quality award criteria, the excellence model, the Six Sigma, and balanced score card (BSC) (MU, 2008:65). The Mekelle and Hawassa University BPR documents state that since the universities follow the 'Management by value' as their management philosophy, the balanced scorecard is chosen as the best measurement tool. BSC is a popular performance measurement scheme that employs performance metrics that combine different perspectives from financial, customer, internal processes and growth perspectives. It is believed that BSC helps managers to understand the inter-relationships between different performance dimensions, in order to improve decision making and problem solving (Rajesh, Pugazhendhi, Ganesh, Ducq & Koh, 2012:269).

The philosophy of management by value is supported better by a balanced scorecard as a management and measurement tool (MU, 2008:68; HU, 2008:36).The Mekelle University BPR team also developed a detailed working document for BSC implementation, which contains guidelines and a design of

management by value (MBV) and the balanced scorecard (BSC) system as a strategic initiative as part of BPR implementation (MU, 2008:68).

As stated in paragraph 3.2.3, HERQA also carries out institutional quality audits of all HEIs. An institutional quality audit will assess the appropriateness and effectiveness of a HEI's approach to quality care, its systems of accountability and its internal review mechanisms. HERQA planned to evaluate the institutions at least once every five years based on the ten focus areas for quality assessment (HERQA, 2006:7). It was also mentioned in paragraph 3.2.3 that the first HERQA quality audit was conducted in 2004/5 and the second quality audit in private higher education institutions in 2006 (Dawit, 2006:121).

3.4.5. Management commitment

Quality improvement activities cannot be successful in any institution without a commitment to the personnel by management. This commitment facilitates the allocation of resources, provides daily leadership and supports quality improvement throughout the institution (McCormick, 2002:226; Schroeder, 1994:6). If this commitment is obtained, it can lead to real quality improvement and the implementation of adequate measures to bring about ongoing improvement. According to Arcaro (1995:32), quality requires a cultural change in order to change the way HEIs do things and to overcome resistance to change.

Emphasis is placed on the HEI management system and management commitment and its role in quality improvement in the strategic plan of Ethiopian PHEIs. Hawassa University's strategic plan, for instance, following an analysis of the strengths and weaknesses of the university's management, states that they are committed to creating an environment conducive to efficient teamwork to implement quality improvement initiatives successfully (HU, 2009a:29).

The HERQA document (HERQA, 2006:6) states that every HEI must have in place strong governance and management systems. The governing body should have sufficient powers to assure institutional autonomy and integrity and the senior management team must have delegated responsibilities to enable actions consistent with the vision, mission and goals of the institution. The management of Ethiopian public institutions does not have full autonomy in decision-making in areas like student enrolment, budget administration and salary adjustment, which means that top managers have no full ownership of the university and that they focus on routines of the system instead of working on strategic issues. This state of affairs, in turn, leads to an extremely centralised operation, poor delegation of power, a mismatch between plan and budget, fixed use of resources, non-systematic control, poor collaboration with other institutions, resource/budget scarcity, lack of consistent service delivery, low staff commitment and sometimes ethical problems (MU, 2008:15). This clearly demonstrates that the institutions have experienced problems in decentralised decision-making and resource utilisation. Therefore, it was believed that the implementation of BPR would solve these problems in order to provide quality service to satisfy different stakeholders.

Failure in service quality improvement is often the result of faulty processes. Therefore, institutions have to find better ways and processes of doing things. Once the processes are identified, the improvement activities become easier. In Ethiopian PHEIs, radical changes have taken place as a result of BPR processes in order to bring about improvement in the performance of the institutions. This paragraph has presented different changes in the existing business process in order to bring service quality improvement and stakeholders' satisfaction. The following paragraph presents the conclusions of this chapter.

3.5. CONCLUSION

Even though there is a dearth of contemporary and sufficient research studies in the research area, this chapter has reviewed the available research pertaining to reforms and status in the Ethiopian HE sector as well as the implementation of

quality improvement initiatives based on BPR principles. It has also provided an overview of the different agencies, support systems and policies in place to support and strengthen service quality improvement initiatives. In addition, the chapter has evaluated the commitment regarding quality improvement at both national and institutional levels. It has also discussed the major changes in the current business process found in service quality improvement literature and how they apply to the Ethiopian HEI sector, a field in which little research has been done in Ethiopia, specifically regarding stakeholder perceptions of the above-mentioned quality improvement initiatives. Although different agencies and supporting systems are in place at both national and institution levels, they are not functioning as expected. Furthermore, some of the supporting systems are poorly staffed and are not capacitated with the necessary resources. The next chapter, chapter 4, will focus on the research design and methodology.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1. INTRODUCTION

This chapter gives a short description of Ethiopia and the research sites, and a detailed discussion of the research philosophy, the research theory, design and methodology, the population, sampling procedures, data collection instruments and procedures, data analysis methods, ethical considerations and validity and reliability of the research.

4.2. SHORT DESCRIPTION OF ETHIOPIA INCLUDING THE SAMPLED UNIVERSITIES

Ethiopia, which is found in East Africa with a total area of 1,127,127 square kilometres, is one of the oldest nations in the world and the oldest independent country in Africa. It is an ancient country with a history of more than 3000 years and a diversity of people and cultures and has a unique alphabet (CSA, 2006:15). Ethiopia is situated in the Horn of Africa between 3 and 15 degrees north latitude and 33 and 48 degrees east longitude. Furthermore, it is a country with great geographical diversity. In addition, Ethiopia is also a linguistically diverse country where over 80 different languages are spoken (MoI, 2004:8).

Ethiopia is the second most populous country in Africa with a total population of almost 74 million. According to the 2007 Population and Housing Census results, the population of Ethiopia grew annually at an average rate of 2.6 percent (CSA, 2008:8, 11). The most predominant age group falls within the range of 0-14 years, which can lead to a large future demand for social services such as education.

Politically, the country is governed in terms of a federal government system. Accordingly, there are nine ethnic based national regional states and two administrative councils. The education system of the country as currently structured

consists of:

- The first primary cycle (grades 1-4).
- Second primary cycle (grades 5-8).
- Lower secondary cycle (grades 9-10).
- Preparatory school cycle (grades 11-12).
- Technical and vocational education and training (TVET) (10+1, 10+2 and 10+3).
- Higher education (institutions that provide undergraduate and postgraduate programmes).

The Ministry of Education is the highest governing and regulatory body of all the public higher education institutions. Regions have educational bureaus, which are responsible for governing the TVET (Technical, Vocational, Education and Training) institutions and teacher education colleges. In 2011, there were 22 public universities (MoE, 2011:59). From these 22 universities, the current research focusses on the four universities whose descriptions are given below.

4.3. RESEARCH SITES

4.3.1. Hawassa University (HU)

Hawassa University (formerly known as Debub University) was officially inaugurated as a public university on 25 April 2000 and incorporated three colleges that had merged, namely: Awassa College of Agriculture (ACA), Dilla College of Teacher Education and Health Science (DCTEHS) and Wondogenet College of Forestry (WGCF) in different locations (at Awassa, Dilla and Wondogenet) respectively. All are located in Southern Ethiopia (HU 2009a:7). The university has seven colleges and one institute. These include: the Awassa College of Agriculture (ACA), the Wondogenet College of Forestry and Natural Resources (WGCFNR), the College of Health Sciences (CHS), the College of Natural and Computational Science (CNCS), Institutes of technology (IoT), the College of Social Science and Humanities (CSSH),

College of Business and Economics (CBE) and the College of Law and Governance (CLG). According to a document produced by HU (2009a:8), there are 46 study programmes at undergraduate level and 31 graduate programmes (HU, 2009a:8).

The newly enviSage Publicationsd BPR programme has been operational since 2009/10. It provides autonomy for the academic and administrative departments for decision-making at the lower level. During this period, HU has enrolled over 22,000 undergraduate and graduate students in its regular and continuing education programmes. In addition, the university workforce is composed of about 2,050 full time academic staff and administrative workers (HU, 2009:8).

4.3.2. Mekelle University (MU)

Mekelle University (MU) was established in May 2000 as a public university and is located in the northern part of Ethiopia (the Tigray region), which is situated 783 kilometres from the capital. MU has three campuses: the Endayesus campus (which encompasses Dry Land Agriculture and Natural Resources Management, Natural and Computational Sciences, Engineering and Computer Sciences, Veterinary Science); the Adi Haki campus (that includes: Law and Governance, Languages and Humanities, Business and Economics) and the Aider campus (College of Health Sciences). MU obtained universitystatus after the merger of two former colleges: Mekelle Business College and Mekelle University College. Currently, MU runs both a graduate and an undergraduate programme under seven faculties and 44 departments. At present MU has more than 23,000 students in both undergraduate and graduate programmes (MU, 2012).

4.3.3. Wolaita Sodo University (WSU)

Wolaita Sodo University is one of the thirteen newly opened universities. The university was officially inaugurated in March 2007. The university was founded at Wolaita Sodo, which is located in the southern region 390 km from the capital city, Addis Ababa. WSU has two campuses, namely, the Gandaba and the Ottona

campus and is organised into six faculties, two schools and 25 departments. The faculties and the schools are: Agriculture, Veterinary Medicine, Health science, Business and Economics,Social Sciences and Humanities, Natural and Computational Sciences, School of Technology and the School of Law. Falling under these six faculties and two schools, there are twenty-five departments. In 2010/11, the university had no associate professor, five assistant professors, 130 lecturers, 12 assistant lecturers and 116 graduate assistants. The university also has 127 administrative workers (WSU, 2010/11:9-10).

4.3.4. Debre Berhan University (DBU)

Debre Berhan University (DBU) is one of the thirteen new universities, which was established in 2007 as a public university. Debre Berhan University is located in the Amhara Region, in Debre Berhan town, which is 130 km northeast of Addis Ababa. Currently the university has about 5,387 enrolled students. In addition, the university has five faculties: Business Education, Natural Sciences Teaching, Business and Economics, Health Sciences and Agriculture Faculties. Furthermore, the university extended its programmes and enrolled 393 summer students and 500 extension/evening students in 1999 and 2000/2007 respectively (DBU, 2011:12).

4.4. PHILOSOPHICAL WORLDVIEWS/PARADIGMS

The most important decision the researcher is expected to make in designing his/her inquiry is his/her choice of the worldviews within which he/she will place his/her work. The way he/she understands the world may influence the research process and his/her research findings. In this regard, Wisker (2008:68) explains that the choice of research methods and the interpretation of data depend on a researcher's worldview.

Even though the research philosophy is crucial in terms of the assumptions that underlie research during the planning stage, in most research it is not articulated explicitly. According to Carson, Gilmore, Perry and Gronhaug (2001:1), a

philosophical worldview explains what, how and why research is undertaken. In addition, Carson *et al.* (2001: 1) assert: "Consideration of the philosophy of research helps to contribute a deeper and wider perspective of research so that our own specific research projects can have a clear purpose within a wider context." This shows that the philosophical worldview helps the investigator to understand clearly every aspect of the research at hand. Furthermore, the philosophical worldview assists the researcher with identifying and creating research designs. In turn, philosophical worldviews/paradigms are defined by Guba (1990:17) as "... a basic set of beliefs that guide action." For Creswell (2007:6), a philosophical worldview is a researcher's general view about the world and the nature of the research that he/she undertakes. Thus, philosophical worldviews guide the entire research design process.

It has been found that there are different and continuously evolving research worldviews that emerge from social science and educational research studies. For example, Wisker (2008:68-9), Onwuegbuzie and Leech (2005:270) and Creswell (2007:7-10), give an account of the beliefs of researchers. One of the world views held is *positivism* in terms of which all true knowledge is scientific, determined by fixed laws, and is best measured and known by the scientific approach. Another view is *post-positivis*m that focusses on determining the cause that determines the outcomes. Post-positivists are also interested in the reduction of ideas into small sets of ideas to test. The philosophy of *realism* postulates that the external world exists independently of our perceptions and adherents of this view believe that reality exists outside our perception whether we see or understand it or not. In turn, *post-modernism* asks whether and how we can find the 'truth' and argue that 'truth' is always politically dependent. In addition, followers of this viewpoint contend that truth has a meaning imposed on it by humans. Furthermore, according to the *social-constructivist worldview,* humans construct knowledge and meaning through experiences and interactions with people, things and events. Social-constructivism is also based on the assumption that the world is understood by the individual in which he/she lives and works. As discussed above, each of the worldviews has different

characteristics and makes different assertions about knowledge. In general, the type of the philosophical perspective the researcher holds, helps with the clarification and explanation of the choice of research methods, such as qualitative, quantitative or mixed methods.

Another worldview, which does not see the world as an absolute, is the pragmatist worldview. Pragmatism is a philosophical paradigm that has been developed by Americans and is concerned with identifying what works (Lodico *et al.*, 2006:9). Researchers holding this worldview mostly focus on the outcomes of their research (Creswell, 2007:22), that is, they depend on the knowledge that arises from examining problems and determining what works in a particular situation. Furthermore, pragmatists argue that if a theory accomplishes a specific goal or reduces our doubt about the outcome of a given action, it is considered a good theory (Lodico *et al.*,2006:9). Pragmatism provides an understanding of knowledge of human actions, interactions and communication in practical ways. Accordingly, they believe that educational problems can be studied by using different methods that describe or solve problems appropriately (Biesta & Burbules, 2003:107).According to Biesta and Burbules (2003:107), pragmatist paradigms/worldviews enable the researcher to obtain a clear picture of relationships between knowledge and actions that provide the possibility of refining the problem. For adherents of pragmatism, truth is not based on reality independent of the mind, but rather on what works at the time (Creswell, 2007:23). Therefore, it allows the researcher to think differently about the way theory and practices are related. This research is intended to assess stakeholder perceptions of service quality improvement initiatives in PHEIs; the higher education institutions in Ethiopia asserted that they had brought about service quality improvement through the BPR process. In order to verify their claims, stakeholders' perception assessment is very important. Thus, the pragmatist paradigm was deemed to be the best choice.

The selected philosophical framework guides the selection of the type of research approach to be used.Philosophically, mixed methods research makes use of the

pragmatic philosophical framework **(**Johnson & Onwuegbuzie, 2004:17). Accordingly, the mixed methods approach (using both quantitative and qualitative approaches) will be chosen for this study and will be discussed in the next paragraph.

4.5. RESEARCH DESIGN

The research design is defined by different researchers in various ways. According to Shukla (2008:29), research design is defined as "... a plan of the method and procedures that is used by the researchers to collect and analyse the data needed." Hence, the research design is seen as a blueprint that shows the sequence of research activities. In addition, the research design indicates how the researcher answers his/her research questions, specifies sources of data to be collected, the type of data, sampling techniques and the procedures (Shukla, 2008:29). Therefore, the research design should be prepared with great care to provide accurate answers to the research questions.

Shukla (2008:29) points out that researchers should choose one of three types of research designs, namely, exploratory, descriptive and causal designs respectively. The following figure depicts the three research designs in relation to the distinction between qualitative or/and quantitative designs. Qualitative methods are mostly used in exploratory research designs to obtain preliminary insights into the problem. Hence, data are collected from a small number of subjects in the form of semi-structured interviews. On the other hand, quantitative research is mostly associated with survey research and relies on descriptive and causal research designs. Shukla (2008:32) adds that a quantitative design provides managers with specific facts for decision-making.
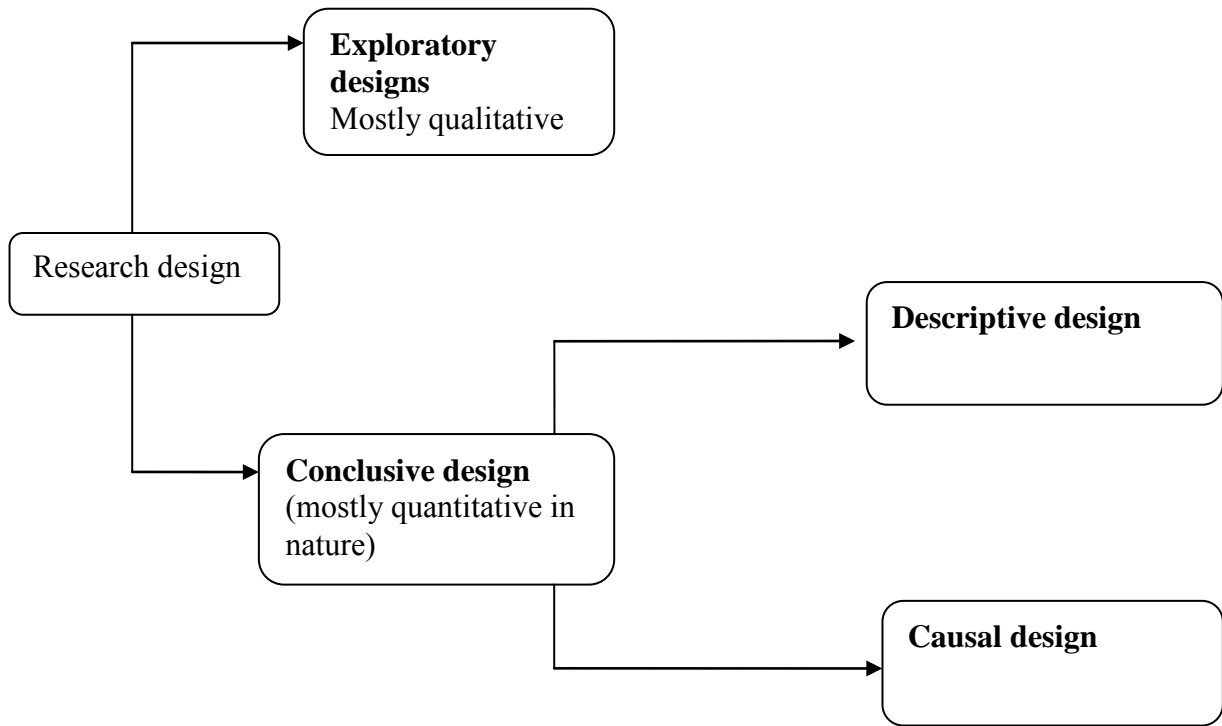
Figure 4.1: Classification of the research design

Source: Shukla (2008:30)

A major challenge in choosing a methodology for the present study was selecting an appropriate research design that helps with understanding the dynamic and holistic nature of stakeholder perceptions with regards to service quality improvement in the HEI setting in Ethiopia. In order to address this challenge, two points must be stressed. First, the researcher has to know what he is going to find out. Second, he has to know that not everything that he wants to know is found using only one approach. Thus, according to Punch (2005:238), using both quantitative and qualitative approaches increases the scope, depth and power of the research. In terms of the choice of methodology, an important question to ask, according to Punch (2005:239), is: what, exactly, is the researcher trying to find out? When we see it in general terms, the research question could be tackled quantitatively or qualitatively. That means some questions can only be answered using either a quantitative or qualitative approach or both. This shows that the question determines the choice of method. However, it also happens that certain methods affect the types of questions chosen. Therefore, this implies that it is of the utmost importance

that there should be a match between the research questions and the methods. Accordingly, the researcher finally concluded that it would be possible to answer the research questions (chapter 1, paragraph 1.4.2) and obtain the necessary information about stakeholders' perceptions of service quality improvement using a mixed method research approach/design involving both quantitative and qualitative research.

It is important to note that mixed methods research provides the researcher with an in-depth look at contexts, processes and interactions and it makes it possible to obtain a precise measurement of attitudes and outcomes (Lodico *et al.*, 2006:17). In addition, this research approach capitalises on the strengths of both quantitative and qualitative research and offers greater possibilities than a single method approach for responding to decision-maker agendas (Creswell, 2009:203; Bryman, Becker, & Sempik, 2008:264; Greene, 2005:209; Reams & Twale 2008:133; Punch, 2005:240). Furthermore, the aim of a mixed methods research design is not to replace qualitative or quantitative research, but to make use of the strengths of both while minimising their respective weaknesses in a particular research undertaking and across studies (Johnson & Onwuegbuzie, 2004:14). Moreover, a mixed method approach enables a researcher to obtain a more comprehensive understanding of educational phenomena, ranging from simple to complex, particular to general and from internal to external perspectives (Greene, 2005:208).

With the development of both quantitative and qualitative research in the social sciences and education, the mixed methods approach has gained popularity (Creswell, 2009:203; Teddlie & Tashakkori, 2009:20-24). Mixed methods are defined by Tashakkori and Teddlie (2003:711) as "... a type of research design in which QUAL and QUAN approaches are used in types of questions, research methods, data collection and analysis procedures, and/or inferences." Creswell (2009:207-08) explains this approach as follows: "The qualitative and quantitative data are actually merged on one end of the continuum, kept separate on the other end of the continuum, or combined in some way between the two extremes." These

descriptions show that, with the mixed methods approach, data collection and analysis can either take place one after the other or concurrently. Numerous published research studies have incorporated mixed methods research in education (see also Lacovidou, Gibbs & Zopiatis, 2009:150; Lagrosen *et al.*, 2004:64).

A mixed methods approach has the potential to provide valuable information to programme evaluators. In this respect, Greene (2005:209) indicates that the mixed method approach helps to address some of the inherent tensions in research. These tensions provide opportunities to make their inquiries distinctive, challenging and rewarding. She goes on to add that in terms of the mixed method approach, researchers should respond to these tensions in three different ways: The most important tensions arise from the various stakeholders who have different values, perspectives and interests. These stakeholders all have their unique interests and concerns as expressed during the evaluation of the programme. The second important tension relates to the allocation of resources for programme design, implementation or/and outcomes. The third tension is related to the context in which educational programmes are implemented. Educational programmes are implemented in complex and real situations with unique characteristics and these unique situations require different methods and approaches. Therefore, a mixed methods approach allows greater flexibility than using a single method to study decision-making agendas in the interest of the stakeholders. What was discussed above reveals that a mixed methods design employed in an educational programme evaluation allows the design or implementation of programmes resulting in valued educational outcomes. Hence, a mixed methods approach is the most suitable approach for programme evaluation, in general and for this research in particular. Greene (2005:209) comments that a mixed methods approach is used to assess the quality of the programme development, programme implementation and/or the outcomes.

Importantly, the mixed methods inquiry in educational research mostly includes diversified and multiple methods for collecting and analysing educational data

(Greene, 2005:208). Accordingly, Teddlie and Tashakkori (2009:26) identify two types of mixed methods, namely, parallel and sequential designs. This study will use the sequential mixed method design. In sequential design, the quantitative and qualitative strands of the study occur in chronological (sequential) order. Interestingly, the use of mixed methods may lead to asking two different questions: When does a researcher use mixed methods and how does mixing occur in this study? When using mixed methods, the most important aspect is the way the data are mixed. In support of this idea, Creswell (2009:207) and Punch (2005:241) suggest that regarding the mixed methods approach, four factors need to be considered when mixing the procedures: first, *timing* - when will the qualitative and quantitative data be collected? That is, will they be collected consecutively or simultaneously? The second factor is *weighting*, of which the question is asked: is priority given to quantitative or qualitative methods or are they used equally in a particular study? The third, factor is *mixing* - does it occur in the research questions, the philosophical viewpoint or in the interpretation of data? The final factor is *theorizing* - which theory or worldviews guides the whole design? These four factors are presented in the following Table 4.1 with respect to this research.

Table 4.1: Aspects to be considered in planning mixed methods design

Timing	Priority/weight	Mixing	Theorising
No sequence Concurrent	Equal	Integrating	Explicit
Sequential Qualitative	Qualitative	Connecting	
Sequential Quantitative	Quantitative	Embedding	Implicit

Source: Adapted from Creswell (2007:207)

As this is a policy implementation study, this study will follow a sequential explanatory and exploratorymixed methodsstrategy. A sequential explanatory design

involves quantitative data collection and analysis as its first phase followed by qualitative data collection through focus group interviews and document analysis in a second phase (Creswell, 2009:206–209; Collins, Onwuegbuzie & Jiao, 2006:88). According to Lodico *et al.*, (2006:285), sequential explanatory design has been widely used by programme evaluators to develop surveys for use in studies and to create an accurate quantitative survey. Creswell (2009:211) also suggests that the purpose of sequential explanatory methods is to use qualitative data and to generate results to support the analysis of quantitative results.
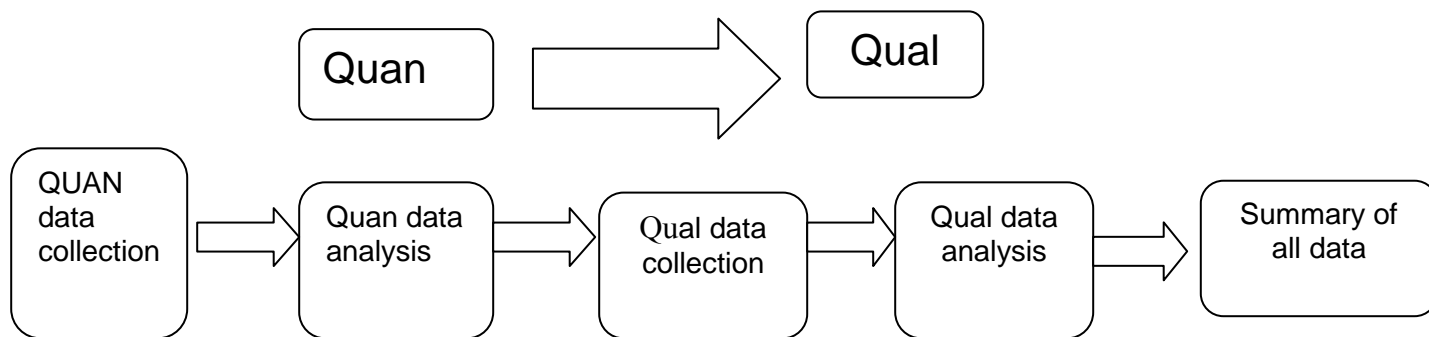
- *Capitalization indicates the weight or priority on the data analysis and interpretation in the study*
- ⟶ Sequential
- *QUAN/Quan = Quantitative; QUAL/qual = Qualitative*

Figure 4.2: Sequential Exploratory Paradigm Emphasis Design

Source: Adapted from Creswell (2009:209) & Collins et al. (2006:88).

4.6. RESEARCH THEORY

A theory is a set of unified concepts that help to guide the practical activities of the researcher. Research can contribute to the development of theory or help test existing theories. Accordingly, philosophers have identified two modes of inquiry, namely, deductive and inductive reasoning (Murnane & Willett, 2011:17; Lodico *et al.*, 2006:5). For Lodico *et al.* (2006:5), inductive reasoning is sometimes called a "bottom-up" approach to knowledge where the researcher depends on particular observations to develop an abstraction or to make generalisations. Inductive reasoning mostly helps the researcher to collect data from the systematically

observed phenomena under investigation; the researcher looks for the central themes pertaining to the observations and develops a generalisation from the analysis of those central themes.

In contrast, according to Murnane and Willett (2011:17), deductive reasoning involves the development of specific hypotheses from general theoretical principles which Lodico *et al.* (2006:5), refer to it as a "top-down approach to knowing." This shows that in inductive reasoning, the researcher begins by observing an unexpected pattern and tries to explain what has been observed to make generalisations based on these particular observations. On the other hand, deductive reasoning begins by formulating a hypothesis as a tentative explanation to be tested by collecting data.

According to Creswell (2007:66) and Lodico *et al.* (2006:5), deductive theory is used mostly in quantitative research methodology and inductive theory is used in qualitative research. In inductive theory, researchers assume that it provides the findings to reflect the unique situation and meanings that are constructed from the study that was conducted (Kezar & Dee, 2011:269). As discussed above, the inductive approach is focussed in particular on studying the experiential aspects of human behaviour and the processes underlying them. In addition, inductive reasoning begins with the identification of the phenomena of interest, and then observations are conducted within that area, after which the researcher looks for emergent patterns and explanations that offer ways of conceptualising the processes underlying the phenomenon. Accordingly, this research chooses the inductive reasoning approach.

The following figure depicts the interconnection of the worldviews, research strategies and research methods used in this research.
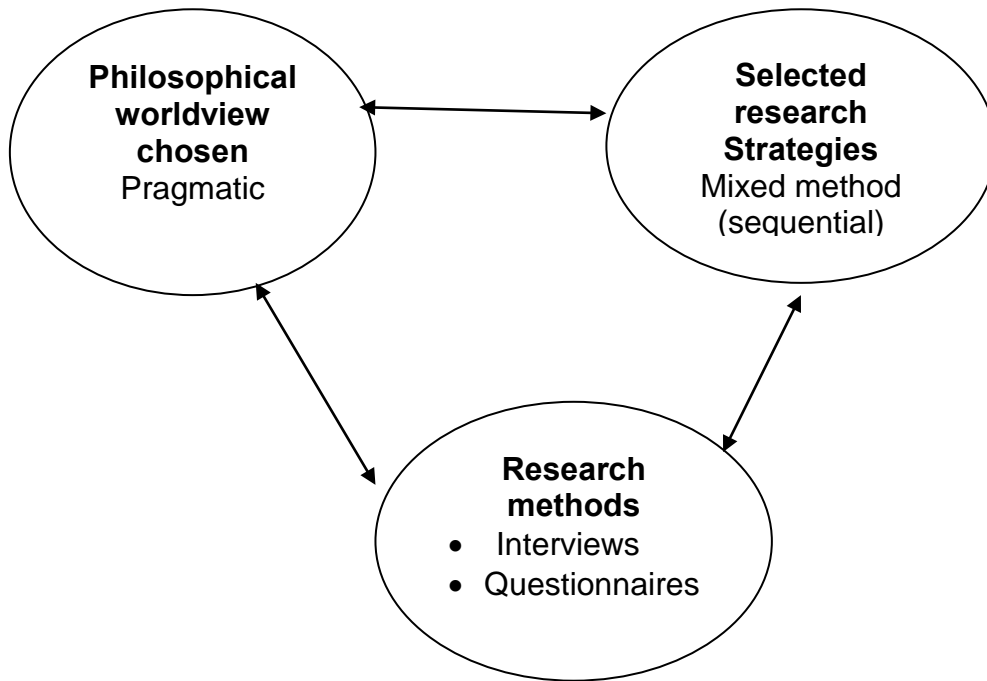
Figure 4.3:The relationship between philosophical worldview, research strategies and research methods

Source: Adapted from Creswell (2007:7)

4.7. TIME SCALE

The time scale of this research is cross-sectional. According to Gray (2008:34), a cross-sectional study is used when the data are collected at one specific period of time. Thus, this research seeks to determine the perceptions of stakeholders on quality improvement initiatives and the implications of these perceptions for further improvements, which focus on four universities, over a limited period.

4.8 POPULATION AND SAMPLING PROCEDURES

This paragraph specifies the characteristics of the population and the sampling procedures.

4.8.1. Population

The quality of research depends mostly on the appropriateness of the sampling techniques that have been implemented (Lodico *et al.,* 2006:139-40). The decision of what information you need depends on the decision regarding what your populationis going to be. For Muijs (2004:37), the population is the group of individuals from whom the researcher wants to generalise his/her results. Before data collection takes place, it is important to be clear about the study population. Based on the above assumptions, the population for this study will include all the regular students pursuing an undergraduate academic degree from selected sample universities and full-time academic staff from the four sample public universities (Hawassa, Mekelle, Wolaita Sodo & Debre Brehan). Because of the large size of the population, a sample was selected using multi-stage sampling techniques.

4.8.2. Sampling

In most cases, the major purpose of a research undertaking is to discover principles that have a universal application, but studying the whole population to arrive at a generalisation would be impractical. Therefore, the researcher needs to take a sample from the population. Sampling is the process of taking smaller portions from a population for observation and analysis (Johnson & Christensen, 2004:197; Best & Kahn, 2005:12; Cohen & Manion, 1994:87; Muijs, 2004:38). Based on this principle, from the 22 universities (9 old and 13 new), four universities were selected using stratified random and simple random sampling techniques. Stratified random sampling allows the researcher to select a sample that is more representative of the population (Lodico *et al.,* 2006:145). An advantage of stratified sampling can be that there is a guarantee that the sample will contain sufficient representatives from each of the strata and to avoid the danger of over- or underrepresentation of some members of the population (Clark-Carter, 2004:156; Iacovidou *et al.*, 2009:150). In this study, stratification was used to include both new and old universities.

Based on the above assumptions, two of the old universities, namely Hawassa and Mekelle, and two of the newly established universities, namely Wolaita Sodo and Debre Brehan were selected using simple random sampling through the lottery method (the old and new classification is based on the date of establishment of the universities. The older ones are those that were established before 1997, while the newly established universities are those that were established after 1997 and before 2011).

A representative sample of 800 students and 160 academic staff from all four public universities were selected for the survey study and 40 participants from each group (student and academic staff) for the group interviews. The selection of academic staff and students for the survey study was also based on the principle of random sampling. In addition to that, the student respondents were only selected from final year students (see also Gallifa & Batalle (2010:161) for a similar study). This is due to the students' familiarity with the institution and their perceptions of institutions' service delivery that were dependable over time. In their final year, students would have been at the university for at least three years, thus, they should have an accurate perception of the service quality improvement initiatives of the institution. Mostly, students in their final year also have some critical viewpoints, and for this reason, their perceptions are usually more critical than in earlier years. Therefore, both the students in their final year and the academic staff were selected randomly through systematic random sampling from the following six colleges, since they received similar services from their respective colleges, namely, the social sciences, the business and economics, the natural sciences, agriculture, Institute of technology and the health sciences. The assumption behind random sampling is that it provides a heterogeneous sample, therefore, each character in the population has to be represented in the sample (Lodico *et al.,* 2006:143; Best & Kahn, 2005:13; Johnson & Christensen, 2004:200; Creswell, 2009:155).

4.9.   DATA COLLECTION TECHNIQUES

This paragraph explains the different instruments that were used for data collection. In this regard, the choice of the data collection techniques was based on the extent to which it would allow the researcher to obtain the information needed to answer the research questions and to obtain a full picture of the problem under investigation (Johnson & Christensen, 2004:162-63). Because of its advantages, educational researchers are increasingly recognising the value of using different data collecting tools. Thus, this research used questionnaires and focus group interviews as data collection instruments.

4.9.1. Questionnaires

For this study, 22 modified, self-administered SERVQUAL survey questions (Parasuraman *et al*. 1991:446-449) were used to gather information related to the perceptions of and importance of service quality improvement, priority areas. The questions on the personal backgrounds of the respondents were also included in the questionnaire. As explained in chapter two, the SERVQUAL scale was designed to assess both the expectations of service quality and the stakeholders' perceptions of what was actually delivered (refer to chapter 2, paragraph 2.9.1). Hence, it was used in this present study to assess stakeholder expectations regarding service quality improvement initiatives and the perceptions stakeholders have concerning the performance as promised. In addition, this scale is used to determine the most important or priority areas identified by the stakeholders. The SERVQUAL scale was also used to assess the five SERVQUAL dimensions (tangibles, reliability, responsiveness, empathy and assurance).

The standardised SERVQUAL scale was adapted for the present study in order to fit the Ethiopian setting. This is because the SERVQUAL scale was developed in America, in a completely different cultural setting. The questionnaire was answered entirely voluntarily and anonymously by the undergraduate students and academic

staff of all four universities. The administration of the survey was done during class time and collected immediately upon completion. Some researchers have employed the five- point Likert scales (Ramseook-Munhurrun *et al.*, 2009:546; Smith *et al.*, 2007:341) while others use the seven-point scale as recommended by Parasuraman *et al.* (1991:422). In this study, respondents were instructed to rate their expectations and perceptions of each of the 22 items of the SERVQUAL instrument on a seven-point Likert scale. In the questionnaire, all the items ranged from 1= "strongly disagree" to 7= "strongly agree". According to Devlin, Dong and Brown (1993:15), a good rating scale should fulfil the following criteria: minimum response bias, high discriminating power, ease of administration and simplicity of the scale for the respondents to answer. Importantly, Parasuraman *et al.* (1991:422) recommend the use of a seven-point scale to meet these criteria. In addition, respondents were asked to rate the level of importance attributed to each of the quality dimensions related to their faculty and university on the same scale, measured by using a 7-point Likert scale of agreement. By subtracting the perceived from the expected, the net satisfaction can be estimated from the total for each student or staff member.

The questionnaire (refer to Appendices E and F containing the questionnaire) had five parts: The first paragraph dealt with the demographic information of the respondents. The second part contained 22 items designed to measure stakeholder expectations (E) of service quality improvement. The third part presented questions that were designed to measure stakeholder perceptions (P) of service quality improvement and which comprised the 22 questions that mirrored those of part one. Part four required respondents to specify the importance of the various attributes based on the 22 items for expectation and perception. The final paragraph was left free for respondents to add further comments, if they had any (Parasuraman *et al.*, 1991:423).

The total sample to be selected from the total population for the survey was respectively 800 students' and 160 academic staff as indicated in paragraph 4.8.2.

4.9.2 Piloting the questionnaires

Pilot testing refers to testing data collection instruments in a small sample of respondents to identify and eliminate potential problems (Shukla, 2008:91). Shukla (2008:91) advises that a questionnaire should not be used in the field without adequate piloting. He goes on to say that piloting provides testing of content, wording, order, form and layout of the questionnaire. This shows that piloting shows the researcher whether the research instrument is appropriate for the study envisioned or not.

Cohen *et al.*, (2005:260-261) further suggest that the pilot test of the questionnaire is important because it:

- Checks the clarity of instructions and layout of the questionnaire of items,
- Checks the validity of the questionnaire items,
- Eliminates ambiguities or difficulties in wording,
- Gains feedback on the attractiveness and appearance of the questionnaire,
- Gains feedback on the layout, sectionalising, numbering and itemisation of the questionnaire,
- Checks the time taken to complete the questionnaire,
- Checks whether the questionnaire is too long or too short, too easy or too difficult, too threatening, too intrusive, too offensive,
- Tries the coding/classification system out for data analysis.

Accordingly, the questionnaire for this study was pilot tested with subjects who were not the sample subjects. These respondents were university students and academic staff from other universities to determine whether the quality attributes used in the questionnaire were clear and formulated correctly, to know the length of time it took to complete and to know the face validity of the instrument. Based on the pilot survey, the overall validity and reliability of the instrument were computed. (See

chapter 5, paragraph 5.2.1 for more details).

4.9.3. Focus group interviews (FGI)

An important step in the process of data collection is to find the right people, places and gain access to and establish rapport with subjects so that they can provide valuable information (Creswell, 2007:118). According to Kvale (1996:14), interviews are an interchange of ideas among two or more individuals on a topic of common interest, are based on the centrality of human interaction for knowledge production and emphasise the social situations of research data. Primarily, focus group interviews were designed for marketing and later their application extended to the social sciences, the health sciences and to education (Owen, 2001:652). Focus group interviews have been used successfully in homogeneous groups of populations in order to determine the needs and preference of the groups (Ekblad & Baarnhielm, 2002:485; Lederman, 1990:121). According to Rikard, Knight and Beacham (1996:248), focus group interviews are types of interviews that provide qualitative, descriptive data in the assessment of educational programmes. This point shows that interviews help with getting critical ideas from people who have detailed knowledge of the study under investigation.

According to Owen (2001:653), focus group interviews have certain advantages, such as the fact that they are appropriate and easily applicable for those people who cannot read and write and they build confidence in those who are unwilling and afraid to be interviewed alone. Interviews also entail a high degree of interaction, motivate the participants to respect opposing views among the group members, create a friendly environment in the group and promote a feeling of enjoyment among group members.

Based on the above assumptions, focus group interviews with key informants from each group (students and academic staff) were conducted using a purposive sampling technique. According to Patton (1990:169), "The logic and power of

purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research." Accordingly, in the group interview, the participants were final year students, representatives from the students' council, senior academic staff, academic staff who were involved in internal quality assessment activities and BPR design, department heads and vice-presidents.

Different researchers recommend and use different numbers of respondents for group interviews. Krueger, (2000:263) suggests six to nine participants, while Langford *et al.* (2002:61) proposesix to ten participants. In turn Johnson & Christensen (2004:147) feel that the ideal number is six to twelve. Thus, for this research, focus group interviews consisted of eight to ten participants drawn from the students and academic staff from different colleges of the sampled universities. The group interviews were aimed at identifying reasons for the difference in perception among stakeholders, reasons for the gaps between perceptions and expectations, if any, and identifying priority areas in service quality improvement initiatives.

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The interviews were conducted at the beginning of April 2012. During the interviews, a digital voice recorder WS-320 M audiotape was used with the permission of the participants and the researcher noted all the relevant information during the discussions and transcribed them immediately after the discussions. There were 74 subjects (34 instructors and 40 students) from all four universities, which were selected purposively as explained above. In one session, eight to ten participants were interviewed together.

Each group interview was conducted for one to one and a half hours. Most researchers use one and one and a half to two hours (for example, Rikard *et al.*, 1996:250) and, in some cases, continue until no new information was revealed, which showed that sufficient information had been gathered, as suggested by Berg

(1998:435). The interview guide was developed carefully, as most researchers agree that the interview guide is crucial for the success of focus group interviews (Rikard *et al.*, 1996:252). Accordingly, the interview schedule was reviewed by PhD students (from UNISA and Addis Ababa University) and the supervisors, who gave their comments on it as well.

4.9.4. Data collection procedures

The data collection procedure for this research was undertaken in three phases. During the first phase, the pilot study was administered to test the appropriateness, validity and reliability of the SERVQUAL questionnaire and modification of the instruments where necessary, based on the pilot study.

The second phase was aimed at conducting the survey in the two targeted groups of the four universities. The questionnaires for the respondents were administered at the beginning of January 2012 to the selected participants personally by the researcher and trained assistants. Following this, the collected data were analysed with different types of software (see chapter 5, paragraph 5.2.2.3 for more details). Furthermore, a descriptive statistical analysis was carried out to describe the characteristic of the sample. In addition, inferential statistics, entailing a reliability analysis (using Cronbach's alpha), explanatory factor analysis, t-test and APA analysis were also utilised to measure the perception and the degree of importance of the constructs.

During the third phase, a series of focus group interviews was conducted to explore reasons for a difference in perception among stakeholders, the reasons for the gaps between the perceptions and the expectations if any, to rank service dimensions based on service quality improvement initiatives, to identify a pool of key service quality attributes and their impact on perceptions, and to supplement the findings of the quantitative data.

Data for this research were collected and analysed as follows:

- The SERVQUAL instruments were pilot tested and improved.

- The SERVQUALscale was administered for the main quantitative data collection.

- Quantitative data analysis took place.

- Interview instruments were developed, based on the findings of the quantitative data, commented and pilot tested..

- Interviews were conducted.

- The qualitative data were analysed.

- An overall analysis was done.

4.10. DATA ANALYSIS AND INTERPRETATION

The survey data were analysed using the statistical software packages, SPSS version 15 (Statistical Software Package for Social Sciences) and SAS version 9.2 (Statistical Analysis System), in terms of descriptive statistics including the means, standard deviations, and cross tabulations (for the variables, academic ranks, levels of education/year, work experience and other demographic factors). The mean difference between perception and expectation was calculated for both the academic staff's and the students' data sets. In addition, the data were analysed, by using a factor analysis firstly. The purpose of factor analysis is to describe the covariance relationships of variables (Johnson & Wichern, 1998:514; Hair, Black, Babin & Anderson, 2010:93) and to examine the dimensionality of the service quality *concept* using the principal component extraction technique to ascertain stakeholder perceptions *dimension/construct*-scores.

With reference to the above:

- Oneshould explain that the factor analysis was conducted on the calculated differences between paired expected and perceived rating values for all respondents over all 22 the service quality questionnaire statements – this constituted the 'data' for the factor analysis.

- The purpose of factor analysis is to identify the underlying structure of the data describing the concept or phenomenon of service quality. An underlying structure implies dimensionality: various components or elements or constructs underlie the concept of 'service quality'. By conducting a factor analysis one is able to verify whether the service quality dimensions of tangibles, reliability, responsiveness, empathy and assurance (see paragraph 2.9.1) truly underlie the service quality concept as suggested by the SERVQUAL model/questionnaire used in this study. The factor analysis thus serves the additional purpose of validating the underlying structure assumed by the SERVQUAL model.

According to Thompson (2004:5), two classes of factor analysis exist or have been developed, namely: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). EFA was used to explain the pattern of relations within the data set. Confirmatory factor analysis (CFA) as defined by Brown (2006:1) is:

> ...a type of structural equation modelling (SEM) that deals specifically with measurement models, that is, the relationships between observed measures or *indicators* (e.g., test items, test scores, behavioural observation ratings) and latent variables or *factors.*

In addition to factor analysis, quantitative data of the present study was also analysed using the Importance Performance Analysis (IPA) technique. As discussed in paragraph 2.9.2, IPA is a technique developed by Martilla and James (1977) and is best described as an absolute performance measure of service users' (also referred to as stakeholders) perceptions of the service rendered by a service provider. This technique seeks to identify the underlying importance ascribed by stakeholders to the various quality attributes being assessed and to indicate which attributes are the most important (Wright & O'Neill, 2002:26).

IPA analysis uses a grid system to visually display the importance-performance balance of service attributes as perceived by stakeholders/users of services. The grid is divided into four quadrants of varying perceived importance-performance

balance. Service attributes are grouped into these quadrants.

Quadrant A: Services attributes perceived to be important but not performing satisfactorily.

Quadrant B: Service attributes perceived to be important and performing according to expectations.

Quadrant C: Service attributes perceived not that important and underperforming,

Quadrant D: Service attributes perceived not that important, but performing satisfactorily.

From the above definition it is clear that both quadrants A and C identify problematic service attributes. Various researchers have used IPA to evaluate service quality experiences in higher education institutions. Most studies assessed the opinions of current customers/stakeholders (Joseph & Joseph, 1997; Angell *et al.*, 2008; Douglas *et al.*, 2006; O'Neill & Palmer, 2004).

Martilla and James (1977:79) explain that IPA is a three-stage assessment procedure. The procedure was followed in the current study as well and consists of:

Step1.*Selection.*During this stage, a set of attributes describing the service being evaluated is selected: for the current study, the 22 attributes of the SERVQUAL scale were selected to assess the importance and performance of the aspects of quality service of higher education institutions. According to Martilla and James (1977:79), determining which attributes to measure is essential. If important aspects of the service are overlooked, the usefulness of the IPA technique is severely limited.

Step 2.*Measurement of importance and performance for each attribute*: to measure stakeholders' perceptions of the importance and performance (service delivery improvement) of aspects of service, stakeholders rate an identical list of service attributes for perceived importance and perceived service delivery performance (Refer to Appendix B to view the list of service attributes as included in the IPA

questionnaire). As recommended by Martilla and James (1977:79), separate sections of the IPA questionnaire of the current study evaluated perceptions of importance (the list of attributes) and performance to minimise the effect of confounding of perceptions.

Step 3. *Averaging the measures of importance and performance ratings of respondents per service attribute of the IPA questionnaire and mapping the paired performance-importance mean ratings to a two-dimensional IPA grid:* Before mapping commences, the IPA two-dimensional grid is scaled in such as way that the origin of the IPA X-Y axis system is positioned where the horizontal axis of the two-dimensional Euclidean space equals the value of the overall mean performance rating (over all service attributes) and the vertical axis of the two-dimensional Euclidean space assumes the value of the overall importance rating (over all service attributes) of respondents. Paired importance-performance rating means for the various service attributes are then mapped onto the IPA grid.

The same sample of respondents for the SERVQUAL questionnaire was used to assess the IPA scale. The third section of the IPA questionnaire requested respondents to rate the importance of the service attributes from the vantage point of users of the service (higher education service quality improvement). Respondents were requested to rate the importance of each service attribute in improving the quality of service of the institution. Respondents rated the importance on a 7-point Likert rating scale where a rating of '1' indicated very low importance, up to a rating of '7' indicating a rating of utmost importance. Likewise respondents were requested to rate service attributes on perceived service performance on a 7–point satisfaction scale where a rating of '1' indicated total dissatisfaction with performance on a attribute of service up to a rating of '7' indicating total satisfaction with a service delivery improvement attribute.

Qualitative data (focus group interviews) were analysed using content analysis methods to identify the themes. Content analysis is defined as a research tool that is

used to describe and identifying words or concepts or trends in communicating the content of the group interview, analysing written, verbal or visual mesSage Publicationss and relating the attributes to the response of the respondents in order to make inferences about the mesSage Publicationss (Busch, De Maret, Flynn, Kellum, Meyers, Saunders, White & Palmquist, 2005:2; Cohen *et al.*, 2005:164; Elo & Kynga, 2008:107). Busch *et al.* (2005:2) identify two types of content analysis: relational analysis and conceptual analysis. Relational analysis begins with the identification of concepts that are present in a given text and tries to explore the relationships between the identified concepts. On the other hand, conceptual analysis is used to identify themes and concepts from the focus group discussions. In conceptual analysis, concepts or themes are chosen from the transcribed notes of the focus group interview and the analysis takes place in order to quantify their presence. Thus, conceptual analysis is the method chosen for this study. The reason for choosing conceptual analysis was that it helps the researcher to analyse focus group interviews by recording the frequency and occurrence of certain concepts or themes expressed by the participants and present the analysis question by question.

4.11. VALIDITY AND RELIABILITY

Validity and reliability are important aspects of any research. Because of the difference between them, validity and reliability can be addressed in different ways. Their importance will be discussed with respect to both qualitative and quantitative data in this section.

4.11.1. Validity

In any research, 'validity' is an important concept to keep in mind. If a research has low validity, it is worthless (Cohen, et al., 2005:105). Even though it is not the intention of this study to discuss all the types of validity, it is interesting to note that Cohen *et al.* (2000:105-06) list about 18 types of validity. Validity is defined, according to Shukla (2008:82), as "the extent to which differences in observed scale

scores reflect the true differences among objects on the characteristics being measured." For Cohen *et al.* (2005:105) and Best and Kahn (2005:208), validity presupposes that an instrument measures what it is supposed to measure. In other words, validity helps the researcher to decide on the scale, measuring what it is meant to measure. The concepts that are included in the instrument help to achieve content validity (Muijs, 2004:66). Getting comments and judgment from colleagues is another way of looking for validity, namely, face validity. Cohen *et al.* (2005:105) contend that validity in quantitative research might be ensured through different means, such as sampling, appropriate instrumentation and appropriate statistical treatment of the data. In addition, validity is checked by reviewing data collection instruments in terms of clarity, wording and sequence of questions.

In order to assess the validity of the revised SERVQUAL instrument, different analyses were performed by the authors (Parasuraman *et al.* 1991:432). They examine the validity of the instrument by analysing the difference between the SERVQUAL gap scores and customers rating on several measures of service quality by using a ten point Likert scale, which ranges between "extremely poor" valued 1 and "extremely good" and found high validity.

In Parasuraman *et al.* (1991:432) and in other replicated studies, the instrument was checked for different types of validity. For example, the concurrent/predictive validity was found with a 0.57 to 0.71 score of variance in overall quality scores measured (Parasuraman, 1991:438), 0.59 (Babakus & Boller, 1992:256). Fernandez and Bedia (2005:13) confirm the validity of the instrument through factor analysis, however, the predictive validity has been found to be relatively low. The face validity was also checked and the responses of the participants in that study confirm that SERVQUAL with minor modifications in terms of a few items had face validity (Parasuraman, 1991:438). Babakus and Boller (1992:257) also support its suitability. In this research, content validity of the instrument was demonstrated by fair and comprehensive coverage of the items that it is supposed to cover. Content validity and the Amharic translation validity of the adapted SERVQUAL scale will be

discussed in chapter 5, paragraph 5.2.1.

Validity does not have a similar connotation in both qualitative and quantitative research. In qualitative research, validity means checking the accuracy of the findings by employing different procedures, therefore, for qualitative data, the credibility and trustworthiness of the data were also checked to address validity (Bailey, 2007:180). Trustworthiness, according to Bailey (2007:180), in qualitative research requires conducting the research in such a way that the reader trusts the result of the research and believes that the research is valuable. This does not mean trustworthiness is attained when the reader agrees with the researcher. Trustworthiness requires the researcher to show how he/she arrived at the conclusion he/she reaches. Bailey continues that trustworthiness has been achieved when the researcher shows the procedures used to make detailed decisions throughout the research process.

4.11.2. Reliability

Reliabilityis another important element that determines the quality of the instruments and the measured results (Muijs, 2004:71). Best and Kahn (2005:285) define reliability as "the extent that the instrument measures whatever it is measuring consistently." For O'Lary (2004:59), reliability refers to "... the extent to which a measure, procedure or instrument provides the same results on repeated trials." This shows that reliability is concerned with the precision and accuracy of the instruments and measures when used repeatedly. If one claims that the instrument/measure is reliable, similar results will be found when carried out on similar groups of respondents in a similar context (Cohen*, et al*., 2005:117; Bailey, 2007:184). Reliability, therefore, is not dependent on who, at what time or where the questionnaire was administered (O'Lary, 2004:60; Bailey, 2007:184). The reliability of the instrument for the present study was checked using the internal consistency method (Cronbach's alpha coefficients).

In different empirical studies, the reliability of the SERVQUAL measure of perceptions and expectations of quality of service was examined using the Cronbach's alpha coefficients. For example, in their study, Fernandez and Bedia (2005:13) identify the values of 0.894 and 0.903 respectively. The values (regarding both perceptions and expectations) are close to 1, which indicates that the instrument has a high level of internal consistency. ZafiropoulosandVrana *(2008:35)* confirm that the instrument was found to be a concise multiple-item scale that was reliable in several contexts. All the dimensions of the scale for this study were found to be reliable.

According to Bailey (2007:184), in qualitative research, reliability is attained when we elicit similar responses from interviewees. On the other hand, dependability is used as an alternative criterion for reliability in qualitative research. Therefore, a lack of reliability is not a problem in qualitative research because dependability requires consistency among different parts of research processes - research questions, data collection and analysis (Bailey, 2007:184). In general, according to the pilot and main study results, the SERVQUAL scale and the interview schedule were found valid and reliable (see chapter 5, paragraph 5.2.1. for more details).

4.12. ETHICAL ISSUES

In any research, the ethical issues need to be addressed adequately. According to Lodico *et al.*, (2006:147) ethical issues focus on protecting the right of the research respondents. Accordingly, the following ethical issues were taken into consideration while conducting the survey and focus group interviews for this research:

Self-determination

The purpose, potential benefits and risks of the study, if any, are explained to the subjects and they have the right to refuse to take part in the research project or to withdraw at any time when giving information (Cohen *et al.*, 2005:51). Furthermore, the researcher ensured the right of self-determination of the respondents through consent forms.

Informed consent

Participants in the study were informed of the possible risks and procedures before they became involved in the study (Lodico *et al.*, 2006:147; Bailey, 2007:17; Scott, 1977:41). Therefore, each respondent in this study gave his/her informed consent.

Privacy

The respondents' privacy was protected through anonymity and in this study the respondents voluntarily shared private information (Cohen *et al.*, 2005:61).

Confidentiality

According to Scott (1997:44), confidentiality is mostly dealt with in relation to data collection and storage systems in which it is not possible to identify the research respondents. For Bailey (2007:24), confidentiality refers to informing the respondents whether the research is anonymous and confidential. With regard to this study, the researcher emphasised that all information would be treated as strictly confidential and that respondents could choose to share personal information only to the extent that they wished.

4.13. CONCLUSION

This chapter has focussed on the research design and methodology employed in this study. The chapter described the sampled universities and the philosophical paradigms employed. The research made use of the mixed-methods approach and appliesa sequential exploratory design. The population, sample, sampling techniques, data collection techniques and the encompassing features of the data collection instruments were explained. Finally, the data analysis and interpretation techniques, validity and reliability as well as ethical issues were addressed. The next chapter, chapter 5, will focus on the analysis and interpretation of the empirical data collected through questionnaires and focus group interviews.

CHAPTER 5

INTERPRETATION AND ANALYSIS OF DATA

5.1 INTRODUCTION

Chapter four discussed the research design and the methodological approach that was adopted to fulfil the aims and objectives of the research study.The rationale for the choice of a mixed methods design was given and the techniques used in data collection and analysis were also explained. This chapter will focus on the interpretation and analysis of both quantitative and qualitative data. The first section of this chapter deals with the interpretation and analysis of quantitative data. The second section deals with qualitative data interpretation and analysis. The final section presents a summary of the findings presented in the chapter. The chapter, therefore, recapitulates how the quantitative and qualitative data were collected, analysed, interpreted and integrated.

5.2. FINDINGS FROM THE QUANTITATIVE STUDY

This paragraph discusses the results of the survey data. The main purpose of this paragraph is to address the research questions listed below:

- How do internal stakeholders (students and academic staff) perceive the service quality improvement initiatives of public higher education institutions?
- What are the areas and the priorities that stakeholders consider important to improving service quality in public higher education institutions?
- Are there any differences among internal stakeholders of PHEIs regarding their expectations and perceptions of service quality improvement initiatives? If so, why are there such differences or if not, why are there no differences?
- Are there any gaps between the expectations and perceptions of service quality improvement initiatives?

- Is the SERVQUAL scale an appropriate instrument to measure users' perceptions of service quality in Ethiopian public higher education institutions?

To answer these questions, the SERVQUAL survey data that were collected from the academic staff and students of Ethiopian public universities, were analysed by means of statistical- and IPA techniques. ,The statistical techniques referred to were discussed in the analysis strategy paragraph of chapter four, paragraph 4.10.

5.2.1 Content validity, Amharic translation and pilot questionnaire administration

Since students and staff completed the questionnaire in their first language, Amharic, careful attention had to be given to the translation of the questionnaire to ensure compatibility with the original English version of the questionnaire. Thus, to strengthen content validity and ensure that the translation remained true to the design purpose of the original English SERVQUAL version, the terminology was adapted to the Ethiopian educational environment and then translated into Amharic by the researcher. Following this, the Amharic version was independently translated back into English by English language specialists. Finally, the original English SERVQUAL questionnaire and the independently back-translated English version were compared to ensure that the design purpose of the questionnaire had not been compromised in any way. The content validity was validated against feedback from two experts from both UNISA and Hawassa University who revised the translated English version. The researcher's supervisors furthermore commented on the wording of some of the items, adapted in terms of the terminology used in the Ethiopian educational context.

On completion of the abovementioned translation process, a pilot survey was administered to a total of 18 students and 17 academic staff at one of the higher education institutions in Ethiopia (these respondents were not included in the final survey study). Questionnaire administration assisted in refining the final Amharic

translation for the main survey. The suggestions and comments of pilot respondents were used to ensure that the wording of questions was appropriate and written in an understandable basic level of written and spoken Amharic.

Feedback from the pilot study revealed a number of issues regarding question formulation in Amharic. For example, two translated questionnaire statements were found to be duplications in the Amharic version: Questions 5 and 8 respectively contained the phrases: "promise to do something by a certain time" and "provide its services at the time promised." These two phrases have exactly the same wording in Amharic and were adjusted. Another example concerned questions 18 and 20, in which the two words "individual" and "personal" share the same meaning in Amharic and were re-phrased. The pilot respondents further commented that in item 19 ("Excellent universities will have lecture hours and office hours convenient to all stakeholders") the word 'all' "suggests something unattainable and should be removed." In this instance, the wording was not changed since it was argued that respondents were requested to indicate their extent of agreement with the specific questionnaire statement on a rating scale where a rating of "1" indicated very strong disagreement to a rating of "7" indicating very strong agreement with a particular statement. The rating scale thus allowed respondents to indicate their true perceptions if they felt that "all the stakeholders" could not be accommodated in such a way. Pilot respondents raised the same kind of objection to questionnaire statements that included phrases such as "…will have lecture hours convenient for all students" and "…will have office hours convenient for all staff". These types of "convenience for all parties" statements appear to be inappropriate in the Ethiopian higher education context – especially in the staff and student context. The questionnaire statements were not altered since it was again reasoned that the rating scale allowed for respondents to disagree. The Amharic version of the questionnaire could thus be finalised with the input of the pilot respondents. The final translation consisted of 22 questionnaire statements. Completion time was estimated at between 25 to 30 minutes for student respondents and 20 to 23 minutes for academic staff based on pilot study completion times.

The data of this small scale pilot study (N=35 respondents) was used to obtain a preliminary indication of the internal consistency reliability of the SERVQUAL questionnaire. For the academic staff questionnaire (n=17), Cronbach alpha values of 0.790 and 0.896 were calculated for the expectations and perceptions constructs of the questionnaire. These values served as initial indicators of internal consistency reliability. Similarly, the students' responses (n=18) gave an indication of internal consistency reliability with alpha values of 0.812 and 0.817 respectively for the expectations and perceptions constructs.

5.2.2. Quantitative analysis of the main study

5.2.2.1. Response rate and structure of the instrument

Prior to the administration of the questionnaire, the management of the sampled Ethiopian universities was informed by letter from the researcher's university (Hawassa University) regarding the purpose of the study. Once permission had been granted, a total of 960 questionnaires were distributed at four public universities with the assistance of three hired and trained assistant data collectors from each university. The staff and student questionnaires were distributed to 160 academic staff and 800 students. Nine hundred and fifty five (955) questionnaires were returned. In total, 899 questionnaires were found to be acceptable as reliable responses to generate data for the quantitative analyses. This accounted for the response rate of 93.65%. This response rate far exceeds normal expectations for similar studies (Nadiri *et al.*, 2009:526). Thus the response rate was regarded as more than satisfactory. The excellent response rate can be ascribed to the fact that respondents at each university completed the questionnaires in a joint session convened at each university especially for this purpose. The trained assistants facilitated these sessions. A summary of the response rates from both academic staff and students is presented below in Table 5.1.

Table 5.1: Summary of response rates to the questionnaire

Questionnaire	Numbers	Percentage (%)
Total number of questionnaires distributed to academic staff at four universities	160	100
Total number of questionnaires returned from academic staff	155	96.88
Total number of usable questionnaires returned from academic staff	155	96.88
Total number of questionnaires distributed to students at four universities	800	100
Total number of questionnaires returned from students	800	100
Total number of usable questionnaires returned from students	744	93
Total number of usable questionnaires for both academic staff and students	899	93.65

(1) Questionnaire composition

Both questionnaires consisted of five sections, namely:

Section A probed the biographical properties of respondents such as their gender, age, academic status, work experience and university. Section Bwas designed to measure the expectations of respondents regarding service quality improvement at excellent universities. This section consisted of 22 questions. Section C was designed to measure respondents' perceptions of service quality improvement at their specific university. The 22 questions of this section mirrored those of Section B.

Section D was designed to measure respondents' perceived importance ratings of the above listed services in relation to the service quality at theiruniversity. This section evaluated the same (22) questionnaire issues probed in sections B and C. Section E consisted of an open-ended question section in which respondents were requested to add any positive and/or negative comment/s regarding their university's service quality and improvement practices. The purpose of the qualitative data

collected in the open-ended section was to enrich and verify the findings of the quantitative analyses. These responses were obviously not analysed by means of quantitative analysis techniques.

The questionnaire statements in the questionnaire were designed to evaluate respondents' experiences as users and stakeholders of university services measured against their expectations and perceptions of the importance of each service at an idealised "excellent" university. In the questionnaires, respondents were therefore requested to rate their expectations, perceptions and perceived importance of each of the 22 items of the SERVQUAL instrument on a seven-point Likert rating scale. Scale rating options ranged from 1= "strongly disagree" to 7= "strongly agree". Respondents were requested to circle the rating of their choice for each statement.

(2) Questionnaire administration

Questionnaires were administered in January 2012 and the responses of the reliably completed questionnaires were captured electronically to an Excel spreadsheet which was then imported into SPSS as an SPSS data file. The integrity of the captured data was checked and analyses of captured data were subsequently executed using version 15 of the SPSS statistical software package (Statistical Programme for the Social Sciences). The analysis strategy described in paragraph 4.10.4 of chapter 4 (as a component of the research methodology) was used to guide the quantitative analyses. The results of the analyses conducted on the response data and the findings derived from the analyses results are presented in paragraph 5.2.2.2 to 5.2.2.4 of this chapter. The statistical package SAS (Statistical Analysis System), version 9.2, was furthermore used to conduct the factor analyses briefly discussed in the "Analysis results" paragraph of this chapter.

5.2.2.2 Profile of the sample respondents

The biographical profile of respondents is presented in Table 5.2. The properties probed include the gender and age of the sampled students and the gender, academic status and work experience of the academic staff. The results reveal that 71.5% of the 744 students were male and 28.5% were female. In the Ethiopian higher education system the majority of the students are still male, therefore male/female representation in the sample was selected in accordance with the student gender composition at universities in Ethiopia. As for the age distribution, almost 54% of the respondents were young and between 22 and 24 years old, followed by 39.5% between 19 and 21 years. Only 6.2% of the sampled students fell into the 25 to 27 age group and 0.4% were older than 27 years.

The gender composition of the sampled academic staff consisted of 90.3% males and 9.7% females (155 respondents in total). Similar to the female student respondents, female academic staff are very limited in Ethiopian public higher education institutions. With respect to the academic status, the majority of the academic staff, roughly 70%, were lecturers, followed by 17.4% graduate assistants and 2.6% assistant or full professors. These findings verify Taye's (2008: xxi) findings that Ethiopian higher education is in need of senior academic staff. The majority of the sampled academic staff (65.8%) had less than five (5) years experience. Only 30.4% had between 6 to 10 years experience and the remaining 3.8% had more than ten (10) years teaching experience in higher education.

Table 5.2: Summary of respondents' biographical profiles

Characteristics		Total	Percentage
Gender of student respondents	Male	532	71.5
	Female	212	28.5
	Total	744	100.2
Age of student respondents	19 - 21years	294	39.5
	22 - 24 years	401	53.9
	25 - 27 years	46	6.2
	above 27 years	3	0.4
	Total	744	100.0
Gender of academic staff respondents	Male	140	90.3
	Female	15	9.7
	Total	155	100.0
Academic status	Associate Professor and above	4	2.6
	Assistant Professor	12	7.7
	Lecturer	108	69.7
	Assistant lecturer	4	2.6
	Graduate assistant	27	17.4
	Total	155	100.0
Work Experience of academic staff in higher education	0 - 5 years	102	65.8
	6 - 10 years	47	30.4
	11 - 15 years	3	1.9
	16 - 20 years	3	1.9
	Total	155	100.0

The following paragraph will focus on the analysis results and discussion of the SERVQUAL survey data.

5.2.2.3 SERVQUAL Model

The SERVQUAL data was analysed according to the statistical techniques proposed in the analysis strategy paragraph described in chapter 4. The motivation for the use

of each technique was also discussed in chapter 4. These techniques included one-way and composite frequency tables (which have already been discussed in paragraph 5.2.2.2 of this chapter); factor analysis – to be discussed in paragraph 5.2.2.3 (1); scale reliability testing and Cronbach alpha criteria to be discussed in paragraph 5.2.2.3 (2); and t-tests which will be discussed in paragraph 5.2.2.3 (3) of this chapter.

(1) Factor analysis of perceptions of service quality improvement

As indicated in the analysis strategy paragraph of chapter four, paragraph 4.10, factor analysis was conducted on the response data as an exploratory analysis step in the research process. The factor analysis served a dual purpose: in the first instance factor analysis was conducted to investigate the underlying structure of the response data, and, comparison of this Ethiopian adapted questionnaire data structure to that of similar American SERVQUAL studies referenced in the literature. Secondly, (and related to the first purpose of factor analysis strategy), the technique was implemented to investigate the viability of data-dimension reduction.

The above reasoning argues that if an underlying structure for the response data can be established, a number of factors or constructs explains the variability in the response data. Identification of a structure in turn implies that subsets of questionnaire statements group together under a factor of the identified data structure. In this way, the dimensionality of the response data can be reduced from 22 to an anticipated three, four or five factors (factors are also referred to as constructs). Examples of subsets of questionnaire items that can be grouped together to explain a factor in the current dataset could, for example, describe constructs such as 'reliability of services', 'response rate of service delivery,' 'confidence instilled in stakeholders based on quality service delivery' and more.

According to Pallant (2007:179), factor analysis "takes a large set of variables and looks for a way the data may be reduced or summarized using a smaller set of factors or components" – without sacrificing information and knowledge embedded

in the data. Defined from another perspective, factor analysis identifies the underlying latent factors that explain the variation among the response variables or questionnaire statements (De Vaus, 2002:134; Hair *et al.*, 2010:93).

Various factor extraction methods have been developed (Field, 2005:632). This study employed Principle Factor analysis and Maximum Likelihood, with an oblique rotation. The oblique transformation was selected because there was reason to believe that the factors that probably underlie the data were dependent. In this regard Parasuraman *et al.* report on interrelated factors (1988:20; 1991:424) in independent research within the same context. Parasuraman *et al.* believe that there is some degree of overlap between factors of the SERVQUAL dimensions. In their research, this was substantiated by questionnaire items that loaded onto more than one factor. In the research pertaining to Parasuraman *et al.'s*study, Kaiser's criterion and the point of inflection of the scree plot were used as guidelines in selecting the appropriate number of factors to extract in the analysis.

Exploratory factor analyses were conducted on the entire dataset of academic staff and students' perception responses. It was argued that the findings of the academic staff and students could only be evaluated and compared against one another if the assumption could be made that the same data structure underlay both student and staff responses. If this were not the case, the basis of comparison would not be equal. It was also argued that factor analysis should be conducted on perception data since these measures are based on participant experience, which is believed be more accurate than the expectation data responses.

Prior to the factor analysis, the perception data was also evaluated for adequate sample size to comply with factor analysis requirements: according to the general rule of minimum sample size determination for factor analysis, the number of questionnaire statements (22) multiplied by the number of rating levels of the SERVQUAL scale (a 7-point Likert rating scale) suggests the absolute minimum sample size for factor analysis. This calculates to 154. The sample size of the

combined dataset for students and academic staff came to 899. Thus the minimum sample size requirement was satisfied.

A summary of the four-factor factor analysis conducted on the research data and criteria that investigated the suitability of the dataset for factor analysis and factor analysis requirements are presented in Appendix A.

Factor analysis results

Several factor analyses with different numbers of factors to be extracted in each model were conducted. Table 5.3 of this section summarises the results of six Maximum Likelihood factor analyses (with promax rotations), that were investigated as possible models of best fit for the service quality data. The specified number of factors that were extracted in each analysis varied between one and six.

Several guidelines were applied to decide on the number of factors to extract. These included the Kaiser criterion (Kaiser (1960) in Field, 2005:633), the point of inflection of the scree plot, eigenvalues greater than one, and the interpretability of the extracted factors.

The issue pertaining to the number of factors to extract links very closely to the adequacy of the data for factor analysis and the model of best fit. To this effect the criteria of MSA (measure of sampling adequacy, the Kaiser-Meyer-Olkin criterion), Bartlett's Chi-square test of spherity and its associated probability, the Akaike criterion, Schwarz's Bayesian criterion and the Tucker-Lewis reliability coefficient are reported in Table 5.3. for each of the six analyses. Each row of the table presents the results of a separate factor analysis. A detailed description of these criteria and factor analysis results for the model of best fit are presented in Appendix A. The factors extracted in each analysis are also described (listed variables) in the last five columns of Table 5.3. Interpretability of factors was evaluated against the grouping of variables indicated for each factor.

Table 5.3: Results of six factor analyses with one to six factors extracted to decide on the model of best fit.

# Fac-tors	MSA/ KMO	Bartlett Chi-sq	Pearson Chi-sq	Akaike	Schwarz BC	Tucker Lewis R-coef	Fact1	Fact2	Fact3	Fact4	Fact 5 &6
1	0.95	9492.20*** (231)	1368.8	950.81	-13.10	0.84	q1-4 q5-9 q10-13 q14-17 q18-22				
2	0.95	9492.20*** (231)	1087.49	711.49	-191.15	0.88	q10-13 q14-17 q18-22	q1-4 q5-9			
3	0.95	9492.20*** (231)	747.57	411.57	-395.05	0.92	q10-13 q14-17	q1,2,4 q5-8	q19-22		
4	0.95	9492.20*** (231)	506.08	208.08	-507.31	0.94	q10-13 q14-17	q5-8	q19-22	q1,2,4	
5	0.95	9492.20*** (231)	399.67	137.67	-491.29	0.95	q10-13 q14	q5-8	q20-22	q1,2,4	q17
6		9492.20*** (231)	294.51	66.51	-480.84	0.96	q5-9	q11-13 q14, 15	q19-22	q1,2,4	q10 (F6 q17)

Legend:

KMO/ MSA: Kaiser Meyer Olkin measure.(Should be > 0.8, (Kaiser H. (1970))
Akaike :   Akaike criterion (smallest is best)
Schwarz BC: Schwarz Bayesian criterion (smallest is best)
Tucker-Lewis R-Coef: Tucker Lewis reliability coefficient (Closest to 1.0)
Fact1-Fact5, F6:   Factors 1 – 6 extracted in factor analysis models (where p_i, i = 1-22,refers to perceptions ratings on q1-q22
References: Schwarz J (2011), Field A (2001), Hatcher L.1994

Questionnaire statements describing SERVQUAL factors/ or constructs
q1-q4   :Tangibles
q5-q9   : Reliability
q10-q13: Responsiveness
q14-q17: Assurance
q18-q22: Empathy

Deductions

Table 5.3 indicates that the Kaiser-Meyer-Olkin's measure of sampling adequacy was 0.95 for all models. This value is greater than 0.8, which, according to Schwarz (2011:26), indicated that the data of the current study could be analysed by means of factor analysis.

Furthermore, the indicators listed in Table 5.3 jointly pointed to the model with either four or five factors as the model of best fit: Pearson Chi-square statistic, Akaike's

criterion and Schwarz's Bayesian criterion all showed a substantial decrease in value for these models against the mentioned values of models with a lesser number of factors (SAS/STAT User Guide, 1999:1157, 1189). The final decision on the model of best fit for the service quality data was based on the interpretability of factors: for the four-factor model, factor 1 described the SERVQUAL dimensions of *responsiveness* and *assurance*; factor 2 by the SERVQUAL dimension of *reliability*; factor 3 by the SERVQUAL dimension of *empathy* and factor 4 by the dimension of *tangibles* (except for question number 3). The fact that two SERVQUAL dimensions, namely *responsiveness* and *assurance*, loaded onto factor 1 for the four-factor model, agree to a great extent with the early findings by Parasuraman *et al.* (1988:20) that the dimensions of the SERVQUAL scale are interrelated. This proved to be true with respect to the dimensions of *responsiveness* and *assurance* on the first factor for this survey study. The findings are furthermore in line with Mostafa (2007:93); Fernandez *et al.* (2005:17); Ramseook-Munhurrun *et al.* 2009:548); Wright & O'Neill (2002:30) and Miao, Jiaxin & Jinlin (2007:62) who all suggest that the SERVQUAL dimensions can be reduced to three or four dimensions rather than five.

The four-model factor model complied best with the analysis criteria and previous research regarding the characteristics of SERVQUAL dimensions. Table 5.3 indicates that the factors of the five-factor model are not as easily interpretable in terms of the variables as is the case with the four-factor option.

Table 5.4 of this section presents the rotated factor loadings for the four-factor model of best fit. The factor pattern indicates the dimensions of the SERVQUAL scale, namely, *assurance, responsiveness, reliability, empathy* and *tangibles* as underpinned in the four factors of the FA (factor analysis) model. More detail regarding the purpose of the analysis is provided in Appendix A and references to Field, Pallant and Brown (Field, 2005:644; Pallant, 2007:183; Brown, 2006:30).

Table 5.4: Rotated factor pattern for the 4-factor SERVQUAL perception data factor analysis

Perceptions Scale items	Factor loading factors			
	1	**2**	**3**	**4**
q15	69			
q10	65			
q12	64			
q17	61			
q11	59			
q16	57			
q14	52			
q13	50			
q18	49			
q8		63		
q7		63		
q6		61		
q5		60		
q9		41		
q3				
q21			75	
q22			63	
q20			62	
q19			41	
q2				73
q1				64
q4				40 (39)

Printed factor leadings are multiplied by 100 and rounded to the nearest integer.
Loadings less than 40 are suppressed to facilitate pattern recognition

Extraction Method: Common factor analysis: Maximum Likelihood (Principal Axis factoring used in preliminary phase).
Rotation Method: ProMax (Oblimin with Kaiser Normalization used in preliminary phase).
4 factors extracted

*   Items: P1 - P4 (Tangibles)   P14 - P17 (Assurance)
            P5 - P9 (Reliability)   P18 - P22 (Empathy)
            P10 - P13 (Responsiveness

Deductions

The factor structure identified in this study can be regarded as very satisfactory. The results were promising because, even though environmental and cultural differences exist between Ethiopia and some of the other independent SERVQUAL studies reported on (for example SERVQUAL USA), the Ethiopian data structure and factors agreed in general with those of other independent findings (Mostafa, 2007:93; Fernandez *et al.*, 2005:17; Ramseook-Munhurrun *et al.*, 2009:548; Wright & O'Neill, 2002:30 and Miao, et al., 2007:62). These positive results furthermore serve as an

indication that the translation process was successful.

Following the validation of the data structure and factors for the SERVQUAL data, scale reliability testing was conducted as the next step in the analyses, as set out in the analysis strategy of chapter 4. Scale reliability testing was conducted on the perception and expectation SERVQUAL factors (which are also referred to as constructs or dimensions) of *assurance-responsiveness* (factor 1); *reliability* (factor 2); *empathy* (factor 3); and *tangibles* (factor 4). The results are presented in paragraph 5.2.2.3 (2).

(2). Scale reliability testing: Validating the internal consistency reliability of the Ethiopian adapted SERVQUAL constructs

Scale reliability testing was conducted on the response ratings of each subset of questionnaire items that describe a service quality construct as identified in the factor analysis and defined for the SERVQUAL questionnaire. As mentioned, these included *assurance-responsiveness, reliability, empathy* and *tangibles*. Reliability tests were conducted on the combined academic staff and student perception and expectation data. Cronbach alpha coefficients were calculated in these analyses and served as indicators of internal consistency reliability. Cronbach alpha values in the region of 0.6 or greater for exploratory studies (Ary, Jacobs & Sorensen, 2010:212; Nunnally, 1978:314) indicate internal consistency reliability. Reliability implies that all questionnaire items grouped together to describe a particular dimension all truly contribute towards explaining the specific dimension (or construct). It furthermore implies that a reliable perception or expectation measure of the construct can be derived for each respondent. The measure is calculated as the mean response to the subset of questionnaire items that define a particular construct.

In Table 5.5 the results of these analyses are summarised. The questionnaire items that describe each construct are listed in the table, along with the Cronbach alpha coefficients calculated for each expectation and perception construct for all

respondents. Each row in the table reports the results of an analysis.

Table 5.5: Results of scale reliability tests conducted on the perception and expectation ratings of academic staff and students

Service quality construct	Questionnaire items	Cronbach alpha coefficient	
		Perceived experience	Expectations
Tangibles	q1-q4	0.71	0.49
Reliability	q5-q9	0.85	0.61
Responsiveness	q10-q13	0.83	0.62
Assurance	q14-q17	0.81	0.67
Empathy	q18-q22	0.84	0.65

The Cronbach alpha values reported in Table 5.5 indicate that internal consistency reliability could be established for the perceived service quality constructs of *tangibility, reliability, responsiveness, assurance* and *empathy* since the alpha values varied between 0.71 and 0.85. These results compared favourably with similar studies undertaken by Wang *et al.* (2010:1107), Mostafa (2007:93) and Lee (2006:8).

With regard to the expected service quality constructs (column 4) internal consistency reliability could be established for all constructs with the exception of *tangibles*. Cronbach alpha values for the other constructs varied between 0.61 and 0.67. The reliability for expectation constructs compared well with research by Sahney *et al.* (2003:300) and even indicated more stability than that found by Sahney *et al.*

With internal consistency reliability confirmed, perception and expectation construct scores could be calculated for all service quality constructs (*reliability, responsiveness, tangibles, assurance* and *empathy*). These results are discussed in the next paragraph. However, caution was exercised with the interpretation of final analyses results pertaining to expectations on the tangibles construct.

(3) Calculation of perceived and experienced service quality improvement initiative construct-scores to assess the gap between perceptions of experienced service delivery and expected service (the service quality gap)

As originally planned and outlined in the analysis strategy paragraph in chapter 4, measures of respondents' perceived experience and expectations on the dimensions of service quality delivery could be calculated once the internal consistency reliability of the service quality constructs was established (via scale reliability testing, paragraph 5.2.2.3.2). These measures of service quality – referred to as service quality construct scores – were calculated for each service quality dimension for each respondent. A particular construct score (either experienced or expected) was calculated as the mean rating response of the subset of rating responses reported by an individual for the particular expectation or experienced service quality construct. Table 5.6 lists the mean scores for the entire dataset, while Tables 5.8 and 5.9 compare academic staff and students' mean perceived (Table 5.8) and expected (Table 5.9) dimension scores.

A measure of the discrepancy between experienced (also referred to as perceived) and expected quality of service delivery improvement on the five SERVQUAL dimensions of service was furthermore calculated for each respondent as the difference between a respondent's experienced and expected dimensions construct scores. The mean differences, referred to as the 'gap scores', are included in Table 5.6 for the entire sample. In table 5.7 the mean difference scores are presented in such a way as to compare academic staff and students on the different dimensions. Tables 5.6 and 5.7 thus reflect how respondents perceive service delivery at their higher education institutions: if the gap score deviates considerably from zero, a discrepancy between the experienced and expected level of quality service delivery for a service quality dimension is indicated. In Table 5.6 t-test results testing the null hypothesis that the mean difference score for a service quality dimension does not deviate statistically significantly from zero (in other words that expectations and experience do not differ) are included in the last column of the table. The last column

of Tables 5.7 – 5.9, on the other hand, report on t-tests comparing academic staff's and students' mean difference as well as the mean perception and mean expectation scores on the service delivery dimensions. The statistical significance of the tests is also included in the last column of these tables. A significance legend is included in each table.

Table 5.6: Service quality gap analysis for all respondents: mean expected, experienced and gap service quality construct scores for the five SERVQUAL service delivery dimensions

	Perceived experience		Expectation		Gap		H_0: gap=0
	Mean	Std	Mean	Std	Mean	Std	
Entire dataset: (academic staff and students)							
Tangibles	3.34	1.78	6.55	.74	-3.21	.26	-61.67***
Reliability	3.21	1.75	6.56	.75	-3.34	.20	-67.93***
Responsiveness	3.58	1.68	6.48	.77	-2.90	.23	-59.68***
Assurance	3.65	1.69	6.54	.77	-2.88	.23	-58.57***
Empathy	3.41	1.66	6.57	.70	-3.16	.19	-68.74***
Significance level: *** : 0.1% ; ** : 1%; * : 5% level of significance							

Table 5.7: Mean gap scores for the five SERVQUAL service delivery dimensions of academic staff compared to students

	Gap score Academic staff		Gap score Students		Gap		t-statistic (Sattertwaite)	
	Mean	Std	Mean	Std	Mean	Std		
Entire dataset: (academic staff and students)								
Tangibles	-1.94	1.18	-3.22	1.41	1.27	1.37	10.47	(11.75)***
Reliability	-3.71	1.35	-3.28	1.50	-0.42	1.47	-3.24	(-3.46) ***
Responsiveness	-2.92	1.27	-2.90	1.50	-0.01	1.46	-0.07	(-0.07)
Assurance	-3.00	1.43	-2.86	1.48	-0.15	1.47	-1.15	(1.18)
Empathy	-3.07	1.39	-3.18	1.38	0.11	1.38	-0.95	(-0.94)
Significance level: *** : 0.1% ; ** : 1%; * : 5% level of significance								

Table 5.8: Mean perceived *experienced* service quality scores for the five SERVQUAL service delivery dimensions of academic staff compared to students

	Academic staff		Students		Gap		t-statistic (Sattertwaite)
	Mean	Std	Mean	Std	Mean	Std	
Entire dataset: (academic staff and students)							
Tangibles	3.13	1.06	3.38	1.34	-0.25	1.29	-2.16 (-2.50)
Reliability	2.74	1.14	3.31	1.41	-0.57	1.37	-4.69 (-5.38)***
Responsiveness	3.47	1.09	3.60	1.40	-0.13	1.36	-1.05 (-1.23)
Assurance	3.46	1.17	3.69	1.37	-0.24	1.33	-1.99 (-2.21)*
Empathy	3.38	1.19	3.41	1.32	-0.03	1.30	-0.29 (-0.31)
Significance level: *** : 0.1% ; ** : 1%; * : 5% level of significance							

Table 5.9: Mean *expected* service quality scores for the five SERVQUAL service delivery dimensions for academic staff and students

	Academic staff		Students		Gap		t-statistic (Satterthwaite)
	Mean	Std	Mean	Std	Mean	Std	
Entire dataset: (academic staff and students)							
Tangibles	5.08	0.49	6.60	0.43	-1.52	0.44	-38.70 (-35.62)***
Reliability	6.45	0.64	6.59	0.40	-0.14	0.45	-3.62 (-2.70)***
Responsiveness	6.38	0.65	6.49	0.50	-0.12	0.53	-2.20 (-2.12)*
Assurance	6.46	0.68	6.55	0.51	-0.09	0.54	-1.80 (-1.49)
Empathy	6.44	0.62	6.59	0.41	-0.15	0.46	-3.68 (-2.83)***
Significance level: *** : 0.1% ; ** : 1%; * : 5% level of significance							

Deductions: Tables 5.6 – 5.9

Table 5.6 indicates that on all the quality service dimensions, perceived experience fell statistically significantly short of expectations if all respondents are jointly considered. The statistical significance associated with the null hypothesis on all dimensions was statistically highly significant and the alternative hypothesis of a difference between expectations and perceived experience was accepted in each case. This finding was answered to the research question 4 (chapter 1, paragraph 1.4.2)

The t-test results comparing the mean dimension gap scores for staff and students

in Table 5.7 indicate statistically significant (on the 0.1% level of significance) gap scores for staff and students on the tangibles and reliability dimensions. On the tangibles dimension, the gap between expectations and perceived experience for students were statistically greater than that of staff – staff expectations appear more realistic. On the reliability dimension the mean gap score for staff was statistically significantly greater than that of students.

Table 5.8 indicates that the mean perceived experience scores for staff on the reliability and the assurance dimensions were statistically significantly less in agreement than the students' perceived experience (mean perception scores of 2.74 and 3.31 for staff and students on the reliability dimension and 3.46 and 3.69 for staff and students on the assurance dimension).

Table 5.9 indicates that, except for the *assurance* dimension, expectations of staff and students differed significantly statistically on all other service quality dimensions. In Table 5.9 students' expectations were statistically significantly higher than staff expectations. (This result speaks to the third research question (chapter 1, paragraph 1.4.2)).

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In summary it can be concluded that a statistically significant discrepancy between expectations and perceived experience of service quality improvement was expressed by respondents. Furthermore, the gap response pattern of academic staff and students also differed statistically significantly from each other.

The discrepancy between expected and experienced service delivery was reported in similar studies in other countries as well, but the extent of the discrepancy was not of the same magnitude as that reported in the Ethiopian research. For example, in the UK Smith *et al.*, (2007:342) reported a mean gap score for staff of -1.3 (a service department perspective) while in Uganda Pansiri and Mmereki (2010:231) found an overall mean gap score of -2.80.Fernandez and Bedia (2005:14) an overall mean gap score of -0.24 in the hotel sector service, Zafiropoulos and Vrana (2008:39) found a mean gap score of -1.02 for students and -1.08 for staff in Greek higher

education. Wang, Wang and Zhao (2007:62) in the hotel customers found an overall mean gap score of -0.72, Brysland and Curry (2001:395) an overall mean gap score of -1.64 in the service sector and in a study in Mauritius Ramseook-Munhurrun *et al.*, (2009:551) reported negative mean gap scores as well, which all indicated unsatisfactory service quality.

The major contributor to differences between stakeholder perceptions and expectations of service quality is the *reliability* construct (with a mean reliability gap score of -3.71 for academic staff; -3.28 for students; and -3.34 for the entire dataset). This is consistent with the findings of a study by Brysland and Curry (2001:395) on the ability of the public service provider to deliver dependable and accurate service as promised. Reliability scored the lowest mean experienced construct score of 2.74 for academic staff and 3.31 for students. *Reliability* of services is an essential component of quality service delivery and the considerable mean gap scores for the *reliability* construct clearly signals that stakeholders perceive that they did not receive the services stated in the BPR documents (see paragraph 3.3).

The general complaint of academic staff on poor service delivery and dependability, unwillingness and the rude behaviour of administrative staff in Ethiopian public universities (as indicated in the interview sessions of the research), are echoed in these findings (chapter 5, paragraph 5.3.3). It will be indicated in the second paragraph of this chapter that the qualitative data affirm these findings.

A considerable gap between perceived experience and expected service delivery was also reported for the *tangibles* construct of service quality (mean *tangibility* gaps scores of -3.21; -1.94; and -3.22 were reported for the entire, academic and student dataset respectively). This service construct refers to the physical facilities and surroundings, equipment, utensils, etc. of the institution utilised in providing services, and includes the appearance of the staff. The finding implies that the *tangibles* of the institution do not meet stakeholder expectations. Smith *et al.* (2007:343) come to the

same conclusion. It is interesting to note that the third largest gap score for the three groups was *empathy*, with mean gap scores of -3.16; -3.07; and -3.18 for the entire, the academic staff and the students respectively. This illustrates inadequate willingness on the part of the university staff to provide individualised care and attention to stakeholders.

The negative values of the overall mean gap scores (as set out in Tables 5.6-5.9 above) for the constructs of *tangibles, reliability, responsiveness, assurance* and *empathy* all indicate that service delivery improvement initiatives fall short of expectations. The negative gaps scores indicate that respondents' expectations are higher than what they perceive to experience when the visual appeal of physical facilities and appearance of staff are considered; that they expect that the quality of services will instil more confidence in the institution; that they expect individualized care and attention when services are provided; and that they expect the range of services available to them to be better communicated. The above discussion of the findings answer to research question 1 (chapter 1, paragraph 1.4.2)

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Tables 5.6, 5.7 and 5.9 are a clear indication that students and academic staff differ in their expectations regarding quality service delivery. Academic staff indicated that they expect *assurance* of services, followed by *empathy* in service delivery, *reliability* of services, *responsiveness* to service requests and *tangibles* in that order, as important elements of service delivery. Students expect, in ranking order, *tangibles, reliability, empathy, assurance* and *responsiveness as* essential elements in quality service delivery (Tables 5.6-5.9). Although research by Parasuraman *et al.* (1991:431) also report differences between staff and students, Parasuraman's ratings do not seem to agree with the ratings found in the research currently under discussion. But both studies do indicate that the expectations of staff and students differ.

A more detailed breakdown of perceptions of poor service quality (gap mean scores) and the quality of expected and experienced service is gleaned from the mean

agreement rating scores calculated for each questionnaire statement and presented in Tables 5.10 to 5.12 of Appendix B. Interested readers can thus obtain a more detailed breakdown of the data in Appendix B.

5.2.2.4 Importance-Performance Analysis (IPA) results

As discussed in chapter 2, paragraph 2.9.2 and more comprehensively in chapter 4, paragraph 4.10, an IPA analysis was also conducted on the 22 SERVQUAL service attributes. In the IPA analyses the 22 attributes are labelled as "P1, "P2", up to "P22". The IPA technique was used to identify areas critical to the improvement of service delivery at Ethiopian higher education institutions.

According to the IPA methodology, indicated in chapter 4, paragraph 4.10, mean importance and mean performance ratings were calculated for each of the 22 SERVQUAL service attributes probed in the SERVQUAL questionnaire. Tables 5.10 – 5.12 present the importance and performance mean ratings per service attribute (Pi) and overall importance and performance ratings.

The overall mean importance and mean performance rating values of the 22 attributes and these overall mean ratings (regarded as x-y coordinates in a two-dimensional Euclidean space) determined the origin of the IPA grid system of the IPA analysis as discussed in paragraph 4.10 of chapter 4. The 22 paired importance-performance service attribute mean ratings were mapped to the IPA grid system (tables 5.10 to 5.12 supplied the coordinates for the mapping). Figures 5.1 to 5.3 depict the importance-performance balance of the 22 service attributes for the entire sample; the academic staff component of the sample; and the student component of the sample respectively. (Please note that the origin of each grid system corresponds to the {overall mean performance; overall mean importance} two-dimensional coordinates of the two-dimensional Euclidean space).

Once the IPA grid system was finalised, the grid was interpreted to identify critical

service improvement initiatives according to the quadrant (paragraph 4.10) in which certain service attributes fell. The quadrants are numbered from "A" to "D". In the schematic grid system, quadrant A indicates the most critical service attributes, followed by quadrant C.

qA	qB
qC	qD

Quadrant A identifies service attributes perceived to be important, but underperforming and quadrant C identifies service attributes perceived not to be that important but underperforming as well. Quadrant B identifies service attributes that are perceived to be important and which performs well and quadrant D identifies service attributes that perform well but are less important.

Table 5.10: Perceived performance, importance and gap scores of individual IPA items for the combined academic staff and student data sets

Performance rating (P)			Importance rating (I)			Gap score (P-I)	
Service attribute	Mean	Std. Deviation	Service attribute	Mean	Std. Deviation	Mean	Std. Deviation
P1	3.11	1.70	I1	6.72	0.60	-3.61	1.10
P2	3.46	1.94	I2	6.56	0.73	-3.10	1.21
P3	4.00	1.77	I3	6.56	0.76	-2.56	1.01
P4	2.80	1.70	I4	6.69	0.62	-3.89	1.08
P5	3.01	1.78	I5	6.73	0.59	-3.72	1.18
P6	3.29	1.73	I6	6.73	0.58	-3.43	1.16
P7	3.31	1.73	I7	6.68	0.65	-3.37	1.07
P8	3.23	1.82	I8	6.70	0.61	-3.47	1.21
P9	3.23	1.72	I9	6.67	0.70	-3.44	1.02
P10	3.60	1.72	I10	6.70	0.65	-3.10	1.07
P11	3.57	1.65	I11	6.74	0.58	-3.17	1.07
P12	3.71	1.65	I12	6.72	0.57	-3.01	1.09
P13	3.44	1.68	I13	6.57	0.72	-3.13	0.96
P14	3.54	1.67	I14	6.63	0.64	-3.08	1.03
P15	3.61	1.70	I15	6.70	0.60	-3.10	1.11
P16	3.65	1.69	I16	6.68	0.60	-3.03	1.09
P17	3.81	1.70	I17	6.72	0.60	-2.92	1.10
P18	3.61	1.65	I18	6.60	0.73	-2.99	0.93
P19	3.71	1.75	I19	6.64	0.66	-2.93	1.09
P20	3.15	1.63	I20	6.61	0.68	-3.46	0.95
P21	3.25	1.66	I21	6.66	0.62	-3.41	1.03
P22	3.33	1.60	I22	6.73	0.61	-3.39	1.00
overall Mean	3.43	1.71		6.67	0.64	-3.21	1.07
Valid N (listwise)	155		Valid N (listwise)				

Table 5.11: Perceived performance, importance and gap scores of individual IPA items for the academic staff data set

Performance rating (P)			Importance rating (I)			Gap score (P – I)	
Service attribute	Mean	Std. Deviation	Service attribute	Mean	Std. Deviation	Mean	Std. Deviation
P1	3.03	1.49	I1	6.47	0.82	-3.44	0.67
P2	3.19	1.33	I2	6.34	0.83	-3.15	0.5
P3	3.76	1.46	I3	6.21	0.99	-2.45	0.47
P4	2.65	1.55	I4	6.47	0.79	-3.82	0.76
P5	2.37	1.48	I5	6.64	0.70	-4.27	0.78
P6	2.90	1.44	I6	6.57	0.76	-3.67	0.68
P7	2.70	1.34	I7	6.44	0.92	-3.74	0.42
P8	2.68	1.41	I8	6.54	0.79	-3.86	0.62
P9	3.12	1.64	I9	6.40	0.91	-3.28	0.73
P10	3.14	1.43	I10	6.50	0.87	-3.36	0.56
P11	3.46	1.50	I11	6.60	0.71	-3.14	0.79
P12	3.83	1.42	I12	6.61	0.69	-2.78	0.73
P13	3.55	1.50	I13	6.41	0.78	-2.86	0.72
P14	3.41	1.54	I14	6.59	0.65	-3.18	0.89
P15	3.08	1.48	I15	6.63	0.62	-3.55	0.86
P16	3.51	1.42	I16	6.50	0.73	-2.99	0.69
P17	3.79	1.48	I17	6.57	0.73	-2.78	0.75
P18	3.66	1.41	I18	6.29	0.94	-2.63	0.47
P19	3.66	1.56	I19	6.45	0.82	-2.79	0.74
P20	3.33	1.50	I20	6.36	0.85	-3.03	0.65
P21	3.00	1.62	I21	6.54	0.79	-3.54	0.83
P22	3.38	1.42	I22	6.61	0.72	-3.23	0.7
overall Mean	3.38			6.49		-3.25	0.68
Valid N (listwise)	155		Valid N (listwise)				

Table 5.12:Perceived performance, importance and gap scores of individual IPA items for the student data set

Performance rating (P)			Importance rating (I)			Gap score (P – I)	
Service attribute	Mean	Std. Deviation	Service attribute	Mean	Std. Deviation	Mean	Std. Deviation
P1	3.13	1.74	I1	6.77	0.53	-3.64	1.21
P2	3.51	2.04	I2	6.61	0.70	-3.1	1.34
P3	4.05	1.82	I3	6.63	0.68	-2.58	1.14
P4	2.83	1.72	I4	6.74	0.57	-3.91	1.15
P5	3.14	1.81	I5	6.75	0.57	-3.61	1.24
P6	3.37	1.78	I6	6.76	0.53	-3.39	1.25
P7	3.44	1.77	I7	6.73	0.57	-3.29	1.2
P8	3.35	1.87	I8	6.74	0.55	-3.39	1.32
P9	3.25	1.73	I9	6.72	0.63	-3.47	1.1
P10	3.70	1.76	I10	6.74	0.58	-3.04	1.18
P11	3.59	1.68	I11	6.76	0.55	-3.17	1.13
P12	3.68	1.70	I12	6.74	0.54	-3.06	1.16
P13	3.42	1.71	I13	6.60	0.70	-3.18	1.01
P14	3.57	1.70	I14	6.64	0.64	-3.07	1.06
P15	3.72	1.73	I15	6.72	0.59	-3.00	1.14
P16	3.68	1.74	I16	6.72	0.56	-3.04	1.18
P17	3.81	1.74	I17	6.76	0.56	-2.95	1.18
P18	3.59	1.70	I18	6.66	0.66	-3.07	1.04
P19	3.72	1.79	I19	6.68	0.62	-2.96	1.17
P20	3.12	1.65	I20	6.66	0.62	-3.54	1.03
P21	3.31	1.66	I21	6.69	0.58	-3.38	1.08
P22	3.33	1.64	I22	6.75	0.58	-3.42	1.06
Overall Mean	3.47			6.71		-3.24	
Valid N (listwise)	155		Valid N (listwise)			--3.17	0.63

A comprehensive discussion of the findings of the perceived importance/performance mean-rating for each item is presented in Appendix B.
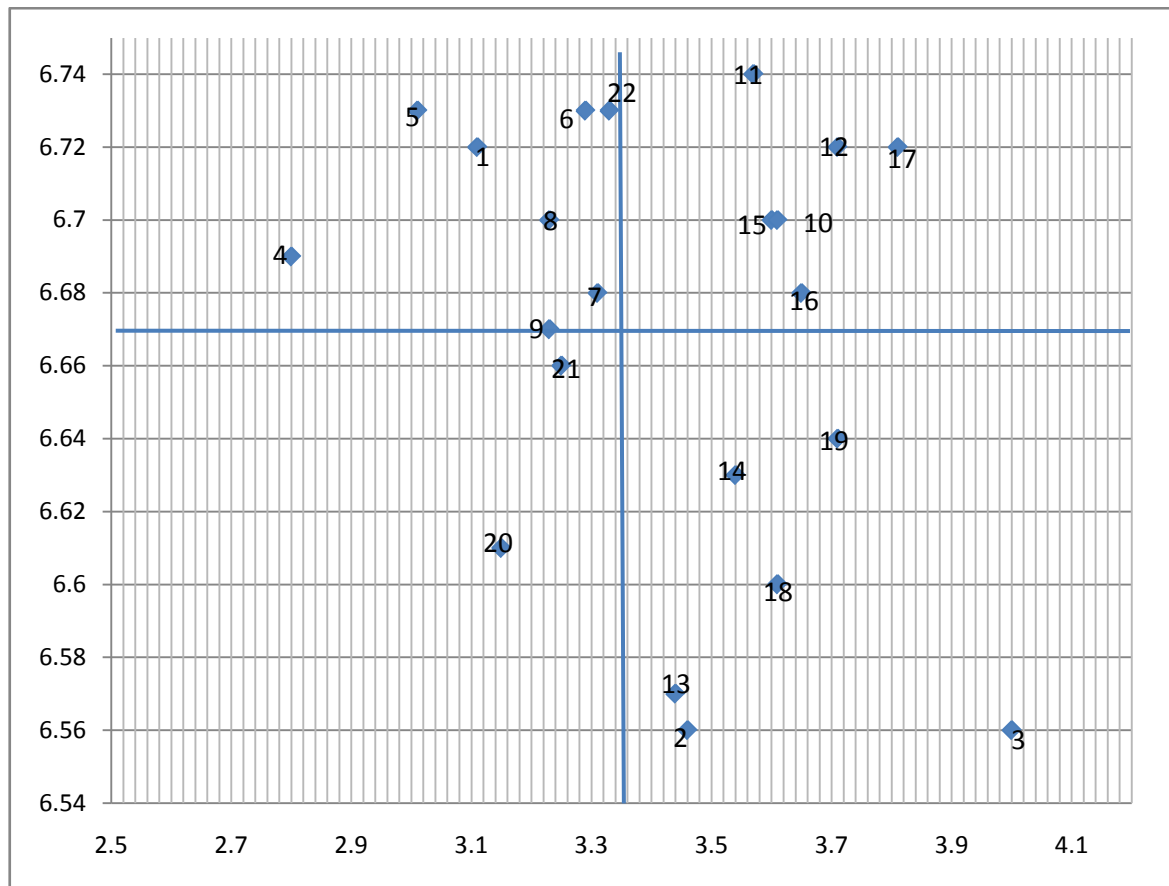
Deductions derived from figure 5.1

As indicated in the previous paragraph, service attributes perceived by the entire

respondent group (academic staff and students) to be critical in improving service quality, group together in quadrant A, namely, *attributes perceived to be important but underperforming.* According to figure 5.1 the attributes include question items no 1, 4, 5, 6,7,8,9 and 22 (see the questionnaire in Appendix E and F). These items prove that this quadrant contains a substantial number of items from the *reliability* dimension (q5, q6, q7, q8, q9) which is related to the ability of the service provider to deliver dependable and accurate service as promised. A number of items in this quadrant also resort under *tangibles* (q1, q4) and these critical items describe the physical facilities and visual appeal of the educational institutions' resources.

Furthermore attributes that group together in quadrant C, namely, *service attributes perceived as not very important but also underperforming* will impact on service quality although to a somewhat lesser extent and include service attributes of questionnaire items 20 and 21 which describe personal or individual attention received by stakeholders.

These above listed attributes identified by all the respondents indicate the areas of improvement initiates to improve service quality.

Figure 5.1: IPA analysis for combined (academic staff and student) dataset

Deductions from figure 5.2

In figure 5.2, service attributes perceived by academic staff to be critical in improving service quality group together in quadrant A, namely, *attributes perceived to be important but underperforming.* The attributes that are critical include item numbers 5, 6, 8, 10, 15, 21 and 22. Most of the items that fall into this quadrant contain items from the *reliability, empathy, responsiveness* and *assurance* dimensions, which are mostly related to the ability of the service provider to deliver dependable service on time and paying attention to stakeholders' needs and interests. Therefore, this quadrant is also labelled service delivery/process**.**

Furthermore the academic staff identified secondary attributes which fall into quadrant C, namely, *service attributes perceived as not that important but*

underperforming. These attributes will also impact on service quality although to a somewhat lesser extent and include service attributes of questionnaire items 1, 2, 4, 7, 9 and 20. These items relate to tangibles and individual attention and individual service (empathy).
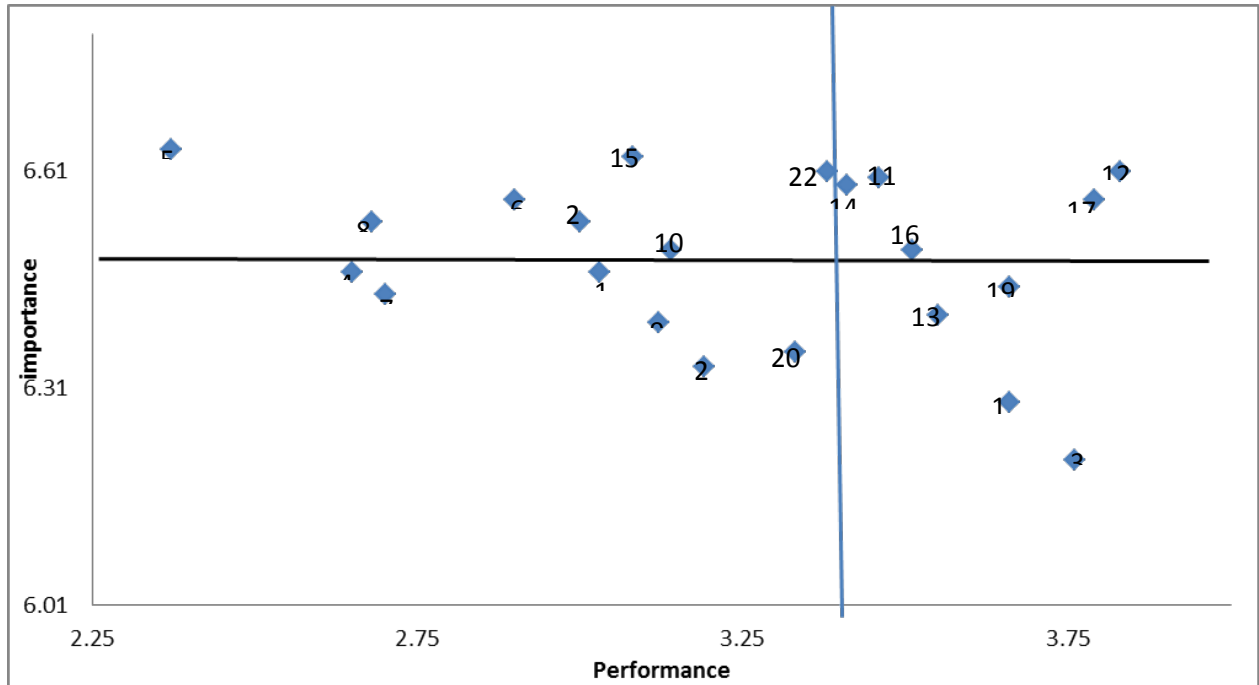
Figure 5.2: IPA analysis for academic staff dataset

Deductions from figure 5.3

As explained in the previous paragraph, service attributes perceived by students to be critical in improving service quality group together in quadrant A, namely, *attributes perceived to be important but underperforming.* The attributes that are critical are 1, 4, 5, 6, 7, 8, 9 and 22 and include items from the *reliability* and *tangibles* dimensions.

Furthermore, attributes that group together in quadrant C, *service attributes perceived as not very important but also underperforming,* will impact on service

quality although to a somewhat lesser extent and include service attributes of questionnaire items 13, 20 and 21 which describe personal attention received from the service deliverer, the *empathy* dimension. These attributes were identified by the students and indicate the areas of service quality improvement initiates.
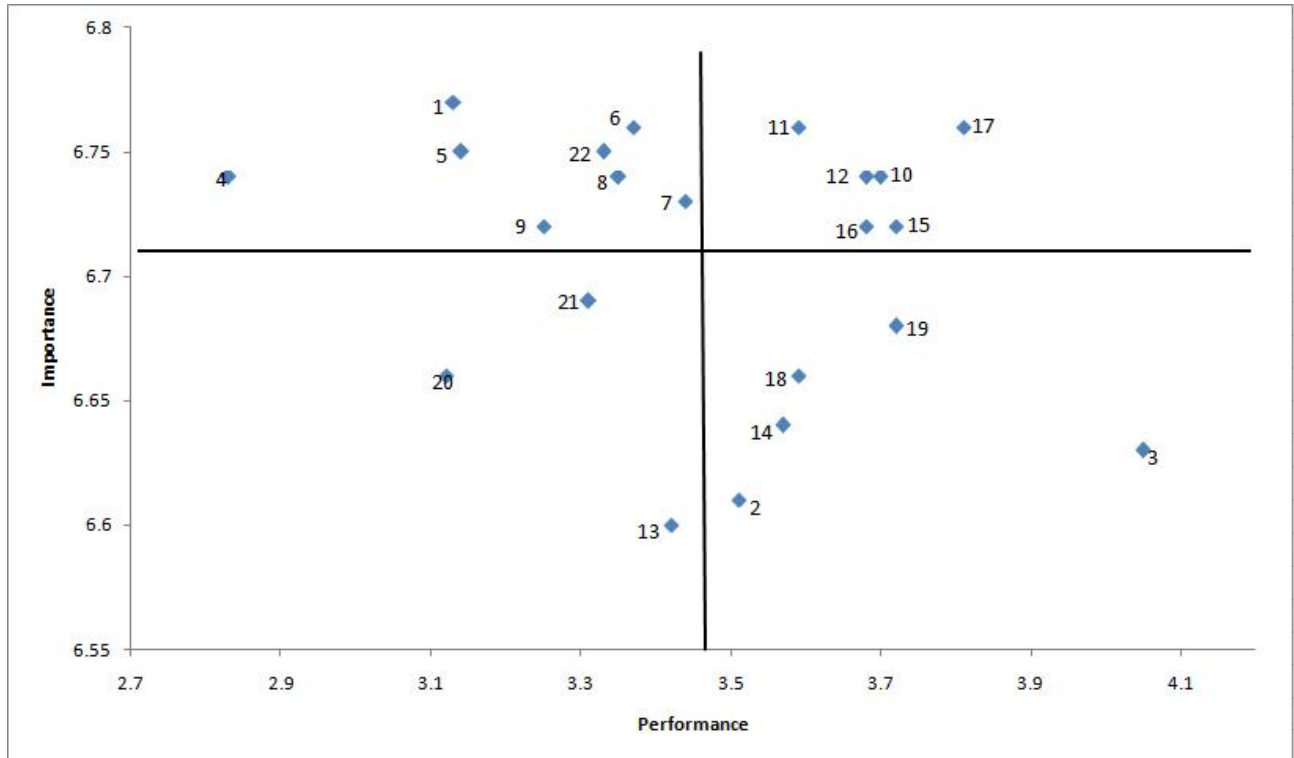
Figure 5.3: IPA analysis for student dataset

A more comprehensive discussion of deductions that can be derived from the IPA grids is presented in Appendix C

5.2.3 Summary of findings derived from the two analysis approaches followed in the quantitative study

The following table, table 5.13, summarises the most critical findings derived from the mean gap score analyses and IPA results.

Table 5.13: Summary of the most critical findings derived from the two analysis approaches followed in the study: mean gap score analyses and IPA results

Type of analysis & risk criteria	Datasets		
	All respondents	**Academic staff**	**Students**
Approach 1: <u>**Mean gap scores**</u> Service quality dimensions **with large mean gap scores** indicating poor quality service delivery	Ha : Mean dim. gap scores stats sign > 0	T tests: that identify statistically significant differences in mean dimension gap scores for students & staff	
	Largest mean gap scores: Reliability Tangibles Empathy	Tangibles Reliability	Tangibles Reliability
Approach 2: **IPA analysis** SERVQUAL items which fall into either quadrant A or C(the two critical dimensions in that order)	**Quadrant A** SQ attributes in QA: 1, 4, 5, 6, 7, 8, 9 • reliability (q5, q6, q7, q8, q9) • tangibles (q1, q4) **Quadrant C:** • empathy (q20, 21)	**Quadrant A** SQ attributes in QA: 5, 6, 8, 10, 15, 21 • reliability, (q5-q8) • *empathy (q21)* • *responsive (q10)* • *assurance (q15)* **Quadrant C:** • empathy (q20) • tangibles(q1,2, q4) • reliability (q7,q9)	**Quadrant A** SQ attributes in QA: 1, 4, 5, 6, 7, 8, 9, 22 • reliability (q5, q6, q7, q8, q9) • tangibles (q1, q4) • *empathy (q22)* **Quadrant C:** • empathy20, 21 • responsiveness (q13)

Deductions

The gap and IPA analyses findings for all respondents (second column of Table 5.13) correspond and indicate that *reliability, tangibles* and *empathy* present the service quality dimensions that require the most urgent attention and that service initiatives should focus on these areas since the mean dimension gaps for these dimensions were the largest and proved to be statistically significantly different from zero. (These findings answer to research question 2 stated in chapter 1, paragraph

1.4.2.)

The findings are echoed in columns 3 and 4 of Table 5.13 where staff/student differences were brought into consideration and areas of experience-expectation discrepancies for staff and students are displayed more prominently. The t-tests indicated that the mean gap dimension scores for *tangibles* and *reliability* differed for staff and students (*tangibles* expectations for students exceeded perceived experience by far, but staff seemed more realistic). The last row of table 5.13, column 3 indicates that, apart from staffs' apparently realistic *tangibles* expectations, the IPA analysis indicated that *empathy, responsiveness* and *assurance-expectations* were critical issues where academic staff was concerned. The IPA analysis also indicated *empathy* as a dimension where student experiences fall short of expectations to a great extent.

The identification of these expectation-experience discrepancy areas can be used to guide recommendations on quality service delivery improvements with a view to accommodating all stakeholders; perhaps shifting focus to accommodate staff and students in particular: *Reliability* initiatives should focus on the *reliability* of service and the timely delivery of the service promised. *Empathy* initiatives should focus on the way stakeholders are respected and treated and *tangibles* initiatives (though not as important as the previous two) should pay attention to the physical appearance of institutional assets, resources, the dress code and the physical appearance of staff.

The findings from the qualitative data and will be discussed in the following paragraphs.

5.3. FINDINGS DERIVED FROM THE QUALITATIVE DATA

This paragraph provides an analysis of the focus group interviews with academic staff in management positions, senior academic staff and student councils or representative committees in groups of eight to ten. Each interview focussed on their experience of service quality improvement initiatives at their respective universities

and both group interviews for the two groups were conducted separately at each university. Each focus group interview took between 1 to 1½ hours. All appointments with interviewees (academic staff and the student council) were honoured and all the focus group interviews were conducted in a small meeting hall at each university at the times convenient for both the participants and the researcher.

A simple descriptive narration was used to facilitate the analysis and interpretation of data which involves the transformation of 'field notes' to 'research notes'. In addition, the focus group responses were organised and grouped for analysis question-by-question. Responses that are organised using the interview questions can facilitate the interpretation of the data (Taylor-Powell & Renner, 2003:2).

5.3.1 Perceptions regarding the existence of a gap/discrepancy between stakeholder expectations and experiences

The quantitative data analysis revealed that there was a gap between what the stakeholders expected and what they were experiencing of the service quality improvement initiatives in Ethiopian public HEIs. With a view of collecting data pertaining to this central idea, the following specific question was posed to academic staff (since they are both service providers and service takers) and to the student council members: "The quantitative results of this study indicated that there is a discrepancy (or gap) between stakeholders' expectations and perceptions of the service quality delivery at your university. What is your opinion and experience in this regard?"

Among other aspects, the existence of such a discrepancy or gap between perceptions and expectations was acknowledged by the entire group. The academic staff offered the following reasons for the gap: high expectations from stakeholders, a shortage of resources, government's intention of expansion, newness of some of the universities, a lack of adequate training on BPR by service providers, a lack of adequate knowledge on the implementation of the BPR process, the disproportion

between service providers and service takers (small numbers of staff are expected to serve thousands of students and staff), lack of motivation by service providers, poor controlling systems, poor management and lack of good governance at the universities, inexperienced workers, non-empowered and task specific frontline employees who cannot operate outside their training and inadequate infrastructure.

The student representatives (council) responded to the same question by putting forward the following possible reasons: newness of the universities and concomitant insufficient physical facilities as construction is still underway, high expectations from the students' side (because of their experience in their hometowns and comparing their university to other good universities), non-value adding hierarchical structures and approval systems, unethical behaviour by some service providers, high staff turnover, inexperienced or incapable staff, unsatisfactory library collections and low commitment on the part of service providers.

The interviewees' position is in line with that of the HESO team (HESO, 2004:23). The HESO team explained the situation of service quality in Ethiopian PHEIs as follows: In higher education institutions weaknesses exist that will need to be addressed. Many staff members seem reluctant to take responsibility for and seek to avoid the real issues, fear taking risks and commonly seek excuses for failures. In some cases, there is also a lack of empowerment for those at lower levels, which can reinforce the sense of dependency and passivity. In addition, there is a lack of solidarity, especially amongst some support staff and as a consequence, while at almost all levels of the sector there is evidence of an absence of a sense of belonging or ownership for the expansion and reforms that are being attempted in Ethiopian higher education. On the other hand, learners are not considered as stakeholders and customer orientation and service delivery have not yet been properly understood or practised in Ethiopian HEIs. These problems are also identified by universities' own BPR teams (MU, 2008:14; HU, 2008:16). BPR was designed and guaranteed to change and solve these problems but they are still remaining after the BPR implementations.

5.3.2. Ranking service dimension based on the quality of service delivery

The focus group interviewees of both the academic staff group and student councils of the sampled universities were also asked to rank the service categories that were considered poor in service delivery improvement. The following question was used to initiate the discussion: "Which service categories do you experience as particularly poor at your university? *Tangibles, reliability, responsiveness, assurance* or *empathy*?" All of the interviewees from new universities ranked *tangibles* as their first choice, followed by *reliability* while those from the old universities placed *reliability* as their first choice and *empathy* as their second and *tangibles* as their last choices respectively. It is interesting to note that both academic staff and student representatives at both new and old universities were in accordance on the extent of poor service quality and service delivery.

5.3.3. Reasons for considering the reliability dimension as poor

The two interview groups were asked the following question based on the results of the quantitative data: "Both academic staff and students experienced and perceived the reliability dimension of service quality at their universities as very poor. Do you agree? What do you think the reasons are?" The interviewees unanimously agreed that PHEIs exhibited great weaknesses with respect to reliability that will need to be improved. The following are some of the reasons mentioned:

- Lack of commitment by service providers.
- Problem of understanding the BPR principles.
- Lack of knowledge on the implementation of BPR.
- Departmental thinking instead of university wide thinking.
- Failure to appoint appropriate people in the right positions.
- Bureaucratic system (most units or departments follow the old ways of doing things rather than implementing BPR principles).
- Shortage of support staff.

- Resistance to change in some support staff (some staff members who have been in their position for a long period of time are not willing to change).

- Lack of sufficient training to handle the tasks effectively and efficiently.

- Absence of training of new staff or lack of on-the-job orientation.

- No systematic and strong control mechanisms in place.

- Lack of motivation amongst service providers.

- Unrealistically high expectations of the stakeholders.

- Initial job orientation and/or training of newly employed staff are not provided. Poor service is then provided to customers because newly appointed staff only learn assigned tasks while servicing customers.

- No systematic monitoring of service quality and no stringent control mechanisms in place.

- The staff believe that a task should only be carried out when the customers request them - consequently nothing is/was done when the customer is not there.

- Disrespect for customers and their work.

- Rigid rules and regulations.

- Absence of necessary empathy of service providers.

- No motivating incentives for service staff.

One of the academic staff participants commented as follows:

> *Some of the staff are demoralised because of losing their previous position. One of the BPR principles is to capacitate workers for the position by giving training. Without doing this some workers are lowered from their previous position and assigned to a lower status. As a result they become demoralised and unwilling to provide services to customers as promised.*

This finding is in line with what was found by the Mekelle University BPR team (MU, 2008:15) who agrees that service providers lack commitment, that there is poor teamwork, redundant work and a lack of good governance.

Student interviewees pointed out that service providers were incapable and lacked

commitment. They also did not come to work on time and were not dependable, according to the student representatives.

5.3.4. Perceptions of the *reliability* dimension

The interviewees were also asked whether service providers at their universities kept their promises, prompted by the following question: "The quantitative data results of this study indicated that academic staff in particular perceived the 'keeping promises to do something by a particular time' aspect of *reliability* as unsatisfactory. In your opinion why would that be?"

The academic staff group participants strongly agreed that it was common at their university not to fulfil what was promised. One of the interviewees, for example, mentioned his experience in this aspect:

> *If you ask them to buy something for your office, they promise to supply you within one or two days but sometimes you can't even get it at the end of the year. Such problems are mostly observed in the corporate finance and procurement and purchasing department.*

Most participants agreed with their colleague. The problem is very common at their universities especially in the corporate finance and procurement and purchasing department. One of the academic staff group participants also indicated the problems associated with the finance department by saying the following:

> *A person disgruntled with somebody or something cannot render an equitable service. For example, one day, we went to the finance department to collect our pay but we had to wait for the paying teller for several hours. Later he came but he told us that we had to come back in the afternoon because the morning time was over. We went there in the morrow (next day) but again he told us that he was unable to pay us for he had to go to the bank and informed us to come later. We came back to our office, being entirely dissatisfied for the pay hadn't been made. We were very disappointed with the paying teller's behaviour and cancelled the day's lecture/class. This clearly demonstrates that the staff member is not responsibly discharging the duties entrusted to him. He is not a conscientious worker.*

It is evident that it is commonly experienced that promises are not honoured which is in agreement with different universities' BPR teams' findings (MU, 2008:16; HU, 2008:18). The BPR teams agree that the universities have faced problems in supporting the teaching/learning process and that almost all the processes are long and consume many people's time and resources and as a result, it is difficult to provide what was promised. This is mainly because of a lack of centralised data sharing, poor automation/data base administration, misallocation of property and budget and corruption. According to the Mekelle University BPR team (MU, 2008:6), this aspect is one of the BPR aspects on the "TO BE" Process where change is needed but where the situation has apparently remained unchanged.

The following reasons were also proffered by both the academic staff and student council group interviewees for the common occurrence of broken promises:

- The staff only attend to work when the relevant stakeholder is there to remind them of it.
- The involvement of a third party that slows the process down.
- The workload of service providers.
- Limited resources.
- Lack of good governance.
- Rigidity of rules and regulations.
- Lack of empathy by service providers.
- Lack of incentives.

Most of the problems mentioned in the preceding discussion are due to rules in the legislation, policy documents and government guidelines and/or rules that are informally accepted by the university staff. According to the Mekelle University BPR team (MU, 2008:14); some of these influential formal and informal rules affect the quality improvement of service delivery in the ways listed below:

- Institutions should expand first and later they will achieve quality.

- Disciplinary measures should be taken after seriously studying the case for a long time.

- Salary and incentives will be calculated and awarded according to the rules of the government.

- Expansion of higher education is the primary target.

- Payments will be approved and dealt with by a central authority.

- The academic staff will be involved in multiple university assignments.

- Every student has to process his/her registration in person.

- The registrar was not capable of producing clean records.

- Some departments have resisted recruiting new staff.

- Most disciplinary mistakes committed so far are hidden and not much effort has been taken to investigate them.

The following paragraph will now discuss the impact if promises are not kept.

5.3.5 Impact of not keeping promises

The respondents were asked the following question: "Do you perceive that improvement regarding the reliability of service delivery ('promises made during service delivery are promises kept') will have a huge impact on stakeholders' experience of their institutions' service delivery?" The group agreed unanimously that if the promises made were not kept or fulfilled, it had a negative impact. Some of the negative impacts on the stakeholder satisfaction are stated as follows:

- Damage to the image and reputation of the institution.
- Loss of confidence and trust.
- Loss of status.
- Loss of desire to work.
- No attainment of the expected change.
- Lack of trust by stakeholders in the service of the university.
- Dissatisfaction of customers with the university service.

- Negative communication by stakeholders about the university.

- The institutions become a centre of complaints.

The magnitude of the impact if promises are not kept, was explained by one of the student participants as follows:

> *A punitive disciplinary measure which suspends a certain student from his study (college) for a year is effected. The student applies for a petition. The response to the petition is not given as promised or is delayed for too long. The student is not allowed to attend classes, neither does he go home but suffers for several weeks under a dilemma. Even if he gets the chance to continue his study, he misses several tests and assignments.*

This point clearly indicates the impact on stakeholders' perceptions of the service quality of the university.

5.3.6 Stakeholder perceptions regarding the *tangibles* dimension

The findings of the quantitative data analysis reveal that the tangibles dimensions of service quality are considered poor. Based on this finding, the interviewees were asked to give their opinion in this regard and if they agreed that a service delivery improvement initiative was poor, they were asked for a justification of their views.

All the participants from the new universities agreed on and acknowledged the severity of the problem, whereas those from the old universities doubted its severity. Regardless of the magnitude, in both cases they mentioned the following points as the reasons for the poor standard of the tangibles dimension:

- At all the universities, construction is under way. Thus, you may find stones, mud and dust everywhere. Furthermore, the roads are not traversable, the offices are not well furnished and there is no lounge or recreation centre (at the new universities).

- At most of the newly launched universities, there is no or very limited internet connectivity and this prevents staff and students from conducting research and

getting up-to-date information and materials.

- A limited central government budget to universities hinders maintenance to buildings *inter alia.*

The materials used in the student cafeteria are of a poor quality. To show the extent of low quality of the materials used in the cafeteria, one of the student interviewees responded as follows:

> *There is a saying that 'A plastic drinking glass is for a mad person and for a child.' This is to show that service providers treated the students as mad and [as] children because they give us tea in old plastic glasses.*

Another student participant told us what his friend had declared after graduation: "*Congratulations! I am relieved of mud"* to show the extent of the disruption caused by construction at the new universities.

The other reason mentioned by the participants in relation to the problems associated with tangibles is that the academic and supportive staff are not willing to adhere to the dress code pertaining to academic staff. Academic staff, cafeteria workers, library and laboratory workers in Ethiopian higher education institutions, are all expected to wear gowns, provided by their universities. One of the academic staff respondents stated the following with regard to this point:

> *You can't differentiate the teachers from students by their dress or hair style. Most of the newly employed young academic staff go to their classes to lecture dressed like American cowboys.*

Limited allocation of budgets from the central government, lack of experience and knowledge on the part of the service providers and newness of the university are also mentioned as reasons for the unsatisfactory state of affairs.

5.3.7 Impact of poor appearance of staff (aspect of the *tangibles* component)

This discussion was initiated by asking the following question: "The quantitative data

results, on the other hand, indicated that the students of the sampled university found that the "appearance of staff" aspect of the tangible component of service delivery was poor. Are they, in your opinion, justified in making such a statement?" The respondents had different views regarding this question. Student respondent groups and academic staff from the new universities agreed with the statement pertaining to the poor appearance of the staff at their universities. However, academic staff from the old universities did not consider this a problem at their university. Those who acknowledged the problem, elaborated on the impact of the problems as follows:

- If the staff's dress is visually appealing, it attracts the stakeholders' attention and leads to greater satisfaction.
- The clothing worn by service providers is very poor as student council respondents of one university reported and the impact of their shoddy clothes was explained by sharing what he had experienced in his university's dining hall.

> *Beauty (aesthetic value) helps one to remain/stay there for a long time. Beauty (neatness) also has an appealing virtue and acts as an appetizer. A women ladling out 'wot' (soup) was sweating much due to the heat in the dining hall and the workload there. She was wiping her face and hand now and then while ladling the 'wot'. Looking at the sweat coming out of her body and the dining gown she was wearing, I left the hall without being served.*

The other student respondent reinforced his friend's idea regarding how badly the cafeteria workers dressed at his university by remarking:

> *The dining gowns worn by some cafeteria workers have entirely changed their original colour and there is even a picture looking like the map of Africa printed on the gowns.*

This implies that the poor appearance of the staff has a negative impact on the perceptions of stakeholders of the service delivery of the university.

5.3.8 Perceptions of the extent of the visual appeal of the service facilities

The focus group participants were also asked to indicate their expectations of the extent of the visual appeal of the service facilities. This discussion was initiated by asking the following question: "The research indicated that the students experience the visual appeal of the institutions as poor, as opposed to their expectations. How visually appealing should the service facilities be?" This issue led to a heated debate among the participants. One respondent contended that:

> *We can't indicate the extent of the visual appeal of the university because it depends on the amount of budget allocated to the university. We can't decide the extent without having the required amount of money in our hands. The university's budget was allocated by the central government and we can't put a standard with the money that we don't have or know how much it was.*

On the other hand, in the other focus group it was declared that: "*Even if we don't have a huge amount of budget we can put the standard which the universities strive to attain.*"

Those who emphasise the importance of the visual appeal of the service facilities put the following points forward as a minimum standard:

- The university should have a fence at least, which differentiates it from its environment, as some universities have no fences.
- Some universities have no logo on their fence for identification. Therefore, there should be a logo, which shows the name of the university at the gate.
- There should be a well-constructed road.
- The campus should be neat.
- There should be new computers, tables and chairs, well-furnished offices, and internet connectivity.
- At most of the new universities there are no trees; therefore, they should try to plant some local trees for shade and to make the university visually attractive at the very least.

- The materials used in service delivery should be neat and visually appealing.

5.3.9 Perceptions of whether improvement regarding the *tangibles* of service delivery has impacted on stakeholders' perceptions

The following question that initiated a discussion was: "In your opinion, do you believe that improvement of the tangibles of service delivery ('the visual appeal – how service staff dress and how visually appealing facilities are') will have a significant impact on stakeholders' experience of their institutions' service delivery?" Both groups of respondents agreed with the impact these aspects have on the perceptions of stakeholders.

One of the academic staff respondents remarked: "*Beauty attracts attention and making improvement in the tangibles has aesthetic values which motivate staff to work hard and students to learn.*"

According to another participant from the staff group:

> *If the staff dress properly according to the demands [dictates] of the profession, it satisfies stakeholders when they receive services from them. On top of that, if academic staff dress professionally, students give [pay] due respect to their instructors.*

5.3.10 General comments on the improvement of service quality

Finally, both groups of focus group participants were asked what changes they would make in order to improve the service quality of their universities, if full authority and resources were given to them. After laughing for a while, all the participants made the following proposals:

- The *reliability* dimension of service quality should be improved first.
- The attitudes of the service providers should be changed first in terms of

considering themselves as civil servants, employed to serve the stakeholders and to act as servants for those whom they served.

- Human and material resources should be provided according to the standards set for universities.

- Service providers should be capacitated and empowered.

- Necessities such as internet access, transport and computers ought to be provided.

- Staff should be motivated to work towards a common goal. The person who mentioned this point shared with us what she had read in the newspaper: *There was a janitor working in a satellite launching station. While performing his regular duty, a person asked, "What are you doing here?" He responded, "I am cleaning the rooms to launch a satellite."* All staff should have this feeling in order to bring the expected service quality improvement initiatives.

- Proper implementation of BPR.

- Adequate training of all staff on how to provide a service to their stakeholders.

- Restructuring the finance and procurement and purchasing departments.

- Providing incentives based on outstanding performance.

- Improving policies and regulations.

- Giving full autonomy to the universities.

- Strengthening decentralisation.

- Improving the tangibles dimensions of service quality.

- Appointing staff according to their training, experience and merit.

- Open discussions with all staff on how to improve the service quality of the university and collecting information from them and planning together.

- Appointing reform officers.

- Creating strong controlling mechanisms and structures.

In general, the focus group interviews led to the identification of a number of important findings from the focus group interviews which supplement the findings derived from the quantitative data. These findings all address the research questions formulated in chapter 1, paragraph 1.4.

5.4 CONCLUSION

The chapter set out to determine the perceptions of stakeholders regarding service quality improvement initiatives in Ethiopian PHEIs. To achieve this, an empirical study, utilising a mixed method design, was undertaken. As indicated in chapter four, paragraph 4.5, a sequential and explanatory mixed methods strategy was followed (Creswell 2009:206). This entailed undertaking quantitative data collection and analysis during the first phase, followed by qualitative data collection through focus group interviews and analysis during the second phase. The quantitative aspect of the research was conducted using a modified SERVQUAL scale to assess expectations and experiences of service quality. The data collected was analysed with a gap-analysis and an IPA analysis approach. Based on the quantitative findings, different questions were developed and focus group interviews were conducted to supplement the quantitative findings to promote a better understanding of the quantitative data.

The findings reveal that the research questions formulated in chapter one have been answered and the aims met. The findings provided interesting insights into the ways that stakeholders have experienced service quality improvements in Ethiopian PHEIs. In addition, the study identified specific areas where gaps existed between the expected and experienced service quality, dimensions which are considered as poor, dimensions deemed the most important, areas that are in need of improvement. The *reliability* and *tangibles* constructs of quality services were perceived as the two areas where perceived experiences fell short of expectations (gap analysis). These two aspects of service delivery were also regarded as the most crucial (IPA analysis) for service quality improvement initiatives.

The study furthermore validated the SEVQUAL scale for the Ethiopian environment in the sense that findings in general agree with independent studies from around the world.

In general, this chapter has presented, analysed and discussed the empirical data and chapter six will present the summary of findings of the thesis, provide conclusions and recommendations and suggest areas for further research in the areas of service quality improvement.

CHAPTER SIX

SUMMARY OF THE FINDINGS, DISCUSSION OF CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter briefly outlines the research problems, the research questions, aims and objectives of the research and summarises the findings from chapter five. Based on the analysis and interview findings, the conclusions will then be presented. This chapter ends with recommendations and suggestions for further research, and comments on the limitations of the study.

In order to determine the implications of stakeholders' perceptions regarding service quality improvement initiatives, the following main research questions guided the investigation: What are the stakeholder perceptions of service quality improvement initiatives in Ethiopian PHEIs? In attempting to answer the main question of the study, the following specific sub-questions were stated and addressed:

- How do internal stakeholders (students and academic staff) perceive the service quality improvement initiatives of the PHEIs?
- Which areas and priorities do stakeholders consider crucial in improving the service quality in public higher education institutions?
- Are there any differences among the internal stakeholders of PHEIs regarding their expectations and perceptions of service quality improvement initiatives? If so, why are there such differences or if not, why are there no differences?
- Are there any gaps between the expectations and perceptions of aspects or dimensions of service quality improvement initiatives?
- Is the SERVQUAL scale an appropriate and reliable measure of service quality in Ethiopian public higher education institutions?

The aim of the study (as indicated in chapter 1, paragraph 1.5) was to explore the implications of stakeholder perceptions on the service quality improvement initiatives of public higher education institutions in Ethiopia. Moreover, the study aims to inform the management of higher education institutions on the implications of stakeholders' perceptions on service quality improvement. This can be accomplished by identifying the gaps between stakeholders' expectations and perceptions regarding service quality. In the light of the above encompassing aim, the objectives of the study were to:

- Gauge the perceptions held by different stakeholders of the service quality improvement initiatives in Ethiopian PHEIs.
- Determine the gap between the expectations and perceptions of service quality improvement initiatives, if any.
- Investigate whether there are any differences in perception among the different stakeholders of PHEIs.
- Identify the implications of stakeholders' perceptions.
- Suggest priority areas for improvement and changes to institutional policies for the successful implementation of the service quality improvement initiatives.

To answer the research questions posed and to achieve the above-mentioned aims, different methods were employed. Firstly, an in-depth literature review was conducted (see chapters two and three) to define and describe the concepts and documented issues linked to service quality, perceptions of stakeholders and service quality improvement initiatives in HEIs and in Ethiopian PHEIs. This was followed by an empirical survey study to address the listed research questions and aims. The methodological paragraph discussed the necessary data collection techniques and appropriate statistical procedures to carry out a value added analysis (see chapter 4,paragraph4.10). The data collected for the study included academic staff and student responses. The analysis strategy was executed using the statistical software packages, SPSS version 15 (Statistical Software Package for Social Sciences) and SAS version 9.2 (Statistical Analysis System). Once factor analyses had been

carried out to verify the underlying structure of the survey data and the reliability of perception/expectation measures of service quality improvement had been verified through scale reliability testing, two statistical approaches were followed to determine the expectations and perceived experience of service quality improvement of respondents. The gap or discrepancy between expectations and experience was calculated. This route was followed to identify critical aspects (or dimensions) of service quality improvement that required immediate attention (seeparagraph4.10). A mean gap deviation-from-zero t-test hypothesis approach and an IPA approach were followed. The demographic properties of the sample were also investigated.

6.2. SUMMARY OF THE FINDINGS

6.2.1 Summary of the quantitative research findings

The following paragraph provides a summary of the findings of the statistical analyses. The biographical data indicated that the gender composition of the sampled academic staff and student data set consisted of more male than female representatives. This is because there are only a few female respondents (female academic staff and students) in Ethiopian public higher education institutions (see chapter 3, Table 3.1 and chapter 5, Table 5.2). More than halfof the student respondents were between 22 and 24 years of age (see paragraph 5.2.2.2 in chapter 5). With regard to the academic status, the majority of the academic staff, roughly 70%, were lecturers, followed by 17.4% graduate assistants and 2.6% assistant professors. Similarly, the majority of the sampled academic staff (65.8%) had less than five years' experience. This finding is consistent with prior Ethiopian studies (see Taye, 2008:xxi).

The analysis of the survey perceptions/expectations data included an identification of the underlying data structure by means of factor analysis. In this regard the issue of the number of factors that underlies the structure links closely with the adequacy measure for the data to be analysed by means of factor analysis and measures of

best fit. Six factor analysis models (models extracting 1 to 6 factors respectively) were compared based on the measures of MSA criteria, the Kaiser-Meyer-Olkin criterion, Bartlett's Chi-square test of spherity, the Akaike criterion, Schwarz's Bayesian criterion and the Tucker-Lewis reliability coefficient. These proved to be satisfactory for all analyses and suggested the four- or five-factor model as the most appropriate (the greatest reduction in criteria magnitude was reported for these two models; see chapter 5, paragraph 5.2.2.3.1). The choice of the four- factor model was based on the added criterion of interpretability. For the four-factor model, factor 1 described the SERVQUAL dimensions (Parasuraman *et al.*, 1988:20) of *responsiveness* and *assurance;* factor 2 the SERVQUAL dimension of *reliability;* factor 3 the SERVQUAL dimension of *empathy* and factor 4 the dimension of *tangibles* (except for question number 3). The fact that two SERVQUAL dimensions, namely *responsiveness* and *assurance,* loaded onto factor 1, agreed to a great extent with the earlier findings of Parasuraman *et al.* (1988:20) that the dimensions of the SERVQUAL scale are interrelated as used for this Ethiopian study. The findings are furthermore in line with Mostafa (2007:93), Fernandez *et al.* (2005:17), Ramseook-Munhurrun *et al.* 2009:548), Wright & O'Neill (2002:30) and Miao *et al.* (2007:62) who all suggest that the dimensions can be reduced to three or four dimensions rather than five.

The Cronbach alpha values reported for the service quality improvement dimensions identified in the factor analysis verified internal consistency reliability for the perceived and expected service quality improvement constructsof *tangibles*, *reliability, responsiveness, assurance* and *empathy*. The internal consistency reliability for perceived service quality improvement varied between 0.71 and 0.85, and between 0.61 and 0.67 for the expected service quality construct (see Table 5.5, paragraph (2) under paragraph 5.2.2.3.

The measures of the discrepancy between perceptions of experienced and expected service quality on the five SERVQUAL service dimensions were furthermore calculated (the "gap scores"). These gap scores were used to compare academic

staff and students' experienced-expected service quality shortfall on the five service quality aspects at their institutions. The results indicated that the experience of all dimensions of service quality improvement fell short of expectations (negative gap scores) as assessed by both academic staff and students. The overall mean gap score suggests a considerable discrepancy between the expected and experienced service quality at institutions. Results from the t-tests on mean gap scores to evaluate the deviation from zero (paragraph (3) under paragraph 5.2.2.3, in chapter 5) indicated that the service quality dimensions of *tangibles* and *reliability* deviated significantly from zero (level of statistical significance of 0.1%).

In a second analysis approach, IPA analyses were used to identify service quality improvement dimensions indicated as critical in improving service quality. In this approach the balance between importance and performance mean rating perceptions on the 22 SERVQUAL service quality attributes, grouped the attributes into four quadrants. The quadrants of "high importance/underperformance" and to a lesser degree "not that important/underperformance" identified service quality characteristics which require service improvement initiatives (chapter 5, figures 5.1 to 5.3).

The findings of the t-tests and IPA analyses corresponded to a large extent (chapter 5, paragraph 5.2.3, Table 5.13) and indicated that *reliability, tangibles* and *empathy* presented themselves as the service quality improvement dimensions that required the most urgent attention. Service quality improvement initiatives should focus on these areas in the first instance (paragraph 5.2.3.5, Table 5.13). The two approaches also indicated that staff and students' perceptions-expectations gap/discrepancy on *reliability* and *tangibles* differed significantly statistically*: tangibles* expectations for students exceeded experience by far while staff seemed more realistic. IPA results furthermore revealed that *empathy, responsiveness* and *assurance expectations* were critical issues where academic staff was concerned. The same trend regarding *empathy* was also deduced for students from the IPA analysis.

A possible explanation for these perception differences among staff and students could be the fact that at Ethiopian PHEIs students are living on-campus and they have more frequent use of university facilities than academic staff. Due to their circumstances, they expect more and place a higher premium on the *tangibles* component of service quality. On the other hand, the academic staff who use the administrative and managerial elements of university services might expect more respect and dependable, accurate services (aspect of reliability), than students do.

The essence of the findings thus indicated critical areas to prioritise for service quality improvement initiatives (in order of priority):

- Reliability and tangibles
- Empathy
- Responsiveness and assurance (staff)

It was argued in the concluding paragraph of chapter five that recommendations for quality service delivery improvements should be aimed first and foremost at these dimensions (and that cognisance should be taken of what these dimensions describe when suggesting improvements).

The critical findings that emerged from the quantitative research describe the current status of perceptions of the quality of service at Ethiopian PHEIs. The quantitative analyses proved that service quality perceptions are low. The reasons that service quality is thus perceived are offered in the findings of the interview responses of sampled respondents, which represented the qualitative component of the research (chapter 5, paragraph 5.3). The most pertinent findings of the focus group interviews are discussed in the next paragraph.

6.2.2 Summary of the qualitative research findings

6.2.2.1 Interview results offering reasons for poor service quality

The focus group interviews offer probable explanations for most of the findings of the quantitative research (the questionnaire data) regarding the proven discrepancy between stakeholders' perceptions and expectations regarding service quality. The following institutionally and government-based reasons were offered by interview participants as explanations (see also chapter 5, paragraphs 5.3.3 and 5.3.4):

- Unrealistically high expectations of the stakeholders.
- Shortage of resources.
- The government's apparent slackness in attending to expansion at academic institutions.
- Growing pains experienced at recently established universities.
- Lack of adequate training regarding the BPR by service providers.
- Lack of adequate knowledge regarding the implementation of the BPR process.
- The proportional imbalance between service providers and receivers of services (little support staff are expected to serve thousands of students and staff).
- The lack of motivation on the part of service providers to perform optimally.
- Poor monitoring systems at universities regarding service quality delivery.
- Poor management and poor governance at universities.
- Lack of experienced staff.
- Frontline administrative staff that are not empowered and assigned specific tasks.
- Ineffective service infrastructure.
- Hierarchical structures and approval systems that do not add value to the institution.
- Ethical problems pertaining to certain service providers.
- High rate of staff turnover.

- Construction at recently established universities hindering the provision of sufficient facilities.

- Maintenance problems: Poor state of the dormitories, classes, bathrooms, recreation areas and sports fields.

- Limited internet connectivity.

- Inadequately stocked libraries.

As indicated in the summary of quantitative findings in paragraph 6.2.1, a critical area in the difference between stakeholder perceptions and expectations of service quality improvement was identified as the *reliability* dimension (reliability of services) (see also chapter 5, paragraph 5.3.3). Possible explanations offered by interviewees in this regard included:

- Lack of commitment by service providers.

- Problems with understanding the BPR principles.

- Lack of knowledge regarding the implementation of the BPR.

- Departmental thinking.

- Unsuitable appointments of people in key positions.

- Bureaucratic systems (most units or departments followed conventional administrative procedures rather than implementing BPR principles).

- Shortage of supportive staff.

- Resistance to change on the part of some of the support staff (some staff who have worked for many years are not prepared to act in accordance with the BPR demands).

- Insufficient or ineffective training in ways to process tasks effectively and efficiently.

- Lack of motivation on the part of the service providers.

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As far as *reliability* is concerned, the focus group interview participants furthermore concurred that the existence of problems in fulfilling the promises made (part of the *reliability* dimension) is very common in PHEIs (chapter 5, paragraph 5.3.3). They

provided the following reasons:

- If an unexpected task set by management has to be attended to (and a staff member thus becomes unavailable for day-to-day-duties), regular work duties may suffer as some operations require authorisation by a senior member (occupied with the unexpected task), and the regular work is delayed resulting in promises not being fulfilled.
- Workload of service providers (staff).
- Limited resources.
- Poor governance.

In addition to the *reliability* aspect of service quality, the issue of *tangibles* in service quality improvement was indicated as an area that critically needed improvement. If kept in mind that *tangibles* refer to the physical facilities and surroundings, equipment and utensils of the institution, and the appearance of the staff, the feedback of the focus group interviews regarding possible explanations for this evaluation include:

- Construction activities currently underway at universities which create an impression of neglect: stones, mud and dust everywhere.
- Construction activities currently underway at universities which create an impression of neglect: roads are in a state of disrepair.
- Offices that are not professionally furnished.
- Very poor amenities on campus: no lounges or recreation centres (at the new universities).
  .

These findings imply that the improvement plan set by the "TO BE" design of the BPR documents of the universities (MU, 2008:35; HU, 2008:34) was not met. Smith *et al.* (2007:343) arrived at similar conclusions. The interview participants believed that the poor upkeep of *tangibles* (the visual appeal – how service staff dress and how visually appealing facilities are) would have a significant impact on

stakeholders' experience of their institutions' service quality.

6.2.2.2 Interview responses regarding the impact of poor quality service delivery

The interview participants also believed that if the promises made during service delivery were not kept (aspect of *reliability*); it would have a considerable impact on stakeholders' perceptions of their institution. Some of the impacts, especially the negative impacts regarding the stakeholders' satisfaction, were mentioned in chapter 5, paragraph 5.3.5, namely:

- Lack of trust by stakeholders in the service of the university.
- Tarnished image of the institutions, dissatisfaction of customers with the university service.
- Loss of status.
- Loss of interest to study or work at the institution.
- Hurdles preventing the institutions intention to satisfy stakeholder's needs.
- No progress towards the attainment of the expected improvement.
- Negative promotion of the university by stakeholders.
- Complaints that management is taking disproportionate measures at the university or at the complaint centre of the university.

Paragraph 6.2.1 and 6.2.2 summarised and integrated the quantitative and qualitative findings of the study. This paragraph also served to indicate how results from the qualitative analyses verified the quantitative findings.

6.3. DISCUSSION OF THE CONCLUSIONS

Assessing the service quality improvement initiatives and understanding how different stakeholders judge the efforts of service quality improvement initiatives should enable service providers to design their quality service delivery processes

effectively and efficiently. This paragraph of the findings will present a discussion on the conclusions based on the empirical investigations.

6.3.1 Conclusions from the empirical investigation

The discussions of the research conclusions drawn from the empirical study are presented in this paragraph by addressing the aims of the research in the following subparagraphs:

6.3.1.1 Verifying the dimensionality of the SERVQUAL scale

6.3.1.2 The appropriateness of use of the SERVQUAL scale to the Ethiopian situation.

6.3.1.3. Deductions derived from the service quality gap analysis, and

6.3.1.4. IPA analysis.

6.3.1.1 Verifying the dimensionality of the SERVQUAL scale

As indicated in paragraph 6.2, four factors or dimensions were found to underlie the service quality data structure of Ethiopian PHEIs. The research aim of determining the dimensionality of the Ethiopian specific SERVQUAL dataset could thus be addressed.

As indicated in chapter 5, under paragraph 5.2.2.3(1), this result differed from earlier findings of Parasuraman *et al.* (1988, 1991) with respect to the number of factors that underlie the data, but not the concepts. The four-factor structure thus also align with Mostafa (2007:93), Fernandez *et al.* (2005:17), Ramseook-Munhurrun *et al.* (2009:548), Wright and O'Neill (2002:30), Angell *et al.* (2008:245), Smith *et al.* (2007:339) and Miao *et al.* (2007:62) who have suggested that the dimensions could be reduced to threeor even four dimensions rather than five or more. The question could be asked whether Ethiopian environmental and cultural differences could affect the dimensionality outcome. If this is the case, the findings agree with the

arguments formulated by Parasuraman *et al.* (1991) and Smith *et al.* (2007:341), namely that the SERVQUAL scale can be modified to accommodate specific service settings – such as the Ethiopian environment - and therefore, the number of dimensions may vary. However, the concepts of *reliability, tangibles, responsiveness, assurance* and *empathy* in quality service delivery could still be identified in the findings from this study.

6.3.1.2. The appropriateness of the SERVQUAL scale to the Ethiopian situation

The SERVQUAL scale has been applied and its internal consistency reliability verified under different environmental circumstances and research fields (educational and business). The studies of Teas (1993a:21), Joseph and Joseph (1997:16) and O'Neill and Palmer (2004:42) attest to this. The research under discussion took place in an educational environment that differed from the setting in which the SERVQUAL scale was originally developed. For the present study, like the aforementioned studies, internal consistency reliability could be confirmed (see chapter 5, paragraph 5.2.2.3 (2)). With dimensionality and internal consistency reliability validated, the conclusion can be drawn that the instrument can be applied with success to the Ethiopian educational environment and will act as a reliable measure of stakeholders' expectations of service quality and their level of perceptions regarding the service quality improvement initiatives of PHEIs. The boundaries of the SERVQUAL instrument's applicability have thus been extended. The study has therefore contributed towards the understanding of service quality, stakeholders' reactions to service and indicates critical areas of service for quality improvement (Wang *et al.,* 2010:1104; Kitchroen, 2004:14; Parasuraman *et al.*, 1985:42; Hung *et al.,* 2003:79; Brysland & Curry, 2001:394). The research aim of determining the applicability of the instrument for Ethiopian circumstances was thus addressed successfully.

6.3.1.3. Deductions derived from the service quality gap analysis

According to Brysland and Curry (2001:395), service quality is judged as excellent when service quality performance meets or exceeds the expectations of stakeholders. On the other hand, researchers (Brysland & Curry, 2001:395; Wright & O'Neill, 2002:32) have reported that negative mean gap scores point to stakeholder dissatisfaction. Negative mean gaps scores were reported for the current study (chapter 5, paragraph 5.2.2.3 (3)) and these negative scores are areas in Ethiopian PHEIs that require improvement in the attainment of service quality satisfaction perceptions of stakeholders.

In this study, the major contributors to the gap between stakeholders' perception and expectations of service quality were the *reliability* and *tangibles* dimensions followed by the *empathy* dimension (see table 5.13, chapter 5). The *reliability* dimension is consistent with the findings of Brysland and Curry (2001:395) and Smith *et al*. (2007:345). The *reliability* dimension of service quality is an essential component of quality service delivery and the considerable mean gap scores for the *reliability* construct clearly signal that stakeholders hold the perception that the services had not improved as stated in the BPR "TO BE" document (MU, 2008:69-71; HU, 2008:34).

Stakeholders also expressed their dissatisfaction with the *tangibles* service quality dimension. This service construct refers to the physical facilities and surroundings, equipment and apparatus of the institution which provide services. It also includes staff appearance. This finding implies that the *tangibles* dimension of the institution does not comply with the improvement plan set by the "TO BE" design of the BPR documents of the universities (MU, 2008:35; HU, 2008: 36). Smith *et al.* (2007:343) have arrived at a similar conclusion. It is interesting to note that the third dysfunctional service area pointed to *empathy*. This shows unpreparedness on the part of university staff to provide individualised care and attention to stakeholders.

The conclusion can be made that the *reliability* and *tangibles* (followed by *empathy)* service dimensions have been identified as falling critically short of stakeholder expectations in service quality improvement initiatives at public higher education institutions in Ethiopia. The gap analysis provided a good measure of service quality satisfaction as evaluated by the stakeholders and their assessments indicated that for the Ethiopian higher education system, these are in great need of service quality improvement. It was also found that although academic staff and students generally viewed the same service dimensions as critical, the extent of their experience and expectations of quality service in PHEIs of Ethiopia differed statistically significantly (chapter 5, Table 5.7) – and their concerns with services differed for different reasons.

6.3.1.4. IPA analysis

As indicated in chapter 2, paragraph 2.9.2, the IPA analysis should serve to direct the overall improvement initiatives to areas that are the most critical and should assist with prioritising improvement efforts.

Similar to the findings of the gap analyses, the overall IPA findings indicated that almost all elements of the *reliability* and *tangibles* dimensions of service quality improvement grouped within the domain of high importance to service quality and low experience of quality service received" the domain of service dimensions that needs critical attention and improvement (see Table 5.13 in chapter 5). The majority of elements describing the dimension of *empathy* inquality service improvement delivery fell within the IPA domain describing aspects of service delivery where 'service is experienced as poor, but the importance attached to the services are lower – though still of consequence' (Table 5.13, chapter 5). (IPA difference shifts between academic staff and students were indicated as described in Table 5.13.)

Therefore to maximise the satisfaction of stakeholders, the service quality improvement dimensions of *reliability, tangibles* (and to a lesser extent *empathy,*

responsiveness and *assurance* as indicated by staff and students) should be given top priority and immediate attention in improving service quality at Ethiopian PHEIs. These indicators suggest service delivery improvement areas to PHEI management.

The deduction can be made that IPA and gap analyses complement one another and verify findings emanating from the analyses (chapter 5, Table 5.13). In general, the findings have answered research question 2 (chapter 1, paragraph 1.4.2) and have indicated areas and priorities that stakeholders consider important for service quality improvement in Ethiopian PHEIs. In addition, the findings indicate the need for HEIs to determine whether they are allocating their efforts and resources to the areas that are considered important by the stakeholders or not. Furthermore, it can also be used as a guideline for the allocation of resources (financial, human or otherwise). All 22 items were represented by a 2-2 grid (see Figures 5.2 and 5.3), which will enable the management of PHEIs to gauge how well their proposed improvements match stakeholders' expectations.

The overall mean importance rating score of 6.67 for this study was high (chapter 5, Table 5.10). The conclusion can be drawn that all items included in the questionnaire were found to be important in determining service quality satisfaction (and thus improvement initiatives) at PHEIs (chapter 5, paragraph 5.2.2.4).

6.4. RECOMMENDATIONS

It is of utmost importance to take note of the fact that the findings pinpoint certain areas requiring priority service quality at Ethiopian PHIEs. Based on the findings and the conclusions derived from them, it is important for the researcher to recommend ways for improving service quality initiatives at the Ethiopian PHEIs.

Assessing the service quality improvement initiatives and understanding how the improvement of different service dimensions has influenced the overall perceptions and satisfaction of different stakeholders is a most important endeavour of any

educational institution. The findings arrived at in this study should help HEI management to understand the specific areas that are in need of greater service quality improvement. If management understands the priority areas with regard to improvement, they will be in a better position to improve the quality of service. Based on the foregoing, recommendations are made under the following sub-headings.

6.4.1. Recommendations: Improvement considerations for HEI management

HEIs have to utilise the findings of this research in order to achieve greater success with their service quality improvement initiatives and to improve stakeholder satisfaction: firstly with respect to *tangibles* and *reliability* that presented as the most critical*,* and secondly with respect to *empathy, responsiveness* and *assurance* (chapter 5, Table 5.13). The suggestions include recommendations that can be implemented by university managers:

- Firstly, it should be noted that at Ethiopian HEIs, it is not common practice to assess the success of the implementation of any new improvement strategies. It is therefore suggested that the institutions have standardised assessment instruments to periodically assess the experience of service quality improvement initiatives. Since no such instrument currently exists for the Ethiopian higher education sector, the use of the SERVQUAL scale is recommended as an interim improvement-assessment tool.

- Secondly, as has been done in the current study (by identifying reliability, tangibles, empathy, assurance-responsiveness as aspects of quality service that require varying degrees of attention) the institutions have to re-identify and re-assess aspects of service attributes periodically in future, which stakeholders indicate as crucial towards customer service satisfaction. As in the current study, these attributes should be the criteria for improvement strategies for service quality improvement and meeting stakeholder expectations. This strategy assists

HEI management to determine those areas that appear to have the biggest influence on stakeholder satisfaction. It can assist management on decisions regarding redeployment of resources (human, material and money) from the less important areas to critically important areas (that is, in IPA terminology, from quadrant D to quadrant A) (paragraph 2.9.2; chapter 5, Figures 5.1-5.3 and Table 5.13).

- In the third place, it is important to recommend that investing additional resources and efforts in improving service attributes in quadrant A will have a positive effect on stakeholders' satisfaction, which will not have the same effect if invested in B (*keeping up the good work*) (chapter 2, paragraph 2.9.2; chapter 5, Figures 5.1-5.3 and Table 5.13). Therefore, the stakeholders' perception of reliability and tangibles (at present) can for example be improved by having a suggestion box and responding to such suggestions, good service-quality monitoring mechanisms, by changing the attitudes of service providers (Providers who insist, "I do a thing only when the service receivers come to my office"), attention to dress code, neatly swept corridors and parking lots as well as motivated and committed staff.

- An additional recommendation concerns the reliability and responsiveness attributes of quality service which were identified, by the research findings, as problematic: the fact that in the current situation at the investigated higher education institutions of Ethiopia stakeholders have to go through a number of offices to get approval for what they require, attests to this. This phenomenon is in contrast with what the BPR document (HU, 2008:9; MU, 2008:45) recommends, namely that the BPR should reduce unnecessary work chains and accordingly also reduce the amount of time it takes for users to receive services. However, it was never put into practice. It is recommended that the university management put a BPR implementation monitoring office in place so that a one-stop service is provided to the stakeholders. Decision-making should also be de-centralised to the point where the one-stop service is delivered to customers.

- A fifth recommendation regarding results from the current study involve the identified *tangibles* aspects of service, which have a considerable influence on stakeholders' behaviour and which creates a positive image of the institution. The importance of an aesthetic environment is critical to satisfying stakeholder expectations. It is recommended that institutions pay attention to the visual appeal of their premises, provide sufficient and adequate office space, classrooms, laboratories and workshops, as well as effective printing and publishing facilities. Since students frequent the cafeteria on a regular basis, cafeteria facilities improvements should attend to a hygienic and attractive environment.

- As a sixth recommendation, it is suggested to improve the exterior appeal of universities and to address the critical attribute of tangibles, while signage and information boards at universities are reassessed and improved.

- Finally, it is recommended that certain key values and beliefs be adopted by all PHEI staff, namely, honesty, discipline, fairness (aforementioned pertaining to the identified reliability dimension), customer-satisfaction oriented services (empathy dimension), responsiveness (responsive dimension), transparency and other decision-making or conflict resolution attributes (which should embrace the identified dimensions of assurance, responsiveness and empathy) that affect service delivery and which are indicated in the BPR documents. The following truth should be stressed to the staff: "Customers pay all our salaries: I will go the extra mile to accommodate realistic queries and requests of the customer".

Even though the SERVQUAL scale is regarded as an important scale, it is advisable to supplement it with other instruments to get an adequate picture of service quality improvement as recommended by Parasuraman *et al. (*1988:36), who advocate the use of the SERVQUAL scale to measure service quality periodically in combination with other forms of service quality measures (for example, IPA).

6.4.2. Recommendations: Essential and effective training programmes for service providers

Significant differences between stakeholder expectations and perceptions that required the immediate attention of the university management were found. One of the factors contributing to this big gap was the lack of knowledge on the part of the service provider regarding the implementation of the BPR, the success of which depends on understanding the principles of business processes (see chapter 2, paragraph 2.4.5). Focus group interviewees indicated that there was a crucial need for the training of service providers in BPR implementation (stated in the "TO BE" BPR design). The literature agrees that training equips service providers to take on their responsibilities by developing their creativity, problem-solving and decision-making skills. Accordingly, the success of any improvement initiatives depends on empowerment and continuous training in the application of new techniques and methods (see paragraph 3.4.2). To improve service quality in accordance with the expectations, it is recommended that the universities should provide various types of training.

- Firstly, the university management has to arrange on-the-job training programmes for the implementation of BPR for the academic and administrative staff to improve their performance by understanding how their jobs fit into the overall plan of the institutions.

- Secondly, newly appointed staff should receive inductive training and they should be made familiar with the principles and implementation strategies of BPR. Such training will have the effect of service providers taking ownership of the duties allocated to them.

- Thirdly, as indicated in chapter 2, paragraph 2.4.5, one of the factors that affects BRP implementation negatively is resistance to change. Whereas the BPR principle is based on radical and rapid changes, the fact is, people fear change.

Therefore, it is recommended that attitudinal change training should be arranged to assist service providers in overcoming their fear of change and address job security fears associated with changes in the workplace.

- Fourthly, service providers should be trained so that they adopt the attitude, "I get paid for the value I create," "I must accept ownership of problems and get them solved" and "I belong to a team: we succeed or fail together." (See paragraph 5.3.3).

- Finally, management has to design the ways and means to provide compensation and reward, enhance information sharing and reduce non-value adding channels to change their attitudes (the assurance dimension of quality service, see paragraph 5.3.10).

6.4.3. Recommendations: Management must create BPR methodology awareness

Despite the fact that BPR is a strategy that has ideal objectives revolving around improving the delivery of service quality, its implementation has failed to bring about the expected improvement in the HE sector, as shown by this survey. However, as mentioned in paragraph 3.3 in chapter 3, most government organisations in Ethiopia have undertaken BPR to improve their service quality delivery and it is evident that the implementation has brought successful service quality improvement. Therefore, its failure at public HEIs has to do with the implementation of BPR methodology. A good methodology provides guiding principles for the successful implementation of any strategies. These guiding documents and principles include the provision of appropriate guiding manuals, a process map, continuous monitoring of activities and top management support. These guiding documents provide the service provider with a systematic way of doing things, keep the service providers engaged in their activities and facilitate management's continuous monitoring of the activities. It is also used as a rallying point. It is recommended that the institutional management should provide guiding manuals and brochures, which provide directions for carrying out their responsibilities as well as the proper implementation of the BPR design.

6.4.4. Service quality model to illustrate how the recommendations can be implemented practically

Representing a particular phenomenon visually or as a model, provides accurate information, clarifies the key issuesand provides guidelines for future action (Cohen & Manion, 1980:18). Based on this suggestion, the following model was designed based on the findings of this study to show how service quality improvement in Ethiopian PHEIs can be addressed.

The model suggests that two quality dimensions of critical importance (*reliability* and *tangibles*) and other somewhat less important dimensions (*responsiveness-assurance* and *empathy*) indicate the focus of service quality improvements. The implication is that the improvement of these dimensions leads to the improvement of service quality and improved perceptions of stakeholders and finally results in stakeholder satisfaction, which is the eventual target of any service quality improvement initiative.

In order to improve the service quality dimensions the management of the universities should design different strategies. Some of the strategies recommended by this study are proper implementation of BPR methodology, training for service providers, improvement of institutional culture and the redeployment of resources – focussing on reliability, tangibles, empathy, responsiveness and assurance – roughly in that order (see chapter 6, paragraph 6.4.1 - 6.4.3).

A clear explanation is required at this point to enhance the understanding of the representation as portrayed in the model.
Firstly, the following service quality improvement areas that are considered important by stakeholders are taken up in the model:

- *Reliability*: the ability of the service provider to deliver dependable and accurate service as promised.

- *Tangibles*: physical facilities and surroundings, equipment used in the delivery of the service and appearance of the personnel.

- *Empathy*: readiness for provision of individualised care and attention to stakeholders.

- *Responsiveness-assurance*: this dimension refers to the institution's willingness to assist its stakeholders by providing prompt service, and the service provider's knowledge and ability to instil confidence in its stakeholders.

The following is a model for the effective improvement of service quality in Ethiopian PHEIs.
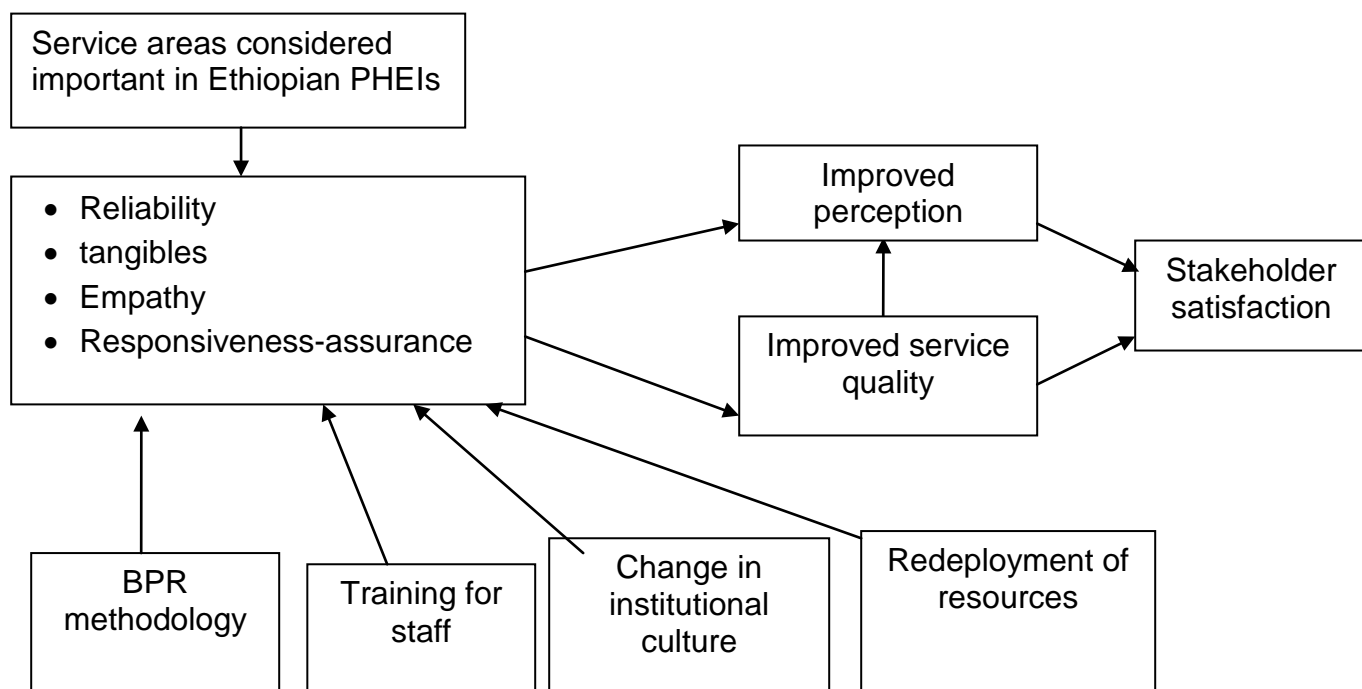
Figure 6.1: A model for the effective improvement of service quality in Ethiopian PHEIs

Secondly, the service quality actions to be taken for service quality improvement are presented in the model:

- *BPR methodology*: the BPR process in Ethiopian PHEIs is not implemented properly. This is due to the methodological problem identified in this research. It seems like "putting the cart before the horse." In paragraphs 6.3.3.and 6.4.4 of this chapter, it was indicated what should be done in this regard.

- *Training for service providers:* refers to the importance of training for service providers regarding the implementation of the BPR process and how to make the service customer-focussed (see paragraph 6.4.2).

- *Change in institutional culture:* this refers to an improvement in the values and beliefs of the staff. BPR requires radical changes, thus the attitudes, values and beliefs of the service providers have to be changed (see chapter 5, paragraph 5.3.3 and chapter 6, paragraph 6.4.2.).

- *Redeployment of resources:* As explained in paragraph 6.3.1.2, the assessment of service quality delivery should be done periodically. Based on the results of the assessment the management has to redirect human, material, financial and other resources from less important to highly important areas/dimensions.

Thirdly, the identification of important areas and measures taken to improve these areas result in:

- *Improved perception:* refers to the experience and acknowledgement of stakeholders on the improvement of service quality delivery.

- *Improved service quality:* refers to the attainment of the objectives of improvement initiatives which is that the performance of service providers meets or exceeds the stakeholders' expectations.

Finally, *stakeholder satisfaction*:
The final goal of any improvement initiative is to satisfy the stakeholders of the

institutions. At this point of the model, if the performance of the institution and the perceptions of stakeholders have improved, it will definitely lead to stakeholder satisfaction.

6.4.5. Recommendations for future research

Based on the findings of this research, the following suggestions for further research are presented. As a first study into the service quality improvement initiatives at Ethiopian PHEIs, this study provides an initial step and further research is needed. Firstly, it is recommended that since this study has concentrated on identifying the implications of internal stakeholders' (academic staff and students') perceptions, another area recommended for future research is the perception of service quality of other stakeholder groups such as administrative staff, employers, the government, NGOs, the Quality Assurance Agency and the general public. Secondly, it is also suggested that future research should focus on covering a larger variety of service attributes to see if a consistent selection of service attributes/factors becomes evident. Thirdly, it is recommended that a further service quality improvement investigation should replicate this research to confirm or deny the four service quality improvement dimensions identified. If similar dimensions are found, it supports the use of the SERVQUAL scale for subsequent quality studies in Ethiopian HEIs. Finally, it is also recommended that a further study should be conducted in private and public HEIs by involving a larger sample to establish the applicability of the identified service factors and the SERVQUAL scale in a wider context.

6.5. LIMITATIONS OF THE STUDY

It is unthinkable to conduct research of this magnitude without encountering various challenges at different stages of the study. According to Denscombe (2002:126), "… every piece of research has its limitations." Thus, the limitations of this research have been addressed as follows. Finding current literature dealing with the service quality improvement in general, and service quality improvement in Ethiopia PHEIs

in particular, was a major challenge experienced at the very initial stages of this study. That is why some of the older works of scholars with regards to service quality have been cited since they are information rich. In addition, since this research is the first of its kind, the lack of similar research done in relation to service quality in Ethiopia have exacerbated the challenges experienced. Another limitation of this study is that the sample pertaining to universities is small because of financial constraints. It would have been better and a lot of information would have been obtained, if the sample size could have been increased. The scope of the present research is that it excludes private HEIs and external stakeholders, as well as some internal stakeholders.

6.6. CONCLUSION

This chapter has presented a summary of the findings, as well as a discussion of the conclusions and recommendations. In chapter one, a number of research questions were posed for which answers were sought through this research (see paragraph 1.4). From both the quantitative and qualitative data analyses, it was found that both academic staff and students perceived the service quality improvement initiatives of the HEIs to be poor. Based on the findings, priority areas for further improvement were indicated for HEI management. It was also found that there was a significant difference between the academic staff and students' perceptions and expectations regarding the service quality initiatives. This study revealed that the reasons for the highest gap scores between perceptions and expectations is that all the stakeholders expected more from the service quality improvement initiatives and they expected more because of the implementation of BPR, believing that its implementations would result in radical changes in the service delivery of their respective universities. This chapter also discusses the extent of the gap between the stakeholders' expectations and the perceptions of service quality initiatives. The high negative gap scores implied that the institutions have failed to meet the expectations of the internal stakeholders regarding service quality improvement. The importance of using the SERVQUAL scale to assess the service quality

improvement in collaboration with other measures periodically, to meet or exceed stakeholders' expectations was also discussed. Finally, based on the findings, various recommendations were made regarding areas for further study while the limitations of this study were also pointed out.

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