

The Perceptions of mature aged dental assisting students on the quality of support services offered: A higher education case study

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DECLARATION

I, Kerusha Pillay hereby declare that the work presented in this research is my own and all sources have been duly acknowledged.

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ABSTRACT

In the new democratic South Africa, access into higher education institutions for a diverse range of students is a national imperative. As a result, educational institutions have implemented new policies, regulations and practices, which allow for alternate access into institutions. This study, was based at the Durban University of Technology (DUT) and investigated the perceptions and experiences of mature age students with regard to the quality of support services offered.

Mature age students are a growing population who experience unique desires and challenges in higher education institutions. While studies around higher education institutions currently focus on traditional students and their experiences, it is important to gain a deeper understanding of the experiences and needs of mature learners in order to develop the literature in this important area.

Having qualified as a dental assistant and now working in the Dental Sciences department, I find myself attending to a variety of requests from the mature age dental assistants. This motivated me to investigate the quality of support services offered to mature age part-time dental assistants.

The main objectives of this study are to determine which support services are currently being offered, how students feel about the quality of service delivery and what the university is doing to address any gaps found within the service delivery units. The researcher will undertake an in-depth qualitative study, using a descriptive case study approach.

The aim of this study is to interpret the perceptions of mature age dental assisting part-time students with regard to the quality of support offered to them at the Durban University of Technology.

The researcher will undertake an in-depth, qualitative case study involving 30 mature-age dental assisting part-time students in order to obtain their perceptions of the quality of support services offered to them.

This study provides a 'snapshot' of the current provision of service quality at the Durban University of Technology. It also offers suggestions that could be implemented to improve service quality, given the limited resources available to management. Due to the dynamic nature of service quality, it is essential to conduct further research to build on this study in order to ensure that the university remains competitive in the increasingly turbulent environment of higher education. This study will assist in developing a comprehensive recommendation to the programme of Dental Assisting, so as to retain and support mature age students who enter university via recognition of prior learning (RPL).

ABBREVIATIONS

HE	Higher Education
RPL	Recognition of Prior Learning
MA	Mature Age
DUT	Durban University of Technology
CAO	Central Application office
HPCSA	Health Professional Council of South Africa
SQ	Service Quality
HEI	Higher Education institution
DA	Dental Assisting

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CHAPTER 1

INTRODUCTION

1.1 PREAMBLE

In 1994 South Africa became a democratic country and various sectors, including the health sector and the higher education sector underwent changes. Within the health sector, all qualified health workers had to be registered with a regulatory registration body. The Dental Assistant's Association of South Africa (DAASA) also called for the registration of all dental assistants (Muslim 2014:2). This resulted in a flood of currently employed dental assistants, clamoring for a Health Professions Council of South Africa (HPCSA) accredited qualification.

Education is one of the major cornerstones of both the economic and political wellbeing of a society. This study focuses on the perceptions of mature aged students at the Durban University of Technology and is premised on the belief that education and national development are fundamental to development in the 21st century.

1.2 RESEARCH AIMS AND OBJECTIVES

The overall aim of this study is to evaluate the delivery of support services being offered to the mature age Dental Assisting students. The study will evaluate mature age students perceptions based on the support services, the relevance thereof and will finally identify the gaps in support services. The objectives of the study are:

1. To determine what support services are offered to mature students.
2. To examine how mature age students perceive the quality of support services offered.
3. To identify the university's gaps in the provision of support services for mature age students.

1.3 JUSTIFICATION FOR THE RESEARCH

A significant amount of information exists regarding the experiences of students in higher education institutions. According to Richardson (2006:310) however, an enormous number of these studies have overlooked the age of their participants. With the decision to embark on academic studies, mature age students have different expectations of higher education institutions. These would include their ability to cope with academic challenges and their ability to manage roles and responsibilities at university at home or at work (Michie ,Glachan and Bray 2001:456). By drawing on the work done by many researchers, this study plans to evaluate perceptions of mature age students based on their individual experiences of the quality of support services rendered. According to James' 2001 study (cited in Ayers 2008:48), mature age students entering university without any past experiences need support services to be in place to assist with their integration into university.

It is my argument that facilitating accelerated access of adults into higher education institutions is not enough unless it is accompanied by adequate, effective support mechanisms that enhance student retention. High quality learning programmes guarantee the transfer of skills and knowledge from training to work places and society as a whole. In addition to that, good quality products of the programme are its best marketing tool. These qualified students sell the programme and raise the reputation of the institution faster than political pronouncements. Hence, this study is necessary as it seeks ways of improving the quality of the teaching-learning process and the rate of programme completion.

1.4 BACKGROUND ON THE RESEARCHER

The researcher has extensive experience interacting with non-traditional students and was also a non-traditional student. .A non-traditional student is defined as “one who has life work experiences prior to entering higher education institutions” (Kantanis 2002:6). Motivation to investigate this topic began with the researcher's work in the Dental Assisting Programme. The opportunity to interact, advise, and provide support to mature age students revealed an obligation within the researcher to ascertain the unique needs of these students. The researcher developed personal relationships with the students during the course of her duties as an administrative officer; in the dental assisting programme. The interaction provided insight into the desire and need for support required by the mature age student.

1.5 CONTEXT OF THE STUDY

The Durban University of Technology arose from a merger of ML Sultan Technikon and Technikon Natal. The institution was named the Durban Institute of Technology (DIT) in April 2002. This was a merger of two higher education institutions with diverse cultures, histories, resources, and staff. The challenges of this merger in these two higher education institutions was that it made history as the first of many mergers of Higher Education in South Africa, and the first in the reconfiguration process of the sector which began in earnest in 2004. In 2006, DIT changed its name to Durban University of Technology (DUT) to bring it in line with the rest of the subsector (DUT Blue Book: 15).

While the institution has a rich history of more than one hundred years as a place of vocational and higher education, it is a fact that DUT is now a university, that makes the current strategic planning process a defining milestone. As DUT heads into its 11th year as a university operating within the South African Higher Education landscape, DUT's context is one of transformation, reconstruction and development.

The Faculty of Health Sciences, with nine Departments, provides various opportunities to students in Health Care Profession. The Dental Assisting Programme is housed within the Dental Sciences department. The Dental Assisting part-time RPL course was conceptualised in 2010 and ran for three years prior to its discontinuance. This was due to financial constraints and the increased workload of staff (2010 CQPA report).

The new regulation passed by the HPCSA requested that the programme start the course, which then became operational from 2014 to 2017.

1.6 OVERVIEW OF THE LITERATURE REVIEW

Entering the university environment can be a daunting experience for mature age students, which could result in stress that can compromise the well-being of the student and could even sabotage their academic success (Davies, Osborne and William 2001:185) Mature aged students from disadvantaged backgrounds are likely to require additional support services to compensate for probable financial, educational and social disadvantages. Therefore, the role of student support services within universities is to provide student support and development services which are focused on students' academic and personal needs throughout their academic career. In many universities, such service units provide expert advice to faculties and other areas of the university regarding the management of students at risk, critical incidents,

and other circumstances that impact on student welfare. The South African government conceptualized the Recognition of Prior Learning as a strategy for achieving the key objectives of the National Qualifications Framework (NQF), in particular access and redress. This strategy would target those individuals who were previously disadvantaged. A viable opportunity for these individuals to improve their socioeconomic status is through entering higher education institutions as mature age students (SAQA 2004:10).

Based on the reasons provided and the fact that support service units provide a range of services based-around the holistic development of a student, it can therefore be said that the universities are focusing on a diverse range of services for students. Quality monitoring, however, needs to be in place.

In addition, Thacker and Novak (1991, 13-36) explain that mature age students have non-academic responsibilities in the form of families or part-time employment, as opposed to younger students and therefore mature age students would be more sensitive to pressures of time and work load (cited in Richardson 2006). Biggs (1985:190), however, posits that regardless of popular stereotypes, mature age students are more likely than younger students to adopt desirable approaches to studying. Other researchers like Marshall and Nicolson (1991:25) imply that many mature age students may have clear vocational aims but they may also have personal goals that are not shared by younger students (cited in Richardson 2006). This may create the motivation needed to allow them to proceed through the course without any distractions. Therefore this study will assist the university in understanding the needs of this diverse student group and their motives for attending university, in order to plan their transition and assistance programmes accordingly. External expectations of the mature age student related to social, transitional and academic support need to be met by the university, a lack of which poses the risk of losing the student from the study programme.

In order for this group of students to be satisfied with the services higher education offers, quality needs to be upheld. Quality in higher education is a complex and multifaceted concept with no single, correct definition. Stakeholders in higher education have their own views of quality due to their particular needs. Students receive and utilise the training offered by the university, which makes them priority customers of educational activities. Quality, from their perspective, is related to their individual expectations.

Quality aspects in higher education has become a key concern. For the purpose of this dissertation, quality will be based on the aspect of support services offered at the university of

technology. O'Neill and Palmer (2004:42) define service quality in higher education as “the difference between what a student expects to receive and his/her perceptions of actual delivery”. Muslim (2014:17) agrees with O'Neil and Palmer who states that if the service offered exceeds the expectations of the student, then quality is seen as satisfactory. Conversely, when the quality of the services rendered is seen as unsatisfactory, the students' perceived expectations were not met.

Prosser and Trigwell (1999) have stressed that the way students perceive their learning and teaching environment is central to the quality of their learning. It is vital to link their personal perceptions and experiences to their teaching and learning environment in order to maximise the quality of services delivered.

As outlined by Firdaus (2006:35), evaluating service quality levels and understanding how various dimensions such as support services impact on the overall service quality, would ultimately enable universities to effectively design the service delivery processes and thus reduce the dropout rate of mature age students. South Africa has a long history of adult learners in public higher education and this is largely undocumented. Mature aged students, whether part-time or full-time, have only in recent years become part of educational research studies (Walters and Koetsier, 2006:100).

The author further implies that due to the diversity of mature aged students entering higher education institutions, the organisations need to start offering complex and personalised support services relevant to their student group dynamics.

An in-depth discussion relating to support service barriers and quality monitoring measuring tools is presented in chapter 2.

1.7 RESEARCH METHODOLOGY

The section below provides an outline of the methodology employed for this study.

1.7.1 Research design

Since the study set out to explore the perceptions of mature aged dental assisting students within the Durban University of Technology, a mixed method research approach will be most

appropriate. Mixed method involves collecting and analysing both qualitative and quantitative data.

1.7.2 Target population

Through the Durban University of Technology's Student Database, a list of all mature aged dental assisting students were obtained. As this study focuses on one university solely, a census study has been utilised.

1.7.3 Data collection method

Data will be collected using both quantitative and qualitative methods.

1.7.3.1 Quantitative data

SERVQUAL questionnaires of close ended Likert scale type questions were disseminated to all participants. The questions focus on mature aged students' expectations and perceptions on the quality of support services offered to them by the Durban University of Technology.

The survey was used because it enabled the respondents to work at their own pace and convenience, thereby accommodating the busy schedule of most of the part time mature aged students.

1.7.3.2 Qualitative data

Qualitative data will be collected using focus group interviews, and the questions will focus on mature aged dental assisting student perceptions and expectations of the quality of support offered to them by the University. These questions were derived from an extensive literature review and using the SERVQUAL dimensions.

The focus group interview was employed in this study because the study (the perceptions of mature age students on the quality of support services) is a relatively new area yet to be explored in the Durban University of Technology.

1.7.4 Reliability and Validity

Questionnaires will be developed using the literature reviewed. To achieve content validity, the survey questions included a variety of questions on quality and level of service delivery offered to mature age students.

To assess the reliability of the study, a pilot questionnaire and focus group schedule was administered to a target group with similar characteristics as the selected sample.

1.7.5 Analysis of data

The quantitative data was captured using the Statistical Package for Social Sciences (SPSS) version 23. Graphs and Tables were used in the presentation of the data. Qualitative data was analysed using thematic content analysis, which involves reporting on themes from the focus group interviews.

1.8 LIMITATION OF THE STUDY

The research participants are from one department within the higher education institution. In light of this, challenges faced by the mature age students and suggestions for support may not be relevant to the rest of the student population. The results may not be generalized to all universities but some may experience the findings and recommendations as relevant or useful.

1.9 OVERVIEW OF CHAPTERS

The study consists of the following 5 chapters.

Chapter 1: Introduction

Chapter 1 contains background to the study, study objectives, rationale for the study, significance of the study and the methodology employed.

Chapter 2: Literature review

The main idea within Chapter 2 is a review of the relevant literature relating to the study. A related theoretical framework has been presented.

Chapter 3: Research Methodology

Chapter 3 discusses the research questions and objectives followed by the research design including the sample, research instruments and data collection

Chapter 4: Analysis of results

This chapter presents the analysis of the collected data, as well as a discussion of the findings.

Chapter 5: Conclusion and Recommendations

In this chapter, the researcher has offered recommendations and conclusions based upon the analysis of the data collected.

1.10 CONCLUSION

This chapter has introduced the research problem, objectives of the study and justification for the study. The limitations and research methodology were presented. Finally, an overview of the chapters that follow and set the foundation for this study has been presented here. The study provides an overview of the aspects related to the perceptions of mature aged dental assisting students and the quality of support services rendered.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter has discussed the motivation for this research and presented an outline of the study.

This chapter provides a review of the literature which will be used for the study. The literature suggests that mature age students entering university without any past experiences of continuous and intensive study, need a support service unit to be in place to assist them with their integration into university. Therefore, the support services offered to the student ought to be reviewed to establish the quality of that service offered. This study, therefore, evaluates perceptions of mature age dental assisting students in respect of the quality of support services offered to them. The term ‘mature age’ is a broad terminology used to describe a group of students, with similar characteristics, entering higher education institutions. This category of student differs from traditional students. Briefly defined in this chapter are the multiple characteristics which make up this diverse student group. In addition, an understanding of the various quality models that can be implemented to ensure that quality standards are upheld in support service units is provided here.

The sources included books, paper based and electronic journals, articles and dissertations. Relevant databases were also consulted (ERIC, SA Publications, Emerald, Science Direct, Sabinet etc.). The researcher visited online international universities’ repositories and various Higher Education Quality Assurance Agencies. Search words such as: “Perceptions of Adult students in Higher education” and “Adult Students’ views on Quality Support offered” were used to search the database of current and completed research in South Africa. Although there are many publications on adult students in higher education, many fail to address the quality of support offered to mature age students in particular.

2.2 MATURE AGE STUDENTS AND ACCESS TO HIGHER EDUCATION INSTITUTIONS

In general, the mature student is employed and has decided to improve his/her personal and/or professional career by obtaining a higher education qualification.

Kasworm, (2003:86) reports that mature aged students:

- have numerous responsibilities and obligations, both at work and at home.
- attend university as a part-time student due to factors like limited time to study, few opportunities given by HE institutions concerning time schedules, and the necessity of attending a full-time job.
- are usually financially autonomous.
- may have a high school diploma.

These qualities as described by Kasworm (2003:87) show the diverse characteristics which comprise a mature age student and as a result the university has to create avenues for these students to access support services.

2.2.1 Definition of Mature Aged Students

Mature aged students are a diverse group, whether in terms of age, previous education, financial circumstances, nationality or family commitments. They may be undergraduate or postgraduate, part-time or full-time students, living either on campus or off.

As a result, this student group may have a variety of opposing circumstances, which makes progression difficult. Concomitantly, this group of students brings with them a strong willingness to succeed, which is the driving force that keeps them focused on completion.

Researchers like Byure (2005) and Connell (2003) have indicated that mature age students have experienced employment since leaving school and many may have dependents, resulting in pressing financial responsibilities (cited in Bannister 2009).

Although MA students in higher education are sometimes referred to as non-traditional students, this definition is based on the assumption that institutions have a norm of what the "traditional" student group population is. This assumption is increasingly debatable within the context of increased diversity across higher education institutions. Mature students are not a

homogenous group and the factors that lead individual students to pursue further studies, vary considerably.

Kasworm (2003:88) defines a similar category of mature aged students known as Non-Traditional Aged Students (NTAS) and explains this phenomenon thus:

“...the status of maturity and developmental complexity acquired through life responsibilities, perspectives, and financial independence; and the status of responsible and often-competing sets adult roles reflecting work, family, community, and college student commitments.”

A Non-Traditional Aged Student (NTAS) as explained by Kasworm (2003:90), is one who is made up of many individual characteristics and is unique in composition.

Mature age students are not the typical group of students who engage in higher education. Many have had careers, raised families, have taken out home loans or have had other significant life experiences before deciding to pursue a qualification at a UOT (Boston, 2017:1)

Evident from the many definitions by various authors, the term ‘mature age student’ is a term used to describe a student who has a range of characteristics similar to and sometimes different from traditional students. This study focuses on the definition of a mature age student as one who has:

a minimum of three years relevant dental work experience

a matric qualification

and has reached 23 years of age prior to registration

2.2.2 Characteristics of mature aged student

For the purpose of this study, mature aged students are identified as a category of students who embark on a course of study later in life, rather than compared to those who enter higher education directly after full time schooling, usually at eighteen or nineteen years of age.

2.2.2.1 Race of mature aged students

The results from studies conducted by Davies, Osborne and Williams (2002) on mature students from lower socio-economic groups show that social class is an important element in the student's decision to participate in HEI.

Other researchers like Purcell, Wilton and Elias (2007) concur with the finding that mature students most often come from lower a socio-economic background. In the past socio economic status was mainly governed by race, which also stood as a barrier into higher education institutions for non-white students. Abbott-Chapman, Braithwaite and Godfrey (2004) examined the demographic characteristics and academic performance of mature students from a low socio-economic and rural background. His studies revealed that students who were educationally disadvantaged came from low socio- economic backgrounds.

He claimed that the social and educational background of the mature students perpetuated a climate where “higher education may be seen to be irrelevant” to people living and working in a rural area.

Race is categorised and is linked to the socio-economic status of students. Within this study, low socio- economic groups can be associated with the African students.

2.2.2.2 Age of mature aged students

South African statistics use sixteen years as the criterion to be classified as an 'adult,' whilst other education-related statistics use the age of eighteen years as the starting point for adulthood (Harley et al. 1996:17). According to the Adult Basic Education and Training Bill (2004:4), the term "adult" refers to a person who is sixteen years or older. Using age as a criterion for adulthood is controversial. It is problematic to pinpoint the moment at which a person achieves adulthood. Although the legal age of adulthood in SA is eighteen years, society does not necessarily view an eighteen year old, as an adult. Therefore, to circumvent the varied interpretations and understandings of the term 'adult', this study elects to use the versatile term “mature age” to define students. The criterion used to accept students into the programme is that they need to be over the age of 23 years at the time of registration.

2.2.2.3 Gender of mature aged students

A greater number of women enrol as mature learners. In particular, women who are early school leavers or whose families discouraged girls from attending university are keen to enrol in alternative entry courses. These students regard alternative entry and university as ways to ‘catch up’ on their education (Quimby and O’Brien 2006:455).

2.2.2.4 Marital Status and work experience of mature aged students

MA students are distinguished from school leavers in that prior to higher education entry, they have accrued substantial life experience either in the working environment or in the domestic setting, and have family responsibilities. (Smith, 2008:6).

Osborne, Marks and Turner (2004:300) reported that the cost of studying, the need to work to earn a living, responsibilities of a current job, domestic/family responsibilities, and a lack of confidence were important issues for mature students. The major influencers for MA students entering HE were better employment and career prospects, academic achievement, and/or economic/financial reasons. Although respondents recognised that being employed and studying would bring added stresses, they deemed that ultimately, the sacrifice would be worthwhile.

Having to study poses challenges for women who are married due to their family responsibilities and several challenges arise when individuals tend to transfer between the role of university student with their role inside of marriage and the family (Abolanle, Lasonde and Awotedy, 2014:103).

Within marriages, the tension faced can include, but are not limited to quarrels between spouses , inferiority, feelings of exhaustion and resentment over inequitable divisions of household labour (Abolanle, Lasonde and Awotedy, 2014:103).

The assumption is that some mature students who re-enter education after a long absence may require additional learning support during their transition period, so as to ensure that they acquire the skills required for HE studies. Mature aged students, also known as “adult students”, “non - traditional students”, “re-entry students”, or “returning students” are defined as adults who return to school full-time or part-time while maintaining responsibilities such as employment, family, and other responsibilities of adult life. This added pressure of being married contributes to the married female’s lack of completing their studies and dropping out (Lynch 2008).

The concept of RPL is understood to refer to the measurement of learning gained through experiences other than formal courses (Bertrand, 1997:11 cited in Smith 2008. The universities RPL process and procedures are relevant to my study since 100% of the sample population were admitted based on the universities RPL criteria.

It is important to gain further understanding of the factors which influence the experience of mature age students, since understanding the complexity of issues which affect mature age female students will help gain a better overview.

Responsibilities outside of university limit the amount of time students are left with to participate in the university environment or interact with peers and faculty members. If these mature students arrive on campus immediately before class and leave right after class, they will be excluded from the mutual understanding and support that mature students can provide each other, and thus they may experience feelings of social isolation. This is, however, mainly due to their work commitments (Abolanhle, Lasonde and Awotedy, 2014:104).

Students believed that a job prior to studying provided them with the opportunity to develop a range of social and personal skills such as communication skills and self-confidence through working and dealing with other people (Robinson 1999:13).

2.2.3 Access routes to Higher Education

Access into the dental assisting programme at the DUT is made possible through school leaving qualifications such as the National Senior Certificate or through recognition of prior learning. A mature student, according to the DUT policy, is regarded as a student who is over the age of 21 years.

Alternate access to higher education institutions may be granted and can be achieved through recognition of prior learning. The concept of RPL is understood to refer to the measurement of learning gained through experiences other than formal courses. (Bertrand, 1997:11 cited in Smith 2008)

Many mature learners are admitted without formal qualifications (Ross (2002) and Haskins and Brown (2002) cited in Smith (2008:20) argue that formal qualifications such as Access certificates do not guarantee that mature students holding these qualifications will be more successful than those without qualifications. Indeed, while the important element is the assessment of learners' ability to be successful, Smith (2008), rightly asserts that one cannot pre-determine a student's capabilities without extensive analysis.

The recognition of mature learners' life and work experience is recognised to permit entry into HE programmes.

Although RPL is not a common trait for many mature students within this study, it is a requirement therefore a characteristic of a mature age student. Recognition of prior learning

within this study replaces the experience or knowledge component of other adult learners. RPL is an interchangeable term used to describe the working experience of individuals as either credit bearing or merely for entrance. All participants in the current study have used their work experience to gain entrance into the programme and have applied for exemptions based on their work experience. This confirms the idea that the University recognizes prior learning through work experience.

Recognition of prior learning (RPL), a term used in South Africa, or APEL (Accreditation of prior experiential learning) as it is known in the United Kingdom, or PLA (Prior Learning Assessment) the term used in the United States of America, all create a mechanism for individuals to enter higher education institutions.

The RPL process will avoid unnecessary duplication of learning, encourage self-assessment, assist learners to make judgments and help build learner confidence (Marion 2010:163). A mixture of economic necessity and social justice arguments have been the driving force in supporting a change in government's attitude towards adult entry into higher education institutions.

RPL reflects the belief that adults can learn in a variety of contexts outside of educational institutions, and this learning may be equivalent to knowledge gained formally in educational institutions. RPL is therefore needed to provide paths into and through higher education for mature adults, enabling them to build on relevant learning and avoid repetition (Castle and Attwood 2001:62) This group of students will need a quality support system to be in place to ensure their success through higher education.

The literature will guide the development of a measuring tool which will assist the university in determining the quality level of the support service unit.

2.2.4 Dental Education in South African Higher Education Institutions

Dental education is fast becoming an international resource. The expansion of the higher education sector has seen hundreds of businesses and profit-driven colleges in South Africa become a part of the nation's economic infrastructure, generating employment. South Africa has a long history of mature students in higher education. This, however, is mostly undocumented. Adult learners, whether part-time or full-time, have only in recent years become part of educational research studies (Walters and Koetsier 2006:100).

South African dentistry has previously relied on unregistered dental assistants who are trained to do this type of work on the job. In 2005, the HPCSA (Health Professionals Council of South

Africa) demanded that all assistants be registered with the HPCSA and undergo professional training. The move sparked a lengthy battle between the HPCSA and dentists who feared that the HPCSA's demands would force many of the country's scarce dental assistants to seek alternative employment.

"We don't have enough dental assistants that would like to themselves go through official training," said Maretha Smit, CEO of the South African Dental Association (SADA), which had previously challenged the HPCSA's demands in court. "(Being a dental assistant) is not a profession that is seen as aspirational (or something) for someone to hang career aspirations on – it's got a ceiling." (SADJ 2016). The researcher agrees with this statement and believes that, 'Universities should look into creating articulation avenues for the dental assisting profession.' Dental assistants are instrumental members of the dental team. Their core function enhances the dental practice during the delivery of oral care. The myriad duties performed by the dental assistant require interpersonal, business, and technical skills. There are many roles a dental assistant may play in a dental practice. These include being a front desk administrator, chairside assistant, dental educator, X-ray technician or practice manager.

2.3 QUALITY IN THE HIGHER EDUCATION ENVIRONMENT

The quality management tools used within the business world have been modified to be used practically in the learning sector for them to be operational in reaching the desired outcome (Chau and Kao,2009:107). Therefore, to ensure that quality in the higher education setting is upheld, these quality management tools will have to be adapted to suit its context. Madu and Kuei (1993:21) mentioned that "Quality in the learning context should be measured differently from that of the business or service industries".

To understand the purpose of this study, it is important to understand and define the term "quality," in the context of higher education.

2.3.1 Definition of Quality

According to Wicks and Roethlein (2009) quality has many different characterizations and there is no single universally acceptable definition of quality. Quality varies amongst manufacturing and service industries and among academics and practitioners. These variations

are due to the interchangeable nature of their individual components, therefore making it difficult to evaluate quality.

The Quality Assurance Agency (QAA), which is the body responsible for providing the quality assurance service needed in higher education institutions throughout the United Kingdom, defines quality as follows:

“Quality in an academic field is a way of describing how well the learning opportunities available to students helps them to achieve their goal.” Therefore the quality assurance definition is appropriate to ensure that effective teaching, support, assessments and learning opportunities are provided for them. (QAA 2004:1)

Daniel (2010:29) describes quality as: “the degree or grade of excellence possessed by a thing”. He further describes quality as the degree to which a set of intrinsic characteristics fulfils the requirements, needs or expectations that are stated.

Quality should be aimed at the needs of the student. This allows the best way to improve and reach full satisfaction.

Wicks and Roethlein (2009:85) outlines quality in five categories; these are illustrated below.

Table 2.1 Categories of quality dimensions

Category	Title	Definition
Category 1	Transcendent	These are subjective and individual.
Category 2	Product Based	Quality is seen as a calculable variable.
Category 3	User based	Quality is a relation for customer fulfilment.
Category 4	Manufacturing Based	Quality is seen as conformance and stipulations.
Category 5	Value Based	Quality is seen as providing good value in relation to cost.

Wicks and Roethlein (2009:85)

Table 2.1 above can be further explained below:

Category 1

These definitions are subjective and personal. They are eternal and go beyond measurement and logical description. They are related to concepts such as beauty and love (Wicks and Roethlein 2009:85). The current study, for example, is very subjective in that individual

student's perceptions are gathered to make an assumption on the quality of the support service unit.

Category 2

Product-based definitions: Quality is seen as a measurable variable. The bases for measurement are objective attributes of the product (Wicks and Roethlein 2009: 85). In this study, a service and not a product, is being measured.

Category 3

User-based definitions: Quality is a means for customer satisfaction, therefore definitions become individual and partly subjective (Wicks and Roethlein 2009: 85). Ensuring high quality levels through student satisfaction of the support service units are at the forefront of this investigation.

Category 4

Manufacturing-based definitions: Quality is seen as conformance to requirements and specifications (Wicks and Roethlein 2009:85).

Category 5

Value-based definitions. These definitions define quality in relation to costs. Quality is seen as providing good value in relation to cost (Wicks and Roethlein 2009:85).

Table 2.1 indicates the various categories against which quality can be measured. This study applied Category 3 because the researcher is concerned with finding out what dimensions of support service quality are warranting student satisfaction. Daniel (2010:31) explains in his study that some companies trust that high quality assures high profits, therefore businesses try to keep quality levels high at every sector within their production.

2.4 SERVICE QUALITY IN HIGHER EDUCATION INSTITUTIONS

Quality of services is considered an important implement for any business to differentiate itself from its competitors (Ladhari 2008:172). Service quality gives the business an advantage over other companies that strive to improve customer satisfaction. The term 'service quality' has received a great deal of attention from both academics and practitioners.

2.4.1 Service quality definitions

There are many definitions for service quality. For the purpose of this study, however, Eshghi's 2008 (cite in Daniel 2010) definition which states, "Service quality is defined as the complete assessment of a service by the customer" will be utilised.

The reason for this choice was that holistic student experience was taken into account and the SERVQUAL model was used to address these multiple areas.

This SERVQUAL model proposed by Parasuraman , Zeithaml and Berry (1985) sought to measure the degree of satisfaction of mature aged students in the dental assisting programme. This model was grounded on the investigation of expectations and perceptions of mature aged students, by means of the five dimensions which include tangibility, reliability, responsiveness, assurance and empathy. The difference between what is expected by the student and the actual service offered, assists the UOT in determining the gaps or shortcomings.

All service quality definitions capture the intangible nature of services, describing the most essential difference between a service and product. However, it is also evident that as well as differences, similarities between services and products do exist.

Mwongoso 2015:300 explains that there has been extensive debate on the best ways to define service quality, which is predominantly complex since it is harder to assess than product quality. Product quality is physical and can be measured by objective signs like performance features and toughness. Service quality on the other hand, is immaterial and studies define service quality in terms of subjectivity, attitude and perceptions.

Many researchers have defined service quality as an "intangible" and "indistinct" concept that is difficult to define and measure (Baron et al. 2009, cited in Beaumont 2012:21).

Lewis and Booms (1983:100) were one of the first writers to define quality in terms of service. They claimed that service quality is a measure of effectively the service provided, and whether the service provision matches expectations and satisfaction.

Recent social changes have thrust forward the issue of service quality to the top of the research agenda throughout the education sector. MA students view education very much in the same light as any other activity, in that they demand high service quality delivery throughout the learning environment.

Service quality has become a frequently researched topic over the past few decades. Baron (2009) writes that "service quality is the single most researched area to date". The vast interest in service quality is attributed to the understanding that poor quality places the company at a disadvantage against their competitors. Tertiary education institutions provide a service for

which students are expected to pay, therefore, measuring service quality in a tertiary educational setting is increasingly important (cited in Mwangoso 2015:299).

Service quality has become a tactical option for many universities around the world. The role of service quality has also become critical to the success of any organization (Landrum 2007).

Learning institutions are a fast growing service industry (O'Neil and Palmer 2004).

Being a service provider, the university is defined by the level of quality it provides to its customers. As universities become more student oriented, student perceptions of higher educational facilities and services become increasingly more important.

Managing relations with students is crucial to ensure that quality assurance is to be achieved because students are involved in internal and external evaluations of higher education services.

Services provided by higher education institutions must be constantly improved in order to keep up with the demands and interests of their students.

2.4.2 Service delivery definitions

Palmer (2011) as (cited in Beaumont 2012:16), defines a service as:

“The production of an essentially intangible benefit, either in its own right or as a significant element of a tangible product, which through some form of exchange, satisfies an identified need.”

Similarly, Lovelock and Wright (1999:5) adopt a more informal approach, defining a service as: “Something that may be bought and sold but that cannot be dropped on your foot.”

(Zeithaml 2009:4); states: “...services are deeds, processes, and performances provided or co-produced by one entity or person for another entity or person.”

Customers cannot see a service but they can see and experience various noticeable features linked to the service. “They can see service facilities, equipment, employees, uniforms, pamphlets, leaflets, and these are referred to by Zeithaml (2009:6) as clues”.

Educational services play a vital role in the lives of students since they require motivation and intellectual skills to attain their goals.

For this study, the researcher uses expectations as desires or wants of students (Douglas and Connor, 2003). It is important to understand and measure students' expectations so to identify any gaps in delivery of services which could prevent satisfaction Negi, 2009 (cited in Daniel 2010:34). Perceptions of students are based solely on what they receive from their service encounter. The current study is primarily based on the difference between expected service and

perceived service from a **student's** viewpoint. This will assist the researcher to obtain a better knowledge of how mature age students perceive service quality.

2.4.3 Expectations and Perceptions of Service Quality in Higher Education Institutions

As a result of the increasing population of mature aged students entering universities, there is a need for change and variation. Student entrance into educational institutions is no longer just for traditional students, but also for those wanting to further their education. Universities now have to relook at their services as the needs of these “non-traditional” students will differ from traditional students (David 2011:153). MA students have distinctive goals and barriers that do not affect most traditional students.

For the majority of mature age students, re-entering a university requires more planning and lifestyle re-evaluation than it does for traditional students. Mature aged students may have families or spouses, full-time jobs, and mortgages for which they are responsible (Mallman and Lee 2016:686). These students assume different expectations regarding the services they are expected to receive. This expectation is based on previous students perceptions and experiences, as well as how the media portrays such services (Marion 2010:23).

There are many interesting debates regarding whether students' expectations and perceptions should be used, or whether it is suitable to use only perceptions to form judgements. In spite of this, Zeithaml (1990) maintains that word of mouth communications and external communications from the service provider are all pivotal in persuading student expectations.

The researcher concurs with Zeithaml's assertion that the expectations of students determines their level of satisfaction, therefore service quality and customer satisfaction should be the focus of higher education institutions. This will assist the organization to differentiate itself by means of providing better quality service and enhancing overall student satisfaction.

Mature students' ability to succeed rests on their persistence through various obstacles and confidence in their own abilities to succeed (Wild 2014:19).

MA students have various expectations based on their personal needs and past experience.

High perceived service quality will lead to high customer satisfaction because service quality is the motivator to satisfaction.

Due to a demanding and dynamic lifestyle and needs, mature age students expect the educational institution to offer a variety of delivery options that are timely, easily accessible and user friendly (Kuh 2009:683).

According to a study conducted by Miler (2006:245). MA students bring new challenges into universities which are accustomed to serving predominately traditional students. MA students entering universities are focused on non-traditional services such as childcare and re-entry academic training skills. Trowler (2010) claim that institutions need to provide support services that enhance the retention of mature age students, as it will become increasingly necessary to restructure existing programmes and services to retain these students. In a study carried out by Kaur (2016:126) on students' perceptions of support service in higher education, the most influential factors in the provision of a good quality education is the quality of the lecturer and its student support structures. It is from this statement that the researcher was driven to investigate the quality of support services from a mature –age student's perspective.

As new adult students enter undergraduate studies, the services offered will become critical in the ability of the university to see them through their studies. The services which are perceived as necessary by mature students will enable the student service divisions to plan programmes that will assist in retaining students. Exploring current student services, as well as existing literature, will assist universities in the planning for current and future services.

According to Parasuraman (1988:30), it is common for consumer's expectations to exceed the actual service perceived and this signifies that there is always need for improvement.

Perceptions are always considered in relation to expectations (Zeithaml, Bitner and Gremler, 2009:87). Perceptions on Servqual (SQ) are formed through customers' views of the quality of services provided by a company and their satisfaction with the overall service (Zeithaml and Bitner, 2003:84). Zeithaml, Bitner and Gremler, (2009:102) argue that because perceptions may shift over time, it is necessary for companies to continually assess customer perceptions.

2.4.4 Student Satisfaction with Service Quality in Higher Education Institutions

Students receive and utilise the training offered by the university facilities, which make them customers of the educational activities (Gruber 2010:105).

Student satisfaction is described as the personal evaluation of the various outcomes and experiences associated with higher education. Student satisfaction is continually being shaped by life experiences (Gruber 2010:107). Customer satisfaction can be considered as an "attitude" in the series of interactions between the student and the University of Technology (UOT). The interaction between customers and services providers, will enable customers to formulate judgments about the quality of the service and their satisfaction.

Satisfaction is regarded as a wider idea while service quality focuses on specific dimensions of customer satisfaction. Satisfaction is influenced by perceptions and expectations of service quality, as well as situational and dispositional factors (Zeithaml , Bitner and Gremler, 2009:107).

Student satisfaction at all learning institution will be influenced by perceptions of the service quality, perceptions of the fees, support service relevance and personal factors such as the student's emotional state and factors such as transport problems and experiences to and from the institution.

2.4.5 The Relationship between Service Quality and Student Satisfaction

The acknowledgement of students as customers was introduced in the mid-1970s (Douglas 1993) and the importance of students as customers increased. Understanding the requests of students is significant in creating and providing a high quality service. Students are interested in quality education, adequate academic environment, employability skills and active participation. It is up to the higher education institutions to satisfy those needs of its customers.

Student satisfaction and service quality are both treated as determinants of a student's perceptions and expectations (Parasuraman, Zeithaml and Berry 1988:2). According to Sureshchandar (2002) as cited in (Beaumont 2012:26) customer satisfaction should be seen as a multi-dimensional construct. This means that customer satisfaction can occur at multi levels in an organization

Student satisfaction is theorized based on the customers (students) collective experience on around a particular service encounter through an overall evaluation of the service experience, (Daniel 2010:34). Parasuraman, Zeithaml and Berry (1985) suggested that when perceived service quality is high, it will lead to increased customer satisfaction.

Student satisfaction is considered an attitude (Daniel 2010:34). In the case of higher education, there is a strong relationship between the students and the university and student satisfaction will be based on the evaluation of several interactions between both parties.

The quality of services and their customer's satisfaction level are important aspects that companies must understand in order to remain ahead in the business sector. It is very important for companies to know how to measure these constructs from the consumer's perspective in order to better understand their needs, thereby ensuring satisfaction.

Literature on service quality focuses on perceived quality which results from the comparison of customer service expectations with their perceptions of actual performance (Zeithaml, Gremler and Bitner 2009:23). For the purpose of this study the student is occasionally referred to as the customer.

Clewes (2003:71 cited in Gruber 2010) explains that the best way to define and measure service quality does not yet exist. Students receive and use the training offered by the university, which makes them priority customers of educational activities. Several satisfaction definitions exist in literature. Oliver (1997 cited in Gruber 2010) states that satisfaction can be defined as pleasurable fulfilment, which indicates that customers perceived that consumption fulfils some need, desire or goal. The satisfaction concept has also been extended recently to the context of higher education.

In this study, participants will evaluate service quality by considering several important quality attributes in HEI's. The researcher is of the opinion that higher educational institutions must take action to stimulate improvement of the attributes that have a lower satisfaction level.

Elliot and Shin (2002:198 cite in Gruber 2010) describe student satisfaction in a HEI as the favorability of a student's subjective evaluation of the various outcomes and experiences associated with higher education. Student satisfaction is being continually shaped by repeated experiences of campus life experiences.

2.5 SUPPORT SERVICE DELIVERY IN HIGHER EDUCATION

The presence of student support services has been the topic of numerous studies and is evident by the extensive literature conducted by authors such as (Bridges 2008, Croft 1991 and Kuh 2009). A review of an extensive range of literature reveals varied reasons for the use of student support services for mature aged student education. The need for proper induction is emphasised by Hayes (2006) who argues that financial advice and support, examination/assessment and preparation and study skills must be in place in all student support programmes.

The role of Student Services within universities is to deliver an integrated student support and development unit which is focused on students' academic and personal needs throughout their academic career. Cliath (2000) stated that the principal aim of student support services is to

optimise the teaching and learning process in order to enable students to achieve adequate levels of competencies in a learning area.

Support services are structures and processes which provide students with facilities and opportunities during their academic endeavours (Nhundu 1997:23).

The term 'student support services' is used to describe the units or departments which provide services and support in higher education, the purpose of which is to ensure that students grow and develop during their academic experience. Kaur (2016:126) mentions that student support comprises a range of activities which include tutoring and teaching, counselling and advising, organisation of study and interactive teaching through online classrooms. Such services contribute to the quality of the academic experience and help students to achieve their learning potential.

Although efficient and effective providers of support, these services requires collaboration and integration. Within this study the various categories, independent of each other, have been examined. Since there is a variety of services offered to support students this study included a limited number of the support structures.

The researcher was of the opinion that working with the holistic student would be more beneficial than working in isolation with only one focus support service area.

For the purpose of this study, the researcher concentrated on financial, social, administrative, library, counselling and academic support services.

The surviving mechanisms, desires and views of mature students towards their study, work and family lives are important to understand so that the university can maximise retention .Researchers like Tweedal (2000) however, reported that MA students must feel as though they belong to a group. Institutions can build on this by encouraging structure and giving greater attention to the social needs of students. (Bhatnagar and Rajadhyaksha ,2001:550).

Studies conducted by Urquhart and Pooley (2007:82) found that all students identify the need for social, emotional and practical information support to help them through their university career.

This study will assist the university in understanding the needs of this diverse student groups. Support structures are identified below in further details.

2.5.1 Financial Support required by mature aged students

MA students mention finances as a significant problem to their academic success (Garbowski 2016).

Engaging in any paid employment reduces the extent of how much financial support students can receive from the institution. Combining several roles with employment and studying can increase the stress experienced by these students and potentially affect the quality of their work (Darlaston-Jones, 2007).

According to Cloete, Pillay, Badat and Moya (2005), one of the main causes of the high failure rate in South African higher education is financial limitations. Past research has shown that financial obstacles are key contributors to students leaving universities prematurely (Boston 2017:6).

2.5.2 Social Support required by mature aged students

Earlier retention research highlighted the critical role that ‘peer support’ plays in many students’ decisions to stay in HE . Steenkamp (2013) mentions that support from family and friends are most frequently cited reasons for students to stay in their learning programme.

Family approach to learning is instrumental in shaping people’s educational choices and experiences (Steenkamp 2013). The effect of parental education and family values on student learning reveals that while cultural factors can impact a person’s higher education success it is not a determinate. The low aspirations of family members inhibit some mature students from attending university at an early age. This type of attitude from family creates a situation where women in particular, can develop low self-esteem and perceive “themselves to have little status in the community and little control over the circumstances of their lives” (Home 2000:337).

Social support helps to lower stress and increase the confidence and abilities of MA students to balance their multiple life roles. The influence of peers is reflected in Gull's (2000) work, which suggests that a friend or acquaintance from within the community who participates in higher education can be influential, (Smith 2008:14). Social support is the emotional aspect of the learning process in which the faculty encourages, motivates and emotionally nurtures students to strike a balance with the academic support.

Studies conducted by researchers such as (Graham and Gisi, 2000, Lundberg,2003; Maudlin and Campbell,2002) found that services including clubs and organizations, as well as meeting places specifically for MA students, might assist in retention (Miller 2006) This, however, this can assist but it will depend on the MA student’s ability to interact with the provided social service that the university offers.

A few universities offered special support for mature students in the form of a mature- student adviser, a mature student officer or a mature student board. The researcher agrees with the findings however, the authors fail to mention one important barrier, “time” which is difficult and may not always allow MA students to socialise outside of study times.

The more universities are able to invest in a widespread range of services the better they will be able to meet the needs of their students. Student services are seen as key components of many academic systems.

These support services help to decrease the university dropout rate and increase the range of student’s experience. (Schreiber, Mamshela and Moja 2014:5).

2.5.3 Academic Support required by mature aged students

Thomas (2013:31) implies that high quality, student focused learning and teaching is at the heart of improving the retention and success of all students’. In particular, the importance of staff and student relationships, teaching and learning styles and experiences as well as assessment and feedback and personal tutoring were emphasised. Studies conducted by Purnell, Cuskelly and Danaher (cited in Thomas 2013) identify issues such as feedback response time and quality feedback as factors which can enhance student achievement. Time and quality need careful attention since they are critical to the support of students in their studies.

Institutional support includes provision of a competent faculty, learning materials, lesson delivery technology and infrastructure. Instructional support refers to the design of courses, interaction with faculty, tutorial assistance, among others.

Mckenzie and Gow (2003:107) have recognised differences in the learning needs and academic performance between school leavers and mature age students, claiming that these differences have implications for ‘targeting of support services for students of different ages’. Steenkamp (2013) noted that adults entering university without prerequisite information and technology skills are at a considerable disadvantage. Adult students attending university bring with them a diverse range of expectations and experiences; nonetheless they have certain similar learning and social needs that are unlikely to be shared by younger students.

Creating a selection of academic support services are essential in order to ensure success for MA students. First and foremost, greater flexibility in time and location needs to be available to students. This includes expanding course offerings for MA students (Markel 2015). In some

cases, faculty members are unaware of the unique stresses and obstacles faced by MA students, and are thus not understanding of their needs (Markle 2015:265).

Additionally, faculty members are crucial to the success of adult students. Markles' studies found that while these students require flexibility and understanding from faculty, many report that positive interactions with faculty members have a significant impact on their success. Faculty members also have the opportunity to bridge the cultural and social gaps for MA students.

2.5.4 Counselling Support Service required by mature aged students

When MA students consider abandoning their studies, they need motivation from counsellors, tutors, colleagues and/or family members to persist with the programme. According to Okopi (2008), guidance counsellors are expected to be steadily empathic, genuine, accepting and respectful. They should be able to develop an open and trusting relationship with students and present the opportunity for students to develop more open and trusting relationships with each other, (Okopi 2008). This symbiotic relationship can only be established through effective and efficient communication.

Hence, support is the provision of a safe space where the student accesses trust, recognition and assistance to move ahead. One such support structure could be student counselling. Research has revealed that more emotional (acceptance, encouragement, praise) and institutional support (financial, childcare, and housing) can decrease the stress on this student group and encourage success (Mugabe 2005:13).

2.5.5 Library Support Service required by mature aged students

Crawford and Gorman (1995:34) stated that utilising modern libraries presents a challenge for many adults re-entering an HEI, since they struggle with the realities of returning to study, with coming to grips with open learning, and with mastering concepts such as Referencing.

2.5.6 Administrative support Service required by mature aged students

A study by Daweti (2003) shows that students see the administrative staff in their institution as untrustworthy and as poor planners. Furthermore Daweti's (2003:8), observation was that the support staff needed better endeavours to acquire specific competencies to support students in

a variety of ways. These studies imply that administrative support is a very weak area within HEI's and needs strategies to upskill these units.

2.6 MODELS FOR MEASURING SERVICE QUALITY

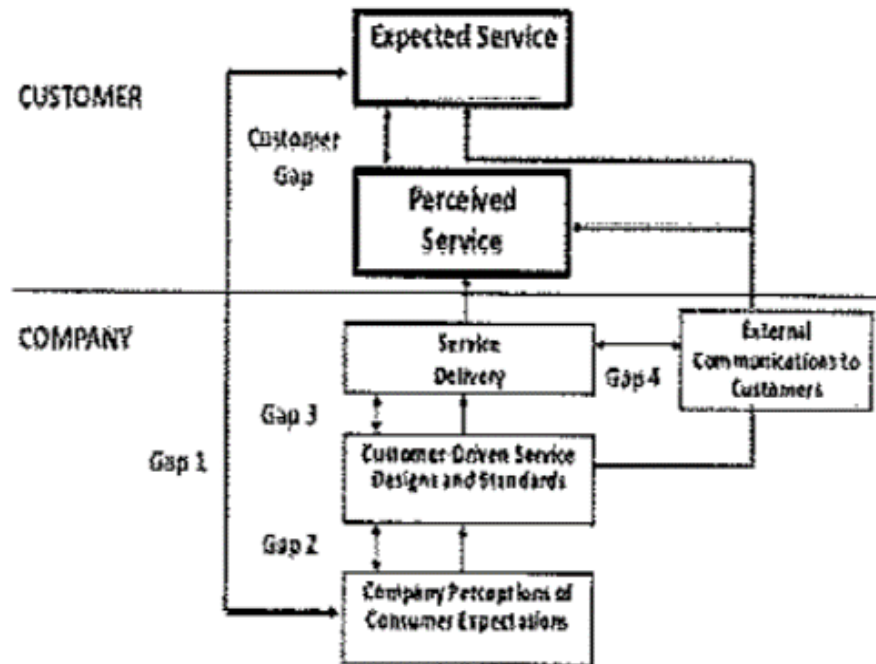
Models for assessing quality emerged in the late 1970s. Concepts like operationalizations and systematization for quality services resulted. To evaluate a service is more complex than to evaluate a product. A product is tangible and its flaws can be spotted, its functioning measured and its strength equated. Services are intangible and assorted, at the same time being judged by the performance and the experience of those who use them, with the possibility of interpretation and different judgements, according to the provider and the user in question (Beaumont 2012:19). Having support services available within the university does not necessarily mean that they are effective and are of quality standards, therefore service quality measures are explained with a broader understanding of what measures are needed to ensure that standards are maintained.

2.6.1 The Gaps Model

This model developed by Parasuraman, Zeithaml and Berry (1985), can be applied to measure service quality in an organization. Gap 5 is identified as the difference between customers' expectations and perceptions of service quality and is therefore highlighted as the most important gap to close in attempting to improve service quality and student satisfaction.

Diagram 1.1 The Gaps Model of Service Quality

Gaps Model of Service Quality



(Parasuraman et al., 1985 as cited in Khodayari, 2001:41).

Each of the gaps labelled in diagram 1.1 is fully explained and Gap 5 forms the bases of this research study. The researcher will describe how the gaps links to the current study.

Gap 1: Consumer expectation: This is known as the management perception gap.

This gap displays the inconsistencies between the perceptions and expectations of the customer. The executives of a company may not always understand what structures convey high quality to consumers, and this lack of understanding may affect the service quality perceptions of consumers (Khodayari 2011)

Gap 2: Management perceptions: This gap deals with service quality specification.

Market conditions and/or management indifference and limited resources may result in an inconsistency between management perceptions of consumer expectations and the actual terms established for a service. This difference may affect the service quality perceptions of consumers (Khodayari 2011:45).

Gap 3: Service quality specifications: This is viewed as the service delivery gap.

Quality specifications and actual service delivery will affect service quality from the consumer's point of view (Khodayari 2011:45). This gap exists when there are guidelines for performing services well and treating consumers correctly. Employees, however, exert a strong influence on the service quality perceived by consumers. Hence, employee performance cannot always be uniform.

Gap 4: Service delivery: This gap is known as the external communications gap.

Inconsistencies between service delivery and external communications in the form of exaggerated promises affect consumer perceptions of service quality (Khodayari 2011:46).

Gap 5: Expected service: This gap is known as the perceived service gap.

The quality that a consumer perceives of a service is an image of the gap between the expected service and the perceived service (Khodayari 2011:46). Organisations such as the SARS offers services that are sometimes highly interactive, that are labour-intensive and that are performed in multiple locations are especially vulnerable to this gap (Berry, Zeithaml and Parasuraman 1985:38). In the present study, the outcome is to measure the perceived service quality from a student's perspective, with the purpose of measuring Gap 5.

Parasuraman, Zeithaml and Berry (1985:46) also recognised that, regardless of the type of service, consumers basically use a similar criteria in evaluating service quality. He identified ten key categories called service quality dimensions. Berry, Zeithaml and Parasuraman (1985:380) believe that although the relative importance of the dimension would differ from one service industry to the next, the determinants of service quality in most consumer service industries would use the same criteria.

The gap analysis is an essential model of consumer-perceived quality and was developed to diagnose quality problems by identifying and measuring 'gaps' in the provision of services between users expectations and perceptions.

Mwongoso (2015:301), writes that one of the problems emerging from service quality is the discrepancy between customer expectations and customer perceptions of the service delivered. A service quality gap exists when there is a short fall which the service provider would like to close.

The reason for the vast interest in service quality is understandable; poor quality places the firm at a disadvantage when compared with the rest of the competition, driving away dissatisfied customers, Lovelock and Wirtz (2011) suggest that with so much unrests taking place in South African higher education institutions, it is imperative that the university puts strategies in place to ensure students enter and are retained until completion of course (Beaumont 2012:21).

2.6.2 The SERVQUAL Model

The SERVQUAL model is used to assess service quality and customer satisfaction. It is important to be aware of how customers perceive service quality in HE and the factors that affect these perceptions. The SERVQUAL model has not been previously used to measure service quality within the dental assisting programme at the DUT. This will therefore enable the researcher to assess the applicability of the SERVQUAL model in this context.

This study has employed the SERVQUAL approach. The choice of this approach came from the fact that within the higher education sector, customers are often exposed to suitable information obtained from commercials, therefore shaping their expectations before receiving the higher education service.

The researcher used the SERVQUAL model in order to assess mature age student expectations and perception of services. This model measures service quality by evaluating the gap between expected service and perceived service.

The major understandings obtained from the exploratory study by Parasuraman, Zeithaml and Berry (1985:44) were the identification of a set of gaps which are the major hurdles in attempting to deliver a service which consumers perceive as being of good quality. These are the gaps between what is expected and what is actually done, by both the consumer and the organisation, and within the organisation itself (Adebowale 2016:81).

2.6.3 Dimensions of Service Quality

The SERVQUAL model is based on the five service quality elements, which are listed below in Table 2.2.SERVQUAL model and criteria for evaluation.

Table2.2 Dimensions of Service Quality

Dimensions of Service Quality	Examples of evaluative criteria
Tangibility	Physical facilities, equipment, and appearance of personnel
Reliability	Ability to perform the promised service dependably and accurately.
Responsiveness	Willingness to help customers and provide prompt service.
Assurance	Knowledge and courtesy of employees and their ability to convey trust and confidence.
Empathy	Caring, individualized attention the firm provides its customers.

Parasuraman, Zeithaml and Berry (1988:14-15)

2.6.3.1 Tangible Dimension of Service quality

Tangibles, according to Brink and Berndt (2010:60), is identified as the dimension which refers to the physical attributes associated with the university. This includes equipment and material which assists the organisation to reflect positively. There are four questions designed by Parasuraman(1988) on the SERVQUAL model within the Tangibles category in services. These questions are designed to represent the company’s outward appearance and are not limited to the condition of operational equipment used in service provision it also includes exterior amenities (External) connected with the services being offered. It does not leave out the professional presentation of the employees; how they look and are perceived by students is considered as tangibles within the service sector (Adebowale 2016:54). Studies conducted by Gronroos,(1983:12) show that customers(students) views on their expectations are different in terms of the tangible aspect , this therefore makes measurement of service quality difficult to

determine, however, the SERVQUAL instrument will assist in appropriately ranking quality of the support service rendered on a scale. When the respondents of Adebowale's (2016:28) study were asked whether they expected to see up-to-date equipment as part of the quality of services being delivered to them, the respondents gave different views about what their expectations. Each response differed slightly from each other. One respondent volunteered that "Since the equipment available is old and the part that is new is mostly not the sophisticated. Competitions are stiffer nowadays; different things appeal to different customers", hence all organizations or businesses, whether small or big are looking for ways of appealing to the taste of their students (customers). This is achieved by putting in place appealing physical infrastructure.

The first impression gleaned by the customers lasts long. The staff is the first point of contact with the customer and if staff is not professionally attired, it will create a poor impression in the eyes of the customers (Adebowale 2016:50).

2.6.3.2 Reliability Dimension of Service quality

There are five questions under this measuring dimension and reliability is connected to the consistency of performance and dependability. Here it is determined whether the company provides the service in the right way the first time and honours its promises to students. (Adebowale's 2016:28)

Students are very sensitive to promises made by universities. The fulfilment of these promises is very important for the survival of the business; no customer wants to retain a provider who does not uphold or fulfil their promises. Inconsistencies between promise and provision is largely the result of inaccurate communication from advertisement and exhibitions, as explained by Yeo (2008:270). Some institutions tend to exaggerate their services, leading to grand promises that twist their actual potential and academic promptness. Examples of this include state-of-the-art technology used in laboratories, computer systems and other learning facilities. The organization must provide the customer with accurate service the first time around. The university should be able to deliver the promised service within the specified time frame. If this delivery is done in a proper manner, it will enhance the perceived quality of the customer (Brink and Berndt, 2005:60). Adebowale's (2016) further explains that in his study the responses showed that some areas lack this aspect of reliability and should fulfil to their promise. Accurate documentation should be maintained for future reference. Therefore the

universities must its students; this may encourage students to complete their studies. The staff should be aware that students are the reason they are in business.

2.6.3.3 Responsiveness Dimension of Service Quality

This dimension looks at the willingness to help and respond to customer's needs. Higher education institutions should be alert to the ever-changing needs of their customers (students) in providing courses and training programmes that are relevant. The learning process is expected to be educationally demanding yet flexible in areas pertaining to course selection and assessment (Yeo, 2008:270).

Dale et al. (2007:240) outline responsiveness as the willingness to assist customers and to provide rapid service on an ongoing basis. Sometimes this service may be out of the ambit of normal operating hours. This dimension focuses on attentiveness and willingness in dealing with customer requests, queries and prompt complaint resolution. Results from Adebowale's (2016) study show (that the employees are friendly to customers; the workers are always there for customers and willing to help them).

2.6.3.4 Assurance Dimension of Service Quality

Assurance is the ability of staff to stimulate confidence and trust on how the customers perceive the actual performance. The level of patience and persistence among the support service staff across all areas ensure that assurance is met. These choices should increase the expectation levels of customers in a way that the inadequacies of one service can be counterweighted by the strengths of others (Yeo, 2008:270). Trust is very important for businesses and employees should treat the customers in a way that will inspire confidence in the company, ensuring that customers feel safe and trust in the transaction. The staff should provide a safe environment so that the customers feel safe. Politeness and a friendly atmosphere is necessary to keep the customers and retain the good image of the university. When employees are polite and courteous, the customers feel relaxed.

Lovelock and Wirtz (2007:420 cited in Beaumont 2012:21) clearly identified the difficulties in separating services from products because of the intangible nature of services. Customers are part of service production as a whole hence there must be clarity as regards service delivery, which is the quality of service anticipated and the actual output, called technical quality.

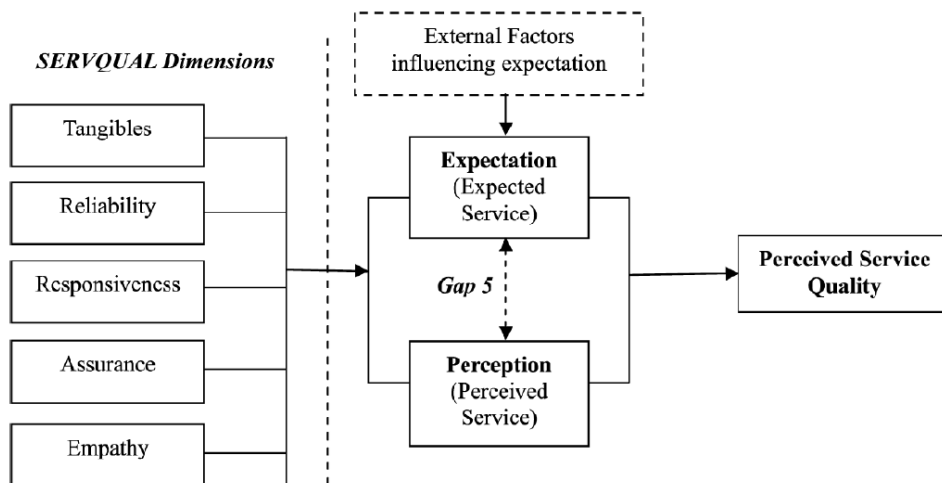
2.6.3.5 Empathy Dimension of Service Quality

It is sometimes difficult for institutions to fulfil customer expectations with regard to empathy, for example, a scarcity of staff and the need for optimal enrolments have seen an increase in class sizes, broadening the student ratio. This increased ratio has implication on the level of individual attention and empathy given to each student. Additionally, when staff is expected to assume numerous duties, the level of service quality may become less desirable over time (Yeo 2008:270). Gaster (1995) suggests that service provision is complex; it is not simply a matter of meeting expressed needs, but of finding out unexpressed needs, setting priorities, allocating resources and publicly justifying and accounting for what has been done.

The SERVQUAL model has been useful in various service industries and many researchers have adapted the instrument to suit a specific service being researched (Markovic 2010:195). The SERVQUAL model has 22 items for assessing customer perceptions and expectations regarding the quality of service. A level of agreement or disagreement with a given item is rated on a Likert- type scale. The level of service quality is represented by the gap between perceived and expected service (Markovic 2010:187).

2.6.4 SERVQUAL model integrated into the GAPS Analysis model

Diagram 2.1 Measuring service quality using SERVQUAL model



Daniel (2010:43)

The SERVQUAL model represents service quality as the discrepancy between a customer's expectations for a service and the customer's perceptions of the service received. The expectations of the students are subject to external factors, as indicated in diagram 2.1 above. The Gap 5 on the diagram represents the difference between customer expectations and customer perceptions, which is referred to as perceived service quality (Daniel 2010:43).

The literature shows that the majority of service quality models support the notion that service is measured by comparing the customer's expectations with the service quality perceptions indicating that the SERVQUAL instrument seems to have the most support in the service quality research field (Steenkamp 2013:94). Studies also show that there is no other commonly accepted service quality model to measure service quality. The wide use of the SERVQUAL instrument indicates that unanimity has been reached with regards to its basic values and application possibilities. (Steenkamp 2013:94)

2.7 THEORETICAL FRAMEWORKS

To create a seamless transition into higher education mature students need specific support. A broader explanation of adult learning theories will be explored in order to bring awareness to this groups' diverse needs.

Mature age students have a wide variety of characteristics which contribute to their progression at tertiary institutions, and understanding their individual needs can contribute to their positive integration into the university. Adult Learning theories by Knowles (2011) will contribute to the understanding of how mature students view the university environment and what factors contribute to their satisfaction.

The theoretical framework serves as a view point through which to guide the data collection process and analyze the relationship between student support services and mature aged students.

A mature student according to the DUT policy is regarded as a student who is over the age of 21 years old. The adult learning theories will allow the researcher to understand adult behaviors in an educational settings. A common author in the field of adult learning theories and adult guidelines is Malcom Knowles, whose famous guidelines on adult learning will be dismantled into sections to allow the researcher to ascertain exactly what structures need to be in place to allow the seamless progress throughout their studies.

These theories could reveal student support services inadequacies that can prompt the development of student strategies which will help mature students to cope in higher education institutions. The researcher acknowledges these theories as helpful in enlightening educational institutions on the optimum support requirements for adults to succeed in tertiary institutions.

2.7.1 Knowles Andragogy Guidelines

In an effort to explain differences between adults and children, Malcolm Knowles introduced the term “andragogy”, defining it as the art and science of facilitating adults to learn. Andragogy is based on five assumptions on how adults learn and their attitude and motivation for learning. (Knowles 2011)

In 2009, Knowles used the term andragogy “the art and science of teaching adults as distinct from pedagogy”, which usually refers to the art and science of teaching children. Andragogy fits into this study as it speaks to the mature students’ behavior towards studying.

Mature age students, out of practice in the art of learning, are likely to find the first year in higher education time consuming, (Knowles 2005). Recent studies have shown that a lack of self-confidence tends to increase the levels of anxiety among adult learners, (Percy 1995:45 cited in Rubenson 2011). These assumptions represented by Knowles have important consequences for the broader domains within the researcher’s perspective of mature age students and their perceptions of support service quality in universities.

Knowles five assumptions are explained below showing the relationship to other theories.

1. Adult learning is self-directed and selective .This means that adults will learn what is meaningful to them. Rubenson (2011:49) found that this group was “not very inclined to learn something they are not interested in, or in which they cannot see the meaning and importance”. Adults take responsibility for their own learning. Malcolm Knowles defined self-directed learning as “a process by which people identify their learning needs, set goals, choose how to learn, gather materials, and evaluate their progress” (Rubenson, 2011:53).

Mature students within this study have been away from formal schooling for many years, and may have had destructive experiences during their school attending years. These MA students may be **re-entering** the educational setting with anxiety and low self-confidence (Rubenson 2011:53). Conversely, Rubenson also asserts that these students could perform exceptionally well as they have now matured and are studying with a purpose. On the other hand, adult learners also carry with them years of previous knowledge and experience which is valuable to the classroom, as well as an established system of values and beliefs governing their thought (Jarvis 2004:144). These adults want to see immediately how the course content is relevant to their current problems or situations. People become ready to learn something when there is need to learn it in order to deal with real-life tasks and problems. In other words, programmes should be organized around real life situations that show students the value of the educational content.

2. Adult students learn through relevance.

As people mature, they become interested in learning subjects that have immediate relevance to their careers or personal lives. As a result, they need to know why they should study

something (Mugabe 2011:29). Under the standard pedagogical model, it is assumed that student will simply study what they are told. Adult learners want to know the reason they learn something or how it will benefit them.

3. Motivational factors that encourage students to learn.

While adult students may respond to exterior motivators, internal priorities are more important. Motivations like job satisfaction, self-esteem and quality of life gives adults reasons to learn. As people mature, their time perspective changes from gathering knowledge for future use to immediate application of knowledge. Adult learners are more life, task and problem-centred rather than subject-centred in their orientation to learning (Knowles 1980). They want to see how what they are learning applies to their life, to a task they need to perform, or to solving a problem. Learners see education as a development of increased competence to achieve their full potential in life. They want to be able to relate whatever knowledge and skills they gain today to a more effective life tomorrow. They view education as a transformative process in preparation for changing social roles.

4. Students learning experience.

As people develop, they gather experiences that help them in their learning. Those skills also enable them to help others to learn. Since adults manage other aspects of their lives, they are capable of directing and even assisting in the planning and implementation of their own learning. Additionally, people attach meaning to the learning they gain from experience rather than the learning they acquire passively. An important result to the experience that adults bring with them is the association of their experiences with their individuality (Marion 2010:142).

5. Physical and psychological environment

Knowles' Andragogy is vital to this study as it provides an understanding of psychological considerations to be taken into account when determining student services. Andragogical conditions for effective learning encompass a physical and psychological environment where adults feel accepted, respected and supported. Andragogy promotes mutuality between teachers and students as joint inquirers, (Mugabe 2011:30).

Knowles' theory is also helpful as it informs educational institutions about the characteristics of mature aged students and how those characteristics influence adult learning. Such knowledge is essential when developing support mechanisms for adults sought by this study.

2.8 BARRIERS THAT AFFECT MATURE AGE STUDENTS TRANSITION INTO HIGHER EDUCATION

Entering the higher education environment can often be an overwhelming experience for mature aged students, which could result in anxiety that might compromise the well-being of the student and disruption of their academic success (Edwards 2003:240) .He goes on to classify the barriers to participation into three categories: situational, institutional, and dispositional. The barriers that hinder participation to learning can occur at all levels of the educational system. Barriers can be located within an individual or within the centre of learning, within the education system in addition within the broader social, economic and political context. When a problem arises in one of these regions, it influences the learning process and can cause learning interruption. Therefore having systems in place to meet the needs of a wide range of problems faced by students will prevent a learning breakdown. The following main classifications of barriers will be discussed, Situational barriers, Institutional barriers and Dispositional barriers.

2.8.1 Situational barriers

Situational barriers are described as barriers that are found in an individual's situation, for example, a lack of transport, lack of child care support, lack of familial support, lack of money, poverty, violence and an unsatisfactory living situation many of these obstacles with which MA students are faced.

2.8.1.1 Poverty experienced by mature aged students

Individuals with low incomes are less likely to buy books or subscribe to newspapers. (Flynn and Brown 2011:45). Although agreeing with Holt and Smith up to a point, the researcher cannot accept the authors' overall conclusion that individuals from poverty stricken environments are at a literacy disadvantage. The researcher notes that many individuals from circumstances of poverty become resilient and rise above all their barriers to achieve greatness.

2.8.1.2 Living situations experienced by mature aged students

Living circumstances may also limit or prevent access to supportive technology such as a computer or Internet access, or may leave an individual with limited places to study (Bamber and Tett 2000:58).

For women, the constraints of family accountabilities may be compounded by the effects of violence. Adult learning surroundings may be dangerous for women who are at risk of violence from an intimate partner. In attending classes, their level of risk may be elevated, as they might be trying to keep their whereabouts secret in order to prevent further harm. Similarly, women might be prevented from attending classes because of physical or emotional abuse (Flynn and Brown 2011:50). These barriers are difficult for women to overcome especially since they may be financially dependent on their partner.

The salary scale for dental assistants is not high therefore application to study is done mainly via bursary or scholarship funds. From the researcher's observations, many participants registered for the programme with financial assistance from their respective companies, as paying for their studies was not an option.

2.8.1.3 Financial constraints experienced by mature aged students

Collier, Gilchrist and Phillips (2002) found that competing responsibilities and a preference for earning money were key reasons for non-participation among potential applicants. Ulrich (2004) similarly found that potential entrants to higher education perceived time or financial commitment to be the main barriers to their participation.

Financial constraints was a concern for many students. Women in particular, according to Warren (2003), had difficulty in being able to perform optimally at home and work. For many women, the two most important domains are home and work. They have enormous challenges trying to balance the home and work domains, as they are required to dedicate much time and sensitivity to each domain. Financial limitations affect these students especially if they are single parents. Carney, Neish and Mc Coll (2005) recommend that the University Support Services' objective is to address the financial challenges faced by the part-time student population. Financial obligations and the lack of support thereof is a grave concern for the part-time students. He believes that higher education institutions should map out the financial requirements of attending higher education institutions so as to equip the students with the

knowledge of what financial responsibilities they will face for the duration of their courses (Carney, Neish and Mc Coll 2005:317).

2.8.1.4 Lack of child care services

In many societies, it is largely women who are responsible for family and children. They look after children, feed them, take them to school and complete house work. This situation is worse if a couple lives alone as there may be no available child care giver. Child care centres will afford the parents study time. Sadly, this service is rare in many developing and underdeveloped countries, for example, in Maldives there are few childcare centres. Child care and other home and family women, elderly people and married people whose independence is severely constrained by their partners and children. Having no child care assistant is a major obstacle for adult women who want to attend university. If a mother wants to attend classes in the evening, there may be no-one to take care of the children. The problem is amplified if she is a single parent or if her husband/partner is a shift-worker. A married woman has a serious barrier if she is married to a jealous husband who refuses to allow her to attend classes in the evening.

2.8.2 Institutional barriers

Institutional barriers refer to high fees, lack of skilled facilitators, difficult language of instruction, and awkward times of instruction. Age and break in studies are also a major barriers.

2.8.2.1 Lack of effective Orientation Programmes

Institutional barriers include educational programs and teachers, support for learners and government policy. There is evidence that poor curriculum development discourages some adult learners from completing programs (Bamber and Tett, 2000). Furthermore, some mature learners explain that adult education programs use overly didactic and inappropriate learning materials.

Given their age difference, MA students also experience feelings of social isolation within their given campus community. Many students find difficulty connecting with traditional students, and thus lack a sense of belonging (Gonclaves and Trunk, 2014)

Few orientation programs are appraised objectively to determine whether or not they have achieved the intended outcome of student retention (Zeidenberg, Jenkins, and Calcagno, 2007). If orientation programs can prove effective as a retention and student success tool, it is important to understand how these programmes can best be utilised.

2.8.2.2 Lack of Social Transition assistance

In many cases, institutions have taken little to no care regarding the social incorporation of MA students, and it is clear that many feel as though they are not a part of their campus community. This social isolation has a significant impacts on a student's success; students are more likely to be satisfied and successful if they actively engage with their campus community (Wyatt 2011). This shows a clear link between what Tinto explains in his integration theory, intimating that integrating students with their immediate environment can be beneficial (Schreiber, Mamashela and Moja 2014:5)

If support services are not adult friendly, adult students look elsewhere to identify a programme and institution that met their needs.

The lack of not knowing where to go for academic information or how to access online learning material were very real concerns for adult learners.

2.8.2.3 Lack of effective counselling unit.

Research findings have shown overwhelmingly that a lack of proper career guidance and counselling in most African schools constitutes a major career barrier for post-secondary education (Amani 2014). Most university students' career choices in Africa are unintentional, imposed by external forces or conditions (Amani 2014). This suggests that students are not prepared to identify which fields best suit their abilities and interests. A recent study by Amani (2014) showed that most undergraduate students' career motivations are external and students are less likely to join their future careers upon completion of their studies. In view of this, the immediate assumption is that there is little or perhaps no career counselling services in higher education institutions, including universities. Students are either unaware of them, or do not have access to the information they need to know before joining the world of work.

2.8.3 Dispositional barriers,

Dispositional barriers are barriers within the learner self, for example the attitude the learner has towards learning perceptions, about peer-learners or facilitators. This category is also related to the learner's health, living conditions, and lack of confidence.

2.8.3.1 Mature Aged students lack of confidence.

Merriam and Caffarella (1991:68) stated that dispositional barriers are the result of a person's attitude towards their self and learning.

A reluctance to engage in university environment may have more to do with dispositional barriers such as attitudes, perceptions and expectations rather than with any of the more practical barriers which fall under the institutional or situational barrier (Edwards 2003:229). The researcher supports Edwards's findings that adult learners bring with them their own perceptions and expectations and that their personal attitudes could hinder or restrict engagement. Mature students are faced with the challenge of self-discipline in their academic work.

The flexibility of the part time programme makes it easy for procrastination. In this case, tutors are not physically present to ensure strict adherence to timetables and other academic schedules. In the relaxed atmosphere of their homes, students are confronted with interruptions from family and friends to the detriment of their studies. Therefore, self-discipline in terms of giving academic work its desired attention is a pre-requisite for the success of any part time mature student.

2.8.3.2 Mature Aged students age restriction

Community perceptions on adult learners, coupled with negative attitudes about education held by families, friends, or partners can adversely influence participation, as can feelings of conflict resulting from upward mobility (Bamber and Tett, 2000). Learners regularly find it difficult to realise their potential and to fit in with other learners, all the while trying to maintain a sense of self. Returning to education can be further complicated by fragile learner identities, possibly resulting from previous negative educational experiences (Stone 1998:294). The effect of the academic support enables students to develop academic self-confidence and this concurs with a study undertaken by Murphy and Roopchand (2003) (cited in Ayres 2008:10) who suggests

that if mature students new to university achieved good academic results and gained positive feedback, they grow in self-confidence and self-esteem and became increasingly motivated to study. Practical support was identified as an initial support system that should be in place to assist them as they manoeuvre around other roles.

2.8.4 Technological Barriers

The majority of students today are not only comfortable with using technology in higher education classrooms but they also presume their instructors will use technological methods of application (Grabowski 2016:).

“With the new millennium, technological devices, software programs, and the influence of the Internet on educational practice have evolved substantially (Grabowski 2016).”

In order for lecturers to mix technology effectively into the curriculum, they must remain current with available technology options and programs (Grabowski 2016). As more and more adult learners seek to gain knowledge through formal and informal training, barriers to successful learning will emerge and the student and university will have to be trained to deal with the problems. Many adult learners are confused and frustrated by the learning system due to a lack of prior experience with technology.

“Technophobia” or “computerphobia” are phrases used by researchers to describe a condition that may affect a mature age student (Jay 1981:47).

Tinto’s (1993) work on the integration of academic and social opportunities for engagement is a predictor of academic success among students. The higher education environment creates opportunities and programs for traditional students and overlooks the non-traditional group (Herman and Lewis, 2004:59).

Creating a sense of belonging will encourage an affinity and connection among this group of students. The influences taking a student away from their learning includes work and family responsibilities which must be recognized and addressed. Many of these factors affecting student performance can be addressed through effective advising and targeted delivery of student support services.

Fuller and Paton (2007) note that social and personal conditions can act as either a catalyst or an inhibitor when faced with the decision to apply to higher education.

The barriers or factors that hinder participation to learning can and do occur at all levels of the educational system. Barriers can be located within an individual, within the centre of learning, within the education system or within the broader social, economic and political context. When

a problem arises in one of these areas, it impacts on the learning process and can cause learning breakdown.

The significance of quality in higher education institutions is undisputably important. Today's students are tomorrow's leaders and without monitoring quality the universities will continue to lose its competitive edge and fall further behind the rest of the higher education institutions. Students are viewed as customers of HEI's as they are the primary recipients of educational services. The Gap Analysis model, along with the SERVQUAL model, should guide management in finding out where the support service units gaps are and in ascertaining appropriate ways to close this gap.

The Gap Analysis is a straightforward and appropriate way of identifying inconsistencies between a service provider and customer perception of service performance.

2.9 CONCLUSION

The literature in this Chapter suggests that mature aged students entering university without any past experiences of study, need a quality support service to be in place to assist them with integration into the university system. This proposition alludes to a regular review of the student support services. This study therefore uses the literature as a framework to compile the research instrument for this study in order to further probe the extent to which higher education institutions engage in providing a quality support service to mature age Dental Assisting students. The next chapter will discuss the research methodology that will be employed in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The literature review discussed in the previous chapter offers a clear plan of action and informs the researcher's decision for the development of the measuring tool selected to conduct the research.

The purpose of this chapter is to describe the methodology used in this research study, the sampling procedure, data collection method and research design.

Furthermore the approach and design of the research measurements used to collect and analysis data, pilot study, ethical issues and issues of validity and reliability, will be explained further.

3.2 RESEARCH DESIGN

A research design can be defined as a plan of how one intends to conduct the research. Most research objectives can be achieved by using one of three research designs, namely, exploratory, descriptive or casual research designs (Mc Daniels and Gates 2013:28).

The researcher chose a descriptive approach, as it allows data to be collected from as many sources as are considered appropriate to provide in-depth information. Descriptive research best suits this study as the research intends to investigate mature aged students' perceptions of support services quality at the Durban University of Technology.

A case study which is descriptive and inductive in nature will serve as the research design and will focus on uncovering meaning from the perspective of the participants (Silverman 2006:43).

3.3 MIXED METHODOLOGY

The researcher utilised a combination of both quantitative and qualitative research methods which are catogerised as mixed methodotlogy.

The mixed methods approach has been described as the "third methodological movement" (following quantitatively and qualitatively oriented approaches).

This researcher used the mixed methods approach, which is a combination of quantitative and qualitative research approaches (Green and Thorogood 2010:42).

In keeping with that recommendation, this study utilized a quantitative and qualitative method in order to collect and analyze data regarding MA students' perceptions of the quality of support services they experienced while enrolled in the Dental Assisting programme. The qualitative analysis will be performed using focus group interviews.

3.3.1 Quantitative Approaches used in the study

Quantitative research has been described by Leedy and Ormrod (2010:80) amongst others, as being the formal, objective and systematic process of obtaining quantifiable information about the research area that is presented in a numerical form, and that has been subjected to statistical analysis. Quantitative research investigates research involving amounts and quantities, and a measurement of variables (Leedy and Ormrod 2010:94).

A quantitative study will be used to extract and quantify the data from the SERVQUAL survey questions.

A significant number of the research studies regarding adult learners in higher education has employed quantitative methodologies, especially the seminal works that inform practice. Giancola, Grawitch and Borchert (2009:247) advised that more studies should be conducted using qualitative research designs in order to understand the impact on the university; and work stressors on MA students in higher education institutions.

3.3.2 Qualitative Approaches used in the study

This study utilised a qualitative approach through a case study design. Coles and McGrath (2010) believe that to uncover meaning from respondents, methods of data collection are required, that facilitate personal contact with respondents. Qualitative research approaches aim to seek explanations, make predictions and answer questions in a real world setting (Leedy and Ormrod 2010:135). It seeks to understand more about a phenomenon, rather than just measure it, and also allows for an understanding of the perspectives of the participant (Green and Thorogood, 2010:6).

Bogdan and Bilken, (2003:50) explain that qualitative research design is flexible, rather than rigid, descriptive data is best collected and analysed inductively because the intention is to understand human behavior. De Vos (2005:345) state that qualitative researchers need to defend the value and the logic of their choice of methodology more than quantitative researchers. This is simply because there are no universally agreed criteria for evaluating the

authenticity and trustworthiness of qualitative studies and readers of such research are generally left to judge the credibility of the research using their own frames of reference (Taylor and Bogdan, 1998)

Authors like Patton (2001:39) further explain that qualitative research uses a true-to-life approach that seeks to understand the phenomena in a context-specific setting, such as "real world setting, where the researcher does not attempt to manipulate the phenomenon of interest."

A case study was chosen as a qualitative mode of obtaining information. A case study is used when there are clear boundaries, such as the university campus. The researcher needs contextual material to describe the setting for the case.

Yin (1994:13) defines a case study as: "one that investigates a contemporary phenomenon within its real life context, especially when, the boundaries between phenomenon and context are not clearly evident.

Case studies are a good way of looking at situations around us. This study used the institutional case studies methods to draw participants from diverse backgrounds, bringing with them assorted views and concepts that strengthened the research (Welman and Kruger 2005:46). A case study is a procedure of inquiry that investigates and yields in-depth description of a bounded process (Cohen, Manion and Morrison 2010). In this study, the case is bounded within a specific institution of higher learning (DUT).

3.4 TARGET POPULATION AND SAMPLE

A population is a study which may be made up of individuals, groups, organizations, human products or events. Defining the target population is a vital step in the research project design, (Welman and Kruger 2005:46). A population of a study refers to the specific group of individuals who have the same characteristics required to be studied (Creswell 2008).

The target population of this study comprised of 90 mature aged Dental Assisting part-time students from the Durban University of Technology which formed the population for the quantitative study, while a cohort of 30 students registered in the 2014, 2015 and 2016 courses were used; 10 students from each year formed the target population for the focus group interviews.

The researcher decided to use a census study for the quantitative method and a sample for the qualitative method. Babin, Carr and Griffin (2013:355 cited in Hussain 2016) define a census study as “an investigation in which all of the elements in that population are used.”

Malhotra (2010:372) defines the target population as a combination of elements or objects that retain the information required by the researcher and about which deductions are to be made.

The Durban University of Technology internal database provided a list of all mature aged students within the Dental Assisting programme.

Purposeful sampling was used and the sampling was one of convenience.

The research participants were all studying for the part-time Dental Assisting course through the department of Dental Sciences at the Durban University of Technology. All 30 students agreed to participate in the research project. Annexure G summarises the demographics of the groups.

In a qualitative approach, emphasis is placed on gathering in-depth information, irrespective of the number of respondents (Cohen, Manion and Morrison 2010).

Thirty students were interviewed in focus group interviews, their demographic data is listed in Annexure G. Thirty students were broken up into six focus groups with five participants in each group. Additional questions were offered to clarify questions during the focus group interviews.

3.5 DATA COLLECTION METHODS

Data is the ‘basic material with which researchers work (Durrheim 2002:45). Data was collected using both quantitative and qualitative methods and are further described below.

Wagner (2006:98) states that “the design of a questionnaire is critical to ensure that the correct research questions are addressed and that accurate and appropriate data is collected”.

The measuring instrument for the study was a survey questionnaire and a focus group interview. Both instruments were derived from an extensive literature review based on the SERVQUAL dimensions. Questions were both open- ended and closed- ended.

3.5.1 Survey used in the study (SERVQUAL)

The survey instrument used in this study was designed around the validated SERVQUAL instrument. The SERVQUAL model developed by Parasuraman Zeithaml and Berry (1988), is a well-established framework for the measurement of general service quality. The SERVQUAL model consists of 22 items related to service features, which are grouped along five dimensions. This model has been extensively used and tested across a wide range of public and private sector services (Kebriyai and Akbari 2008), and was therefore chosen as the model for this research. The adaptation of the SERVQUAL is supported by Parasuraman, Zeithaml and Berry (1988:28), who state that items under each dimension can be “suitably reworded and/or augmented to make it more relevant to the context in which the instrument is to be used”. The instrument employed for gathering data was surveys, for all individual students. In designing the survey much attention was given to ensure that the objectives of the research were covered. The survey was used because it enabled the respondents to work at their own pace and convenience due to the busy schedule of most of the part time mature aged students. The main variables in this research study are the SERVQUAL attributes. The SERVQUAL attributes are coded according to the standard model. The demographic attributes are collected from the participants and these attributes are collected for analysis.

The following are the codes for the SERVQUAL items:

Table 3.5 SERVQUAL Dimensions

SERVQUAL Dimensions/Items	
Tangibles (TA)	
TA1	The DUT support services have modern-looking equipment.
TA2	The physical facilities at all DUT support services units are visually appealing.
TA3	Staff who work in the DUT support services are professionally attired.
TA4	The physical environment of the DUT support services units are clean.
Reliability (RL)	
RL1	DUT support services staff honour their promises timeously
RL2	DUT support service staff is invested in solving the problems of mature age students.
RL3	DUT Support service staff perform the service.efficiently
RL4	DUT support service staff honour their promises timeously
RL5	DUT support service staff keep records accurately.

Responsiveness (RN)	
RN1	Staff makes information easily obtainable by the mature age students.
RN2	Staff provides prompt service to students.
RN3	Staff is always willing to help students.
RN4	Staff is never too busy to respond to students requests.
Assurance (AS)	
AS1	The professionalism of staff in the DUT support service unit instils confidence in students.
AS2	Mature age students feel safe in their interactions with staff of the DUT support service unit.
AS3	All staff within the DUT support service unit are polite.
AS4	Staff from the support service has adequate knowledge to answer mature age students' queries.
Empathy (EM)	
EM1	DUT support service staff provides individual attention to mature age students
EM2	Operating hours are convenient for the mature age students.
EM3	Staff provides personal services to mature age students.
EM4	Staff has their student's best interest at heart.
EM5	The staff understands the specific needs of the mature age students.

Respondents were asked to indicate their degree of agreement with a certain statement on a seven-point Likert scale type (1 = "strongly disagree" to 7 = "strongly agree". For each item, a "gap score" (G) is calculated as the difference between the "perception-of-performance" score (P) and the "expectations score" (E). The greater the "gap score" (calculated as $G=P$ minus E), the higher the score for perceived service quality (Parasuraman, Zeithaml and Berry 1988:28). The questions were close-ended Likert scale type questions which the researcher found to be more flexible, allowing for more validity to the second part of the analysis which was the focus group interviews.

3.5.2 Focus Group Interviews used in the study

The literature provided by (Wellman and Kruger 2005; Kelly, 2006; Terre Blanche, Kelly and Durrheim, 2006; Creswell, 2009 and Merriam, 2009) outlines several characteristics associated with a qualitative approach. The following characteristics of the qualitative approaches were used in this study:

- The SERVQUAL model was used as a framework for developing the measuring instrument and delivered the interview schedule personally to research participants.

This allowed the participants to reflect on their experiences prior to the focus group interview session.

- The focus group data was collected at the sites in which lectures take place.

The purpose of carrying out the research at these sites was to talk directly to the research participants and to observe their contexts with the aim of understanding the contextual environment.

- The research assistant was the key instrument in data collection and recording while the researcher did the interpreting. Wellman and Kruger (2005) raised concern about the double roles that qualitative researchers play, arguing that such double roles have the potential to lead to bias in data collection. In this study, this concern was objectively addressed.
- Information was gathered via a tape recorder and transcribed by the researcher. Thereafter the transcriptions were sent to the interviewees for their verification. This was a way of eliminating any possibility of bias and distortion of information.

The researcher made use of a digital voice recorder to record the research participants' answers to the focus group interview questions.

The focus group interview was used in this study because the study (the perceptions of mature age students on the quality of support services) is tentatively a new area yet to be explored in the Durban University of Technology.

The interview schedule allows objective data collection from the respondents and eliminates diversion from the topic, thus preventing bias or subjective judgments from the researcher. In addition, all the respondents are asked the same questions, which allows the objective comparison of results (Brink and Berndt 2010:153).

3.5.2.1 Advantages of Using Focus Groups Interviews

- Data uses respondents' own words thereby obtaining deeper levels of meaning and making important connections.
- Very flexible; can be used with wide range of topics, individuals, and settings.

3.5.2.2 Disadvantages of Using Focus Groups Interviews

- There is less control over the group; the facilitator is less able to control what information will be produced.
- Small numbers and convenience sampling severely limit ability to generalise to larger populations.

3.6 ANALYSIS OF DATA

As this study was a mixture of both quantitative and qualitative methodologies, the manner in which quantitative and qualitative data was analysed is discussed below:

3.6.1 Analysis of the quantitative data

The survey was collected and responses were coded according to table 3.5 above, captured on an excel spreadsheet, then analyzed using SPSS (Statistical Package for Social Science SPSS-17).

Data will be presented in the manner described below:

3.6.1.1 Descriptive Statistics

Descriptive statistics describes the organising and summarising of quantitative data. The analysis and interpretation of data were presented using descriptive statistics. According to Welman and Kruger (2005:242), descriptive statistics involve the description and summary of data, while inferential statistics involve the inferences that are drawn from the results. Ultimately, the results of statistical investigations can be represented graphically by means of bar charts or pie charts.

3.6.1.2 Frequency and Percentages

McGivern (2006:463) informs that a frequency count refers to the number of times a value occurs in the dataset and the number of respondents who give a particular answer. The percentages are used to simplify the data into a standard numerical range and allows easy comparability, (Kent, 2007:566).

3.6.1.3 Cronbach's Alpha

The Cronbach Alpha test was computed to measure the internal consistencies of the factors used in the questionnaire. According to the UCLA Academic Technology Services: 2002 (Bolarinwa 2015), the Cronbach's alpha measures how well a set of items measures a single one dimensional latent construct. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability.

3.6.2 Content Analysis

Qualitative data analysis is defined as “working with the data, organizing them, breaking them into manageable units, coding them, synthesizing them, and searching for patterns”, (Bogdan and Biklen,2003). To analysis qualitative data means to discover patterns, concepts, themes and meanings. The focus group interviews were first download from the digital recorder onto the computer. Thereafter, the interviews were transcribed into text.

The researcher then read and reread the transcripts while closely examining the words used by participants to describe their experiences, so as to condense the data and group commonalities. These statements were highlighted and notes recorded in the margin of each transcript. The researcher then reread the highlighted meaning statements, reviewed field notes and began grouping the similar statements.

The similar meaning statements were grouped together within each of the six focus groups. Themes were largely determined by using relevant direct quotes from the individual participants. Some of the direct quotes may include some grammatical errors; however, in an effort to retain the authenticity of the participants' words, they are presented as stated by the participants themselves.

Text is considered a rich source of data in qualitative studies and may be solicited by mail or in person (Burns and Grove 2003:377).

The process of content analysis is lengthy and may require the researcher to examine and re-examine the data to ensure that an in-depth analysis was done.

For instance, a characteristic that was perceived extremely important but performed poorly would be considered as a problematic area that management needed to address.

The data was analysed according to the guidelines proposed by Mouton (2001:103), the sequence of which is listed below:

- Preparation of the data.

The first part in the process of data collection is the preparation of data. The researcher began by describing the sample population, thereafter organising and transcribing the data. The researcher had to become familiar with the data. The data, derived from focus group interviews, was transcribed by the researcher.

- Coding of data and the establishing of themes.

Coding is the process by which the qualitative information is separated into categories, themes or dimensions. The coded data was then structured and organised into main themes as well as subthemes. (Braun and Clarke 2006:6).

Coding identifies patterns of meaning across datasets that provide an answer to the research questions being addressed. Patterns are identified through a rigorous process of data familiarisation, data coding and theme development.

- Finally the data is structured and interpreted into findings.

This section is to bring structure to the data and the final aim is to arrive at findings. The relevance and usefulness of the data was evaluated by the researcher according to the objectives of the study. The data that answers the research questions were regarded as relevant and of importance to the study.

The researcher used direct quotes from participants to facilitate an understanding of the true experience of the student's perceptions of the quality of support services. A literature review was done to investigate and test the findings.

3.7 VALIDITY AND RELIABILITY

The validity of an instrument is the degree to which an instrument measures what it is intended to measure (Polit, Beck and Hungler 2001:448). Content validity refers to the extent to which an instrument represents the factors to be studied. To achieve content validity, the survey questions included a variety of questions on quality and level of service delivery offered to mature age students.

Questions were based on information gathered during the literature review to ensure that they were representative of how mature age students perceive support service quality. Content validity was further ensured by consistency in administering the survey. All surveys were personally distributed to subjects by the researcher.

The questions were formulated in simple language for clarity and ease of understanding. Clear instructions were given to the participants. External validity was ensured. Burns and Grove (2003:270) refer to external validity as the extent to which study findings can be generalized beyond the sample used. All participants completed the survey and attended the focus group interviews. Generalizing the findings to all members of the population is therefore justified.

Triangulation will be used to enhance confidence in the research findings.

Triangulation may involve the use of different methods, especially observation and focus groups interviews, which forms the major data collection strategies for much qualitative research.

Triangulation may involve the use of a wide range of informants. Here individual viewpoints and experiences can be verified against others and, ultimately, a rich picture of those under scrutiny may be constructed.

A number of types of triangulation methods exist, four of which were identified by (Knafl and Breitmayer, 1989:210) and these have been applied to the study as explained in table below:

Table 3.7 Types of Triangulation

Four types of Triangulation		
No	Triangulation type	Application to the study
1	Theory Triangulation	Several theories, including Knowles Adult Learning theory and Zeithmal's GAPS model were used in this study.

2	Methodological Triangulation	The study is a mixed method study and makes use of both qualitative and quantitative methods.
3	Observe triangulation	Two observers were used to collect data. A research assistant and the researcher were tasked with observing focus group discussions, transcribing data and assisting with administration.
4	Data Triangulation	Multiple data sources were used. Firstly, an examination of all relevant studies was conducted from various sites. Secondly, a SERVQUAL adapted survey was administered to all participants. Thirdly, focus groups interviews were conducted with 30 mature aged students.

Knafel and Breitmayer, 1989

The next paragraph discusses measures taken to ensure trustworthiness and reliability as employed in this study. Trustworthiness of a study, according to De Vos (2005:345), refers to the belief that the research will reflect the truth.

According to Lincoln and Guba's (1985) constructs, the criteria below should be employed by the researcher to ensure trustworthiness:

- a) Credibility (in preference to internal validity);
- b) Transferability (in preference to external validity/generalisability);
- c) Dependability (in preference to reliability);
- d) Confirmability (in preference to objectivity).

Creswell (2008) recommended that at least two of these strategies be used when performing any qualitative research study.

The first principle is credibility, which deals with the focus of the research and confidence in how well data addresses the planned objectives (Polit, Beck and Hungler, 2001). The first question regarding credibility arises when making a decision about the focus of the study. Participants were chosen based on their relation to the study, Selecting participants with various experiences increases the possibility of shedding light on the research question from a variety of aspects. Choosing the most appropriate method for data collection and the amount of data is also important in establishing credibility. The amount of data necessary to answer a research question in a credible way varies depending on the complexity of the phenomena under study and the data quality. The current study's approach is to display participants' opinions based on

information obtained from the transcribed text. Another way was to seek agreement among co-researchers, experts and participants.

The second principle is transferability, which refers to ‘the degree to which the findings can be transferred to other settings’ (Polit, Beck and Hungler, 2001:717). The authors can give propositions about transferability, but it is the reader’s judgement to determine whether or not the findings are transferable to another context. A rich and strong presentation of the findings together with actual quotations will also enhance transferability.

Based on the information presented, this study meets the requirements of trustworthiness.

3.8 ANONYMITY AND CONFIDENTIALITY

A process of obtaining the candidate’s willingness to participate in the study was undertaken and an informed consent document was signed by all participants prior to commencing the study (Annexure A). The form clearly indicated the aim and objectives of the study. Participants were then verbally informed that they may withdraw from the study at any time and that the study will be completely voluntary.

3.9 ETHICAL CONSIDERATIONS

Written permission to conduct the study was requested from the Research Director of the Durban University of Technology (Annexure B). It is normal practice for researchers to negotiate access to organisations for research purposes through requesting permission from those in positions of authority, normally referred to as “gatekeepers” (Burgess, 1991:45)

Ethical considerations for focus groups are the same as for most other methods of social research. For example, when selecting and involving participants, researchers must ensure that full information about the purpose and uses of participants’ contributions is disclosed. Being honest and keeping participants informed about the expectations of the group and topic and not pressurising participants to speak, is good practice. A particular ethical issue to consider in the case of focus groups is the handling of sensitive material and confidentiality, given that there will always be more than one participant in the group. Participants were encouraged to keep confidential what they heard during the interviews and researchers have the responsibility to anonymise data from the group.

3.10 PILOT STUDY

The term 'pilot study' refers to a mini versions of a full scale study. It can also be used to pretest a particular research instrument such as questionnaires or an interview schedule. Social scientists use pilot studies in different ways and it can be referred to as a feasibility study. Pilot studies are small scale descriptions or trials completed in preparation for the major study. The benefit of conducting a pilot study is that it strengthens and gives advance warning about where the main research project could encounter problems or whether proposed methods or instruments are too complicated. (Polit, Beck and Hungler 2001:467)

The focus group questions proved to be a valid and reliable. The pilot focus group interview assisted in the conducting of a meaningful interview and also allowed the researcher to learn how to present an unthreatening environment for research participants during the focus group interview.

At the end of the focus group interview, attention-grabbing domains were elicited from the research participants by asking them the following questions; "Were there any other challenges that you faced?" and "Was there any support you received or would have liked to receive?" This validated the researcher's concern that mature part-time students required support from their higher education institute. The pilot study was a valuable exercise because it ratified the concerns of the researcher.

3.11 CONCLUSION

This chapter concludes with a discussion of the research styles used throughout the research to enhance the value of the research. This section displays the need to create a final research product while ensuring that the information is credible and methodologically sound. The conclusion drawn is that although qualitative research is different from quantitative scientific research, it can be rigorous and meaningful if care is taken to limit the subjectivity of the research and to ensure that structured and logical data collection and analysis is employed.

The next chapter describes the findings and analysis systems used to collect the data. Chapter 4 specifically deals with the analysis of the data.

CHAPTER 4 RESEARCH ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

In this chapter the results of the research study are presented. The data was collected and then processed in response to the problems identified in Chapter 1 of this dissertation.

This study therefore uses the literature as a framework to compile the research instrument for this study in order to further probe the extent to which higher education institutions engage in providing a quality support services to mature age Dental Assisting students. The overall objective of this study is to determine the extent to which the Durban University of Technology engages in providing a quality support service to mature age Dental Assisting students.

This chapter commences with a detailed analysis of the quantitative data (survey questionnaire) and the interpretations of the results. The analyses will present the statistics in the form of tables and graphs for the quantitative data collected. Thereafter the chapter will present the findings emanating from the thematic qualitative study (focus group interviews). The results will be presented based on the common themes indented in the literature review.

4.2 QUANTITATIVE ANALYSIS

Data analysis for this study was undertaken in two steps, firstly the preliminary quantitative data analysis and thereafter the main quantitative data analysis.

The preliminary analysis involved mainly descriptive statistics which were used to summarize the data, the demographic characteristics of the respondents were outlined in order to simplify the understanding of the data.

The main quantitative analysis was divided into themes based on the SERVQUAL survey which are illustrated below:

- Questions 1-4 – Tangibility
- Questions 5-9 – Reliability
- Questions 10-13 – Responsiveness
- Questions 14-17 – Assurance
- Questions 18-22 – Empathy

4.2.1 Reliability Statistics

Reliability was computed by taking several measurements on the same subjects. A reliability coefficient of 0.70 or higher is considered as acceptable.

The table below reflects the Cronbach's alpha score for all the items that constituted the survey.

Table 4.1 Cronbach's Alpha Score

	Number of items	Cronbach's Alpha	
		Expectation	Perception
Tangibles	4 of 4	0.920	0.950
Reliability	5 of 5	0.905	0.687
Responsiveness	4 of 4	0.941	0.602
Assurance	4 of 4	0.920	0.745
Empathy	5 of 5	0.844	0.728

The modified SERVQUAL items was assessed through the total reliability scale. The reliability scores in some items exceeds the recommended alpha value of 0.700. Looking at the reliability coefficients of all five dimensions, some dimensions have above 0.700. The responsiveness dimension however, has values below 0.7 and reliability has values below 0.7; amongst the reasons for this are the following:

- The items under each dimension seemed too similar.
- Few items used in a particular dimension.

The reliability value for this study is substantial considering the fact that the highest reliability that can be obtained is 1.0. This is an indication that the items of the five dimensions are accepted for analysis.

4.2.2 Factor Analysis

Factor analysis is a statistical technique whose main goal is data reduction.

To determine whether the scoring patterns per statement were significantly different, a single variable chi square test was done. The results are shown below.

Table 4.2 Chi Square Analysis

	Perception		Expectations	
	Chi Square	df	Chi square	df
Tangibles				
1. The DUT support services have modern-looking equipment	0.00	6	0.121	4
2 The physical facilities at all DUT support services units are visually appealing.	0.083	8	0.013	4
3 Staff who work in the DUT support services are professionally attired.	0.935	6	0.090	6
4 The physical environment of the DUT support services units are clean.	0.049	6	0.010	4
Reliability				
1. When DUT support services staff honour their promises timeously.	0.04	6	0.025	4
2. Staff is invested in solving the problems of a mature age student.	0.049	6	0.008	4
3 Support service staff perform the service efficiently.	0.668	4	0.030	4
4 DUT support service staff provide the service at the time they promise to do so.	0.670	4	0.031	4
5 DUT support service staff keeps records accurately	0.008	6	0.043	4
Responsiveness				
1 Staff makes information easily obtainable to the mature age students.	0.749	6	0.055	4
2 Staff provides prompt service to students	0.182	7	0.073	4
3 Staff is always willing to help students	0.018	4	0.000	4
4 Staff is never too busy to respond to students requests	0.270	6	0.003	4
Assurance				
1 The professionalism of staff in the DUT support service unit instils confidence in students.	0.01	4	0.034	4
2 Mature age students feel safe in their interactions with staff in the DUT support service unit.	0.00	4	0.087	4
3. All staff within the DUT support service unit are polite.	0.044	6	0.513	4
4 Staff from the support service has adequate knowledge to answer mature age students' queries.	0.155	6	0.553	4

Empathy				
1 DUT support service staff provides individual attention to mature age students.	0.017	4	0.300	6
2 Operating hours are convenient for the mature age students.	0.115	7	0.067	4
3 Staff provides personal services to mature age students.	0.003	7	0.052	4
4 Staff has their students' best interest at heart.	0.082	6	0.141	4
5 The staff understands the specific needs of the mature age students	0.035	6	0.434	4

4.2.2.1 Responses related to Perceptions

The participants were stratified according to race and as per table 4.2 the chi square perception values with the p value of less than 0.05 indicated a significant relation between the variables. Those which were above p value greater than 0.05 for example (T2, T3 and A4), indicate that there is no significant relationship between the variables.

4.2.2.2 Responses related to Expectations

The participants were stratified according to race and as per table 4.2 the chi square expectation values with the p value of less than 0.05 (T2, T4, A1 and R3) indicated a significant relation between the variables. Those which were above p value greater than 0.05 for example (E1, E2 and E5), indicate that there is no significant relationship between the variables.

4.3. PRELIMINARY QUANTITATIVE DATA ANALYSIS

The preliminary quantitative analysis includes all participants biographical profiles collected from the surveys. There are several software packages for the analysis of quantitative data, however, the researcher elected to use the Statistical Package for Social Sciences (SPSS) version 23.0 for analysis.

SPSS was used to create a spreadsheet to show at a glance the responses of all participants.

4.3.1 Biographic Profile of Participants

Participants were requested to provide biographical data. Annexure D depicts the biographical profile of the sample participants who participated in this research.

Of the 90 participants, twenty were married, while the remaining 36 were single and 34 were either divorced or widowed. Five participants had no dependents. All participants had no prior tertiary level education. Their poor academic qualifications had no influence on the fact that all participants were highly experienced in their relevant fields. All participants had over three years of experience.

Demographical information is closely tied to socio-economic information, and both are referred to as classification information. The aim of collecting the biographical data is to classify the respondents (Malhotra, 2010:350). In addition, the results obtained from collecting the classification information helped the researcher connect the literature to the results of the final study.

While it is obvious that each mature aged student has a profile which may be similar or different from others, there is no evidence to indicate that mature aged students should be regarded as a homogeneous group.

Mowes (2002) indicates that: "...distance learners do share broad demographic and situational similarities that have often provided the basis for profiles of the MA student in higher education."

The university, therefore, needs to ensure that there are avenues present for these two distant student groups to have interactions throughout their university routes. This partnership will encourage transfer of information and attitude among the mature age students and it will promote student success.

Biographical information from the study are elaborated on tables below:

Table 4.3 Age group of respondents.

		Frequency	Percent
Valid	18-29	13	14.5%
	30-39	49	54.5%
	40-49	22	24.5%
	50-59	6	6.5%
	Total	90	100.0

Age is a crucial factor in the differentiation of MA students from traditional students.

A way to measure respondents' views according to age was for the researcher to place them in categories of 4-5 year intervals. Classification of participants according to their age is indicated in table 4.3 above.

This is a normal representation of the average age of MA students, which is 35 years (Mowes 2002:135).

The table above shows that most of the students (54.5%) are aged between the 30-39 years, followed by those in the 40-49 and 18-29 age group. By all accounts, majority of the respondents fall into the adult learner category. None of the respondents fall below the 21 years age group, as the DUT mature age policy allows for a student above 21 years to be admitted according to age.

Table 4.4 Marital status and Years of Work Experience of participants.

		Frequency	Percent
Valid	Single	36	40%
	Married	20	23%
	Divorced, Widowed	34	37%
	Total	90	100.0

Table 4.5: Year of Work experience of participants.

		Frequency	Percent
Valid	1-10	71	79%
	11-20	16	18%
	21-30	2	2%
	31>	1	1%
	Total	90	100.0

From table 4.4 it is clear that 20% were married while 34% of the participants were either widowed or divorced, followed by 36% who were single. As most MA students study part-time and need to balance a range of responsibilities, conflicting commitments is a frequently cited problem. In many instances, studying will necessarily assume a lower priority than family and work commitments, particularly when unforeseen events intervene (Mowes 2002: 135). The findings are similar with that of Mowes in that as much as students have their priorities in relation to studying, family and life commitments take over and studies take a back seat. A criterion to qualify for MA registration into the dental assisting programme is to have a minimum of three years relevant work experience. Therefore since employment is a pre-requisite all students were employed prior to registration. At the time of this focus group interview, however, three students had lost their jobs and two were on maternity leave; nevertheless, they all attended their allocated focus group session.

Table 4.6 Race of participants.

		Frequency	Percent
Valid	African	47	52%
	Indian	37	41%
	White	6	7%
	Total	90	100.0

The majority of respondents (52%) were Black followed by Indians (41%) and 7% for Whites as Table 4.6 above depicts. The trend from the findings shows that most of the adults were from the previously disadvantaged groups.

The literature supports this as many of the students who enter universities through alternate entry are from previously disadvantaged backgrounds and in many cases were Blacks, Indians or Coloured students.

4.4. MAIN QUANTITATIVE ANALYSIS

Researchers such as Steenkamp (2014:95) mention that the SERVQUAL is an accepted tool to be used as a standard for assessing different dimensions of service quality. This tool has been shown to be reliable for a variety of service organizations.

Based on the line by line analysis of all the items, the perceptions of the participants were perceived as significantly negative as compared to student's expectations.

The participant's responses to the SERVQUAL survey are listed below, along with the mean and standard deviation.

4.4.1 Standard deviation of the SERVQUAL dimensions

The researcher used descriptive statistics mainly involving the mean and standard deviation in the data analysis. The mean is an average of the sum of all values (Salkind,2009:2).

In statistics and probability theory, standard deviation shows how much variation exists from the average (mean). A low standard deviation indicates that the data points tend to be very close to the mean; high standard deviation indicates that the data points are spread out over a large range of values (Barde 2012:114). According to the stats explained in the table 4.7 below, standard deviation for perceptions have a score of around 0.80 and standard deviation for expectations around 0.50. This indicates that all participants were in agreement regarding their expectations and the responses related to perceptions varied largely. The basic data collection and statistical calculations (mean and standard deviations) are the most important phases prior to the gap analysis. Therefore identifying the levels of all dimensions would assist in determining the Gap.

Table 4.7 Mean and Standard deviation per dimension

Overall (n=30)	Perceptions		Expectations	
	Mean	Standard Deviation	Mean	Standard Deviation
Tangibles	4.042	0.880	6.052	0.540
Reliability	4.022	0.702	6.122	0.485
Responsiveness	4.047	0.758	6.477	0.592
Assurance	3.897	0.814	6.172	0.522
Empathy	3.452	0.788	6.316	0.558

Reliability and Responsiveness perceptions have a low standard deviation which indicates that the students results overall are similar and their expectations show an even smaller gap in the variation. According to the data above in table 4.7 students are satisfied with the reliability and responsiveness areas within the university.

4.4.2 Service Delivery

Below is an item by item analysis of all the SERVQUAL questions stratified according to the participant's race.

The first SERVQUAL dimension supporting Service Quality (SQ) is Tangibles which reflect all physical facilities, environment cleanliness and professionalism of staff.

Table 4.8.1 The presence of innovative looking equipment.

Perceptions		Race			Total	Total Percentage
		African	Indian	White		
1. The DUT support services have modern-looking equipment.	Disagree	15	13	4	32	35%
	Neutral	7	21	0	28	31%
	Agree	24	3	2	29	33%
	Moderately Agree	1	0	0	1	1%
Total		47	37	6	90	100%

The overall perceptions of the equipment in the Dental Assisting course is mediocre according to 66% of the participants. They felt that equipment is not modern-looking while 34% feel view the equipment as-satisfactory. Since dental assisting is a practical course, the equipment is expected to be at the forefront of technology but are perceived not to be so.

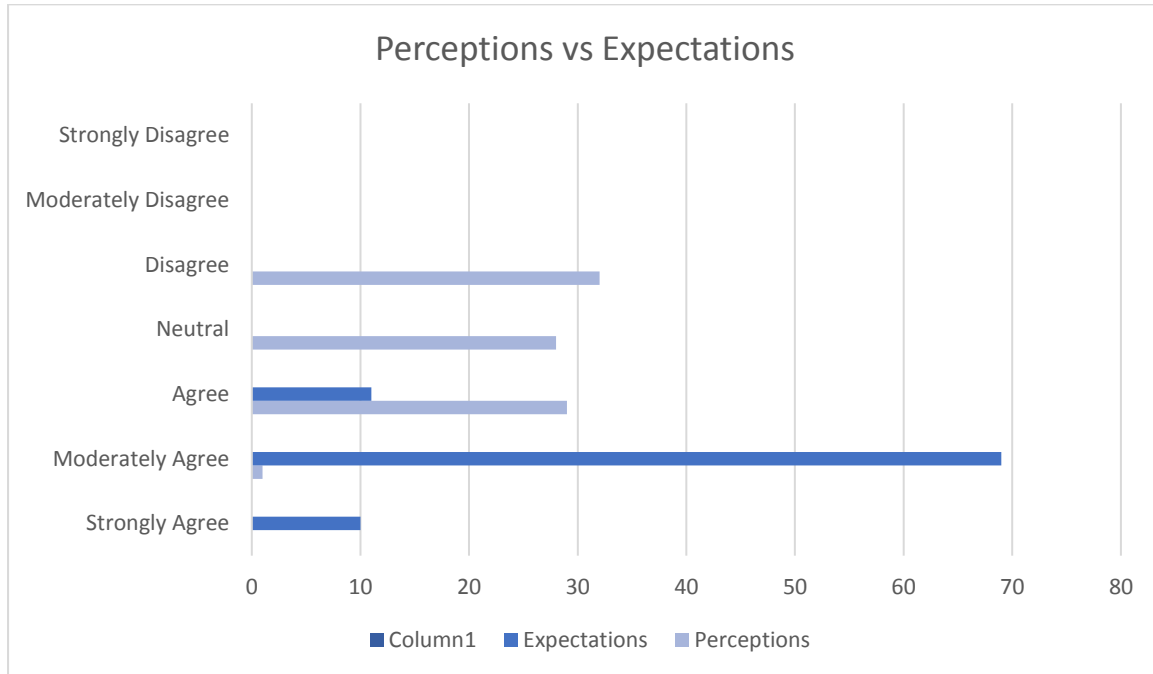
Table 4.8.2 The presence of innovative looking equipment.

Expectations		Race			Total	Total Percentage
		African	Indian	White		
1. The DUT support services have modern-looking equipment.	Agree	8	1	2	11	12%
	Moderately Agree	35	31	3	69	77%
	Strongly Agree	4	5	1	10	11%
Total		47	37	6	90	100%

All participants' responses fell within the "agree" to "strongly agree" bracket of the scale, therefore it is fair to accept that all participants would like to see better equipment. Since dental assisting is a practical course the equipment is expected to be at the fore front of technology.

The difference between student’s perceptions of Service Quality and their expectations of Service Quality

FIGURE 1.1 MODERN LOOKING EQUIPMENT



The above figure 1.1 shows that students would like better looking equipment within the universities support service units, as their expectations are much higher than their perceptions.

Table 4.9.1 The physical facilities at all DUT support services units are visually appealing

Perceptions		Race			Total	Total Percentage
		African	Indian	White		
2. The physical facilities at all DUT support services units are visually appealing.	Moderately Disagree	0	1	0	1	1%
	Disagree	14	13	4	31	35%
	Neutral	9	15	0	24	26%
	Agree	23	8	2	33	37%
	Moderately Agree	1	0	0	1	1%
Total		47	37	6	90	100%

On average, results showed that 36% of the participants were dissatisfied with the facilities, while a similar 38% were satisfied. A medium group of participants of 26% were uncertain and fell into the neutral category. After Parasuraman, Zeithaml and Berry (1985) determined the

importance of the physical aspect of service quality, this dimension was found to be more imperative in the area of the banking services than in any other service.

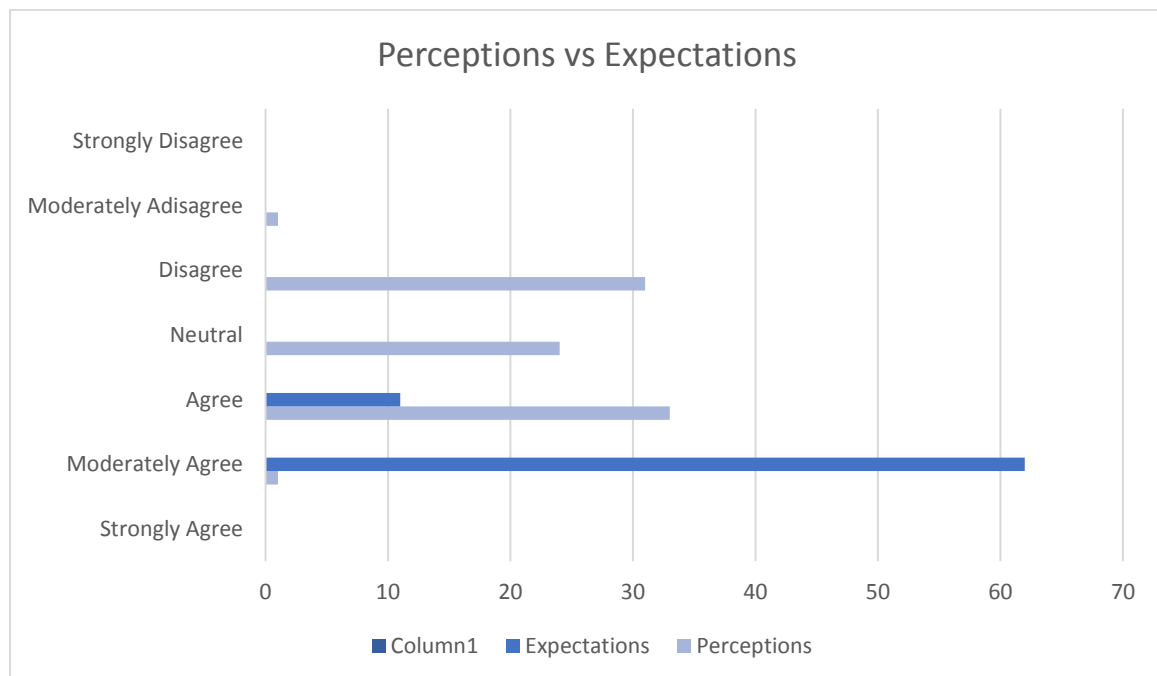
.Table 4.9.2 The physical facilities at all DUT support services units are visually appealing

Expectations	Race			Total	Total	
	African	Indian	White		Percentage	
2. The physical facilities at all DUT support services units are visually appealing.	Agree	8	1	2	11	12%
	Moderately Agree	35	24	3	62	69%
	Strongly Agree	4	12	1	17	19%
Total	47	37	6	90	100%	

All participants responses fell within the “agree 12%” to “strongly agree 19%” with 69% moderately agreeing that the facilities need to be improved. Therefore it is fair to declare that all participants expect superior facilities which need to be visually attractive.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.2 UNITS ARE VISUALLY APPEALING.



The above figure 1.2 shows that students expect more visually appealing facilities within the universities support service units, as their expectations are much higher than their perceptions.

Table 4.10.1 Staff who work in the DUT support services are professionally attired

Perceptions	Race				Total	
	African	Indian	White	Total	Percentage	
3. Staff who work in the DUT support services are professionally attired.	Moderately Disagree	1	0	0	1	1%
	Disagree	15	15	3	33	37%
	Neutral	9	8	1	18	20%
	Agree	21	14	2	37	41%
	Moderately Agree	1	0	0	1	1%
Total		47	37	6	90	100%

A fair number of participants (38%) viewed staff as not being professionally dressed, while 42% felt staff were of professional stature. The remaining (20%) percent of the participants chose the neutral option which does not give the researcher a clear understanding of the participants' actual perceptions.

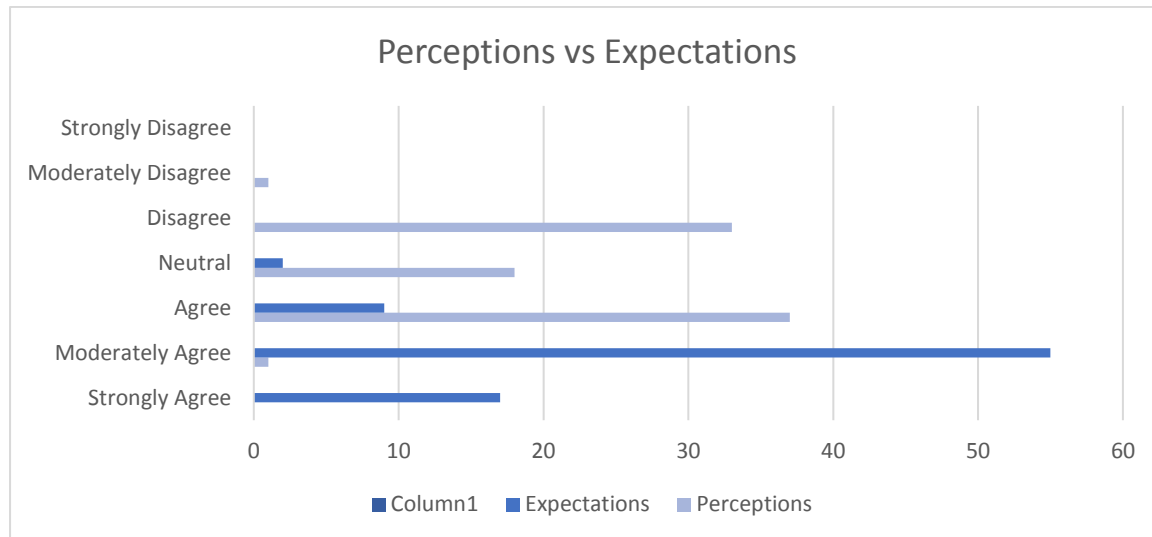
Table 4.10.2 Staff who work in the DUT support services are professionally attired.

Expectations	Race				Total	
	African	Indian	White	Total	Percentage	
3. Staff who work in the DUT support services are professionally attired..	Neutral	1	0	1	2	2%
	Agree	6	2	1	9	10%
	Moderately Agree	28	24	3	55	66%
	Strongly Agree	5	11	1	17	22%
Total		40	37	6	83	100%

All participants' responses fell within the "Agree 10%", "Moderately Agree 66%", "Strongly Agree 22%" categories, suggesting that the staff attire needs to be improved. Therefore it is fair to declare that all participants expect superior apparel from staff. Students felt that staff are expected to dress more professionally.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.3 STAFF ARE PROFESSIONALLY ATTIRED.



The above figure 1.3 shows that students expect staff to be dressed in a more professional manner while working in support service units; their expectations are much higher than their perceptions. This means that the university needs to ensure that support service staff are dressed professionally during their working hours.

Table 4.11.1 The physical environment of the DUT support services units are clean.

Perceptions	Race			Total	Total	
	African	Indian	White		Percentage	
4. The physical environment of the DUT support services units are clean.	Disagree	12	10	3	25	28%
	Neutral	13	16	1	30	33%
	Agree	21	11	2	34	38%
	Moderately Agree	1	0	0	1	1%
Total	47	37	6	90	100%	

The positive image projected by the campus through the attractiveness of its surroundings and environmental space create a visually appealing effect on its customers (students). Perceptions range from a low 28% disagreeing that the units are not clean, to 38% agreeing that the environment is neat. The remaining 33% percent of the participants chose the neutral option which does not give the researcher a clear understanding of the participant’s actual perceptions.

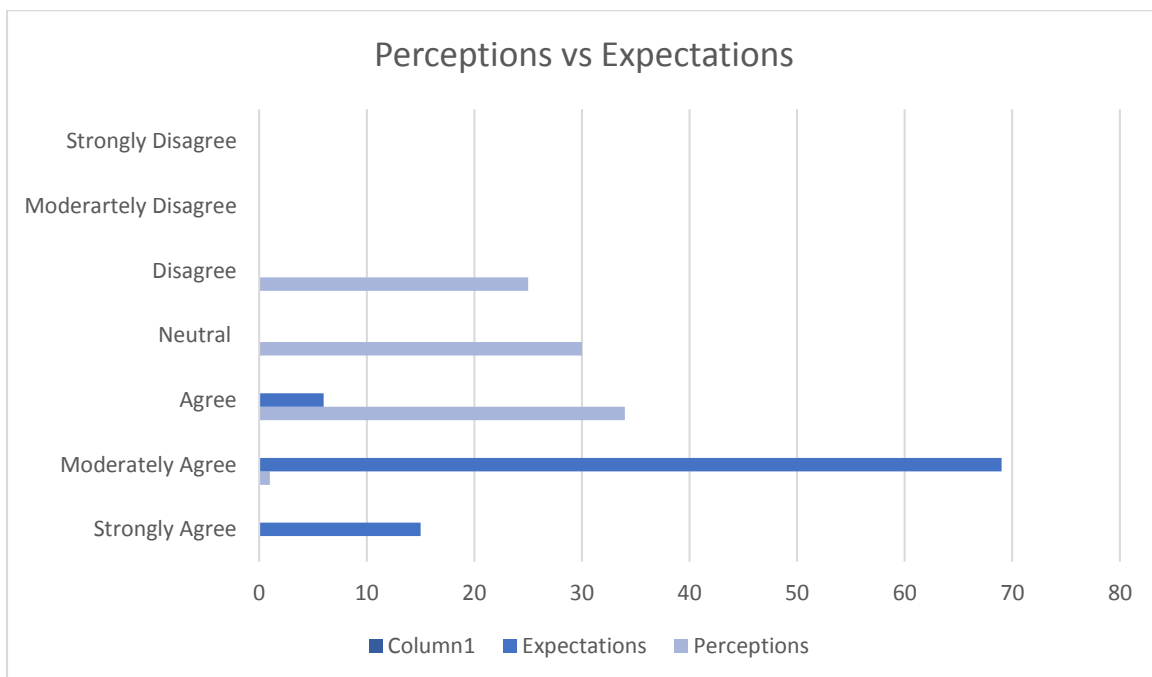
Table 4.11.2 The physical environment of the DUT support services units are clean.

Expectations		Race			Total	Total
		African	Indian	White		Percentage
4. The physical environment of the DUT support services units are clean.	Agree	4	1	1	6	7%
	Moderately Agree	41	24	4	69	76%
	Strongly Agree	2	12	1	15	17%
Total		47	37	6	90	100%

All participants responses fell within the “Agree 7”, “Moderately Agree 76 %”, “Strongly Agree 17%” that the support service units needs to be improved.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.4 CLEANLINESS OF SUPPORT UNITS



The above figure 1.4 shows that students expect the university’s environment to be clean and neat, as their expectations are high. This means that the university needs to ensure that maintenance and cleaning agencies are monitored to ensure that the environment around the university is always clean.

The second SERVQUAL dimension supporting service quality is staffs' ability to complete services on time and to be invested in solving the problems of mature age students.

Table 4.12.1 DUT support services staff honour their promises timeously

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
5. DUT support services staff honour their promises timeously.	Moderately Disagree	1	0	0	1	1%
	Disagree	3	11	1	15	17%
	Neutral	7	13	3	23	25%
	Agree	36	13	2	51	57%
Total		47	37	6	90	100%

A common response from participants 57% indicated that they were satisfied with the ability of staff to keep to their promises. Very few (17%) were dissatisfied and disagreed that the staff showed the ability to keep their promises.

Table 4.12.2 DUT support services staff honour their promises timeously

Expectations		Race			Total	Total
		African	Indian	White		Percentage
5. When DUT support services staff honour their promises timeously	Agree	4	1	1	6	7%
	Moderately Agree	40	24	4	68	76%
	Strongly Agree	3	12	1	16	17%
Total		47	37	6	90	100%

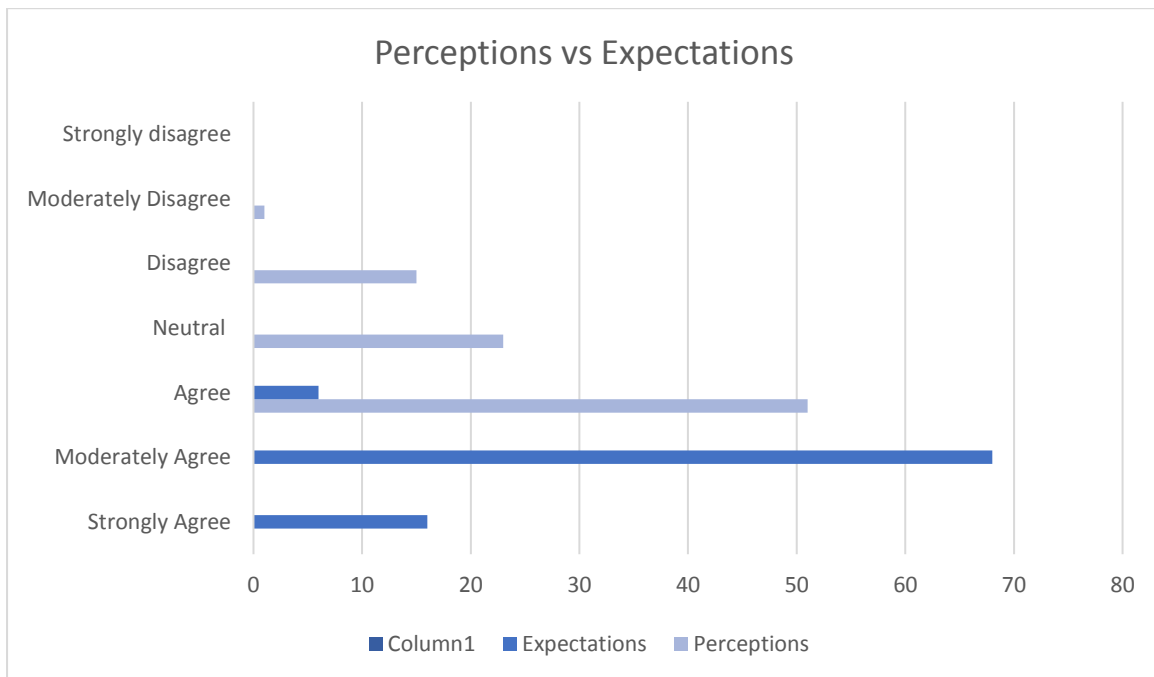
All participants responses fell within the “Agree 7”, “Moderately Agree 76 %”, “Strongly Agree 17 %” that the support service staff ability to keep to promises needs to be improved. Therefore it is fair to declare that all participants expect better promise keeping approaches from support service staff.

Failure to be reliable and do what is right leads to broken promises. When graded with other dimensions (Parasuraman, Zeithaml and Berry 1988), found that the reliability dimension was

steadily “the most dangerous dimension” of all the five dimensions. This means that management needs to take extra measures when dealing with reliability issues. In this study, however, the researcher found that students were satisfied with the staffs ability to complete tasks within the promised times. Therefore this shows that the university is performing well in this area, nevertheless there is always area for improvement.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.5 STAFFS PROMISES AND DELIVERY



The above figure 1.5 shows that students expect staff to keep to their undertakings, as their expectations are much higher than their perceptions. This means that the university needs to ensure that staff are trained and evaluated on a regular bases so that they perform according to standards.

Table 4.13.1 DUT support service staff is invested in solving the problems of mature age students.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
6. DUT support service staff is invested in solving the problems of mature age students	Moderately Disagree	1	0	0	1	1%
	Disagree	2	11	2	15	17%
	Neutral	34	21	4	59	65%
	Agree	10	5	0	15	17%
Total		47	37	6	90	100%

Responses were not clear as 17% agreed while the same number of participants also disagreed and the balance of the participants were unsure, leading them to choose the neutral option.

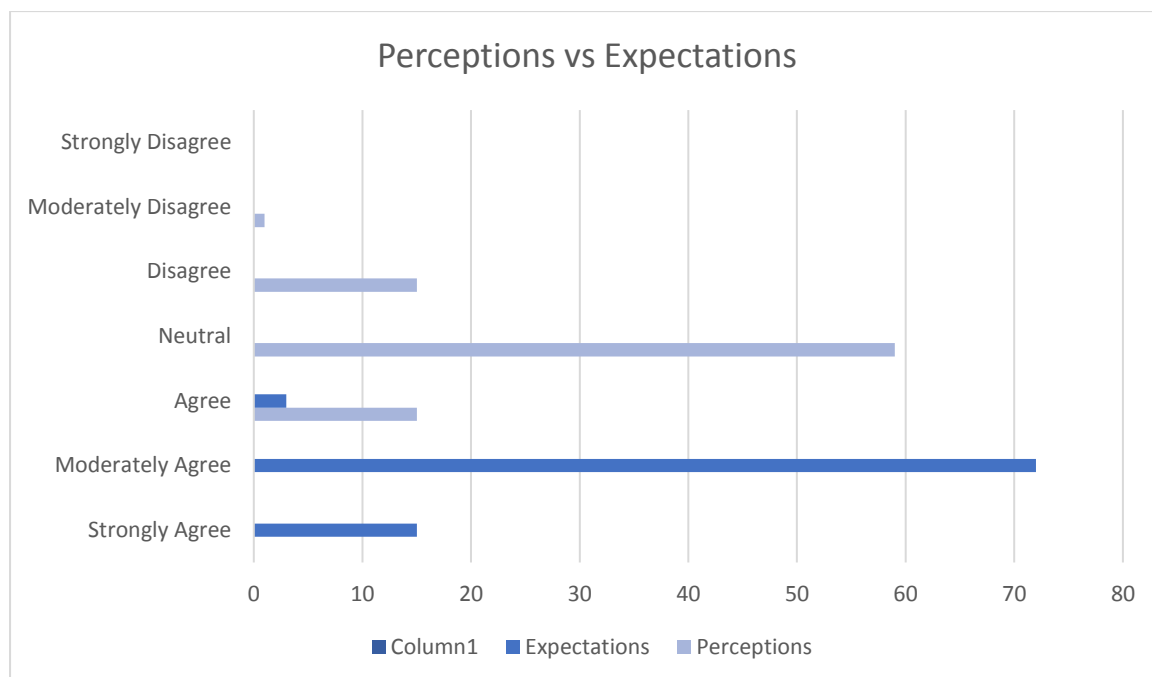
Table 4.13.2 DUT support service staff is invested in solving the problems of mature age students.

Expectations		Race			Total	Total
		African	Indian	White		Percentage
6. DUT support service staff is invested in solving the problems of mature age students	Agree	3	0	0	3	3%
	Moderately Agree	42	25	5	72	80%
	Strongly Agree	2	12	1	15	17%
Total		47	37	6	90	100%

All participants' responses fell within the "Agree 3", "Moderately Agree 80%" and "Strongly Agree 17%" categories, which indicates that the support service staff ability to show interest needs to be improved. Therefore it is fair to declare that all participants expect better problem solving approaches from support service staff.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.6 STAFFS ABILITY TO SHOW A SINCERE INTEREST



The above figure 1.6 shows that students expect staff to show a sincere interest in their needs and problems, as their expectations are much higher than their perceptions. Many students could not indicate an option which therefore resulted in a neutral choice. This means that the university needs to ensure that staff and students complete evaluations to determine the satisfaction level of both students and staff.

Table 4.14.1 Support service staff perform the service efficiently.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
7. Support service staff performs the service efficiently.	Disagree	30	21	3	54	60%
	Neutral	12	14	2	28	31%
	Agree	5	2	1	8	9%
Total		47	37	6	90	100%

A large number of participants were unhappy with this item and perceptions ranged from 60%, indicating that staff do not perform the service correctly the first time. A lesser number of participants 9% felt that staff perform the service correct the first time.

Support service staff must have the suitable understandings and skills to prepare reliable and good-quality study materials for students. Tutors and administrative staff should also have technical skills such as computer skills and interpersonal skills.

Table 4.14.2 Support service staff performs the service efficiently.

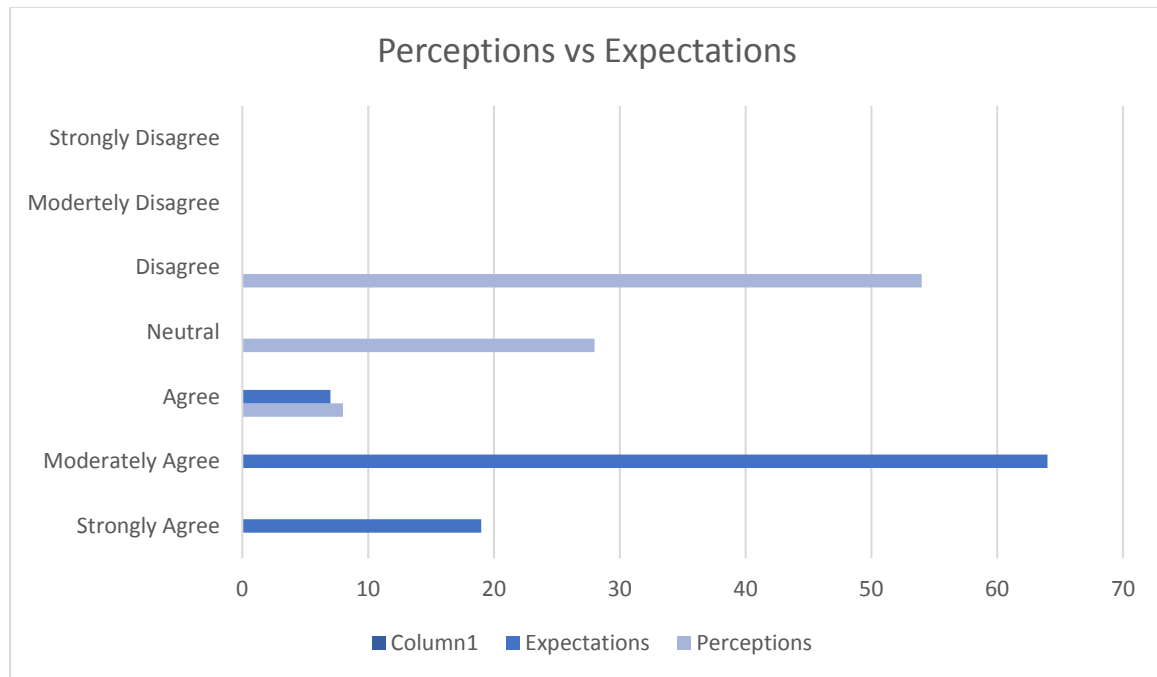
Expectations		Race			Total	Total
		African	Indian	White		Percentage
7. Support service staff performs the efficiently.	Agree	6	0	1	7	8%
	Moderately Agree	36	25	3	64	71%
	Strongly Agree	5	12	2	19	21%
Total		47	37	6	90	100%

All participants' responses fell within the "Agree 8%", "Moderately agree 71%" and "Strongly Agree 21 %" which indicate that the support service staff efficiency in getting the service correct the first time needs to be improved. Therefore it is fair to declare that all participants expect better service delivery approaches from support service staff.

The entire sample agreed that this aspect of service quality should be improved.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.7 STAFF PERFORM THE SERVICE EFFICIENTLY



The above figure 1.7 shows that students expects staff to execute the service correctly the first time, as their expectations are much higher than their perceptions. This means that the university needs to ensure that staff are trained on an ongoing bases so that they perform accordingly.

Table 4.15.1 DUT support service staff provide the service at the time they promise to do so.

Perceptions		Race			Total	Total Percentage
		African	Indian	White		
8. DUT support service staff provide the service at the time they promise to do so.	Disagree	30	19	3	52	58%
	Neutral	12	10	2	24	26%
	Agree	5	8	1	14	16%
Total		47	37	6	90	100%

The majority of participants (58%) were of the opinion that the support service units does not provide services at the times they promise to do so, while 16% believed that the support service units were efficient in providing services at the promised time. It should be noted that student growth and student accomplishment occur as a result of thoughtful and carefully structured

developmental programmes and support initiatives on the part of those who have been entrusted with this responsibility at our higher education institutions.

Table 4.15.2 DUT support service staff provides the service at the time they promise to do so.

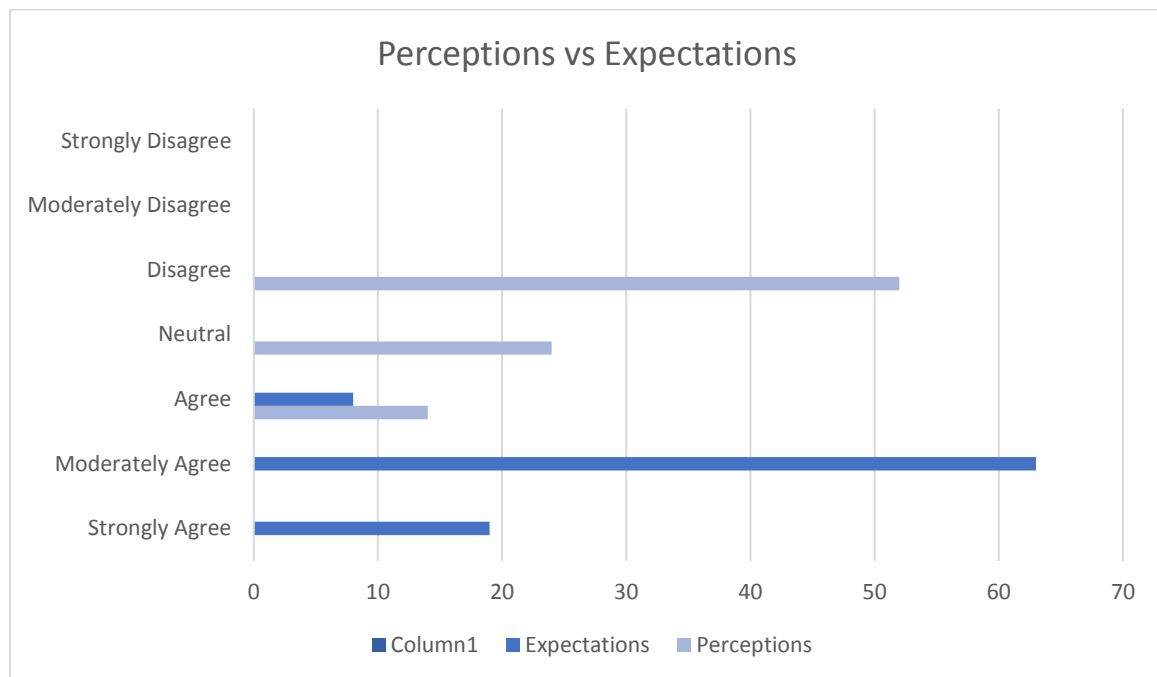
Expectations	Race				Total	Total Percentage
	African	Indian	White	Total		
8. DUT support service staff provide the service at the time they promise to do so.	Agree	7	1	0	8	9%
	Moderately Agree	35	25	3	63	70%
	Strongly Agree	5	11	3	19	21%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 9 %”, “Moderately Agree 70%”and “Strongly Agree 21 %” categories, which indicates that the support service staff ability to provide the expected service at the promised times needs to be improved. Therefore it is fair to declare that all participants expect efficient provision of services from support staff at the promised times

The nature and extent of student development and success depends largely on the measure to which student services practitioners critically reflect upon and consistently review the assumptions, content, delivery and appropriateness of student development programmes, support structures, services and initiatives.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.8 STAFF PROVIDES THE SERVICE AT THE PROMISED TIME



The above figure 1.8 shows that students expect the support service staff to provide the required services at the promised times, as their expectations are high. This means that the university needs to ensure that operating hours for the support service units are convenient for students.

Table 4.16.1 DUT support service staff keeps records accurately

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
9. DUT support service staff keeps records accurately.	Disagree	6	3	1	10	11%
	Neutral	7	0	3	10	11%
	Agree	33	34	2	69	77%
	Moderately Agree	1	0	0	1	1%
Total		47	37	6	90	100%

An area to highlight is the staff ability to keep accurate information, which came out as a high achieving area and perceptions were very high.

The participants (77%) perceptions of the support service staff’s ability to keep accurate records are perceived to be high. Only 11% were of the opinion that support service staff do not keep accurate records.

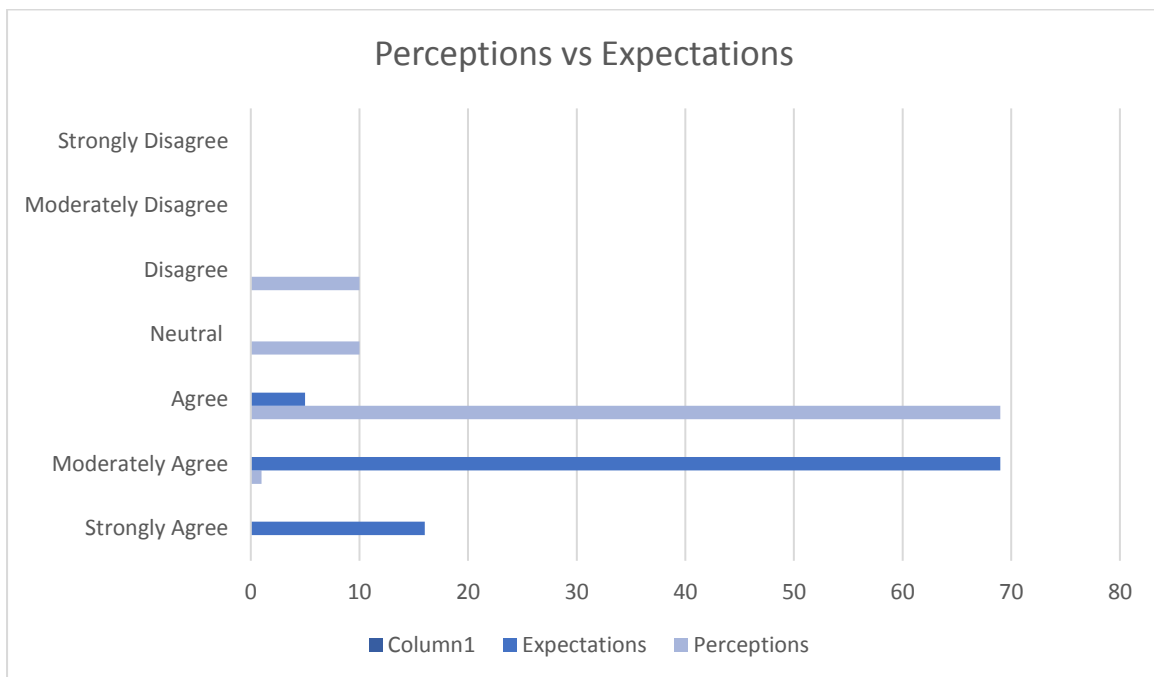
Table 4.16.2 DUT support service staff keeps records accurately

Expectations		Race			Total	Total
		African	Indian	White		Percentage
9. DUT support service staff keeps records accurately.	Agree	4	0	1	5	5%
	Moderately Agree	39	27	3	69	77%
	Strongly Agree	4	10	2	16	18%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 5%”, “Moderately Agree 77%”and “Strongly Agree 18%” categories, which indicates that the support service staff ability to keep accurate records needs to be improved.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.9 STAFF KEEP RECORDS ACCURATELY.



The above figure 1.9 shows that students expect staff to keep accurate records at all times, as their expectations are slightly higher than their perceptions. This means that the university needs to ensure that records are kept safely and are accurate.

The third SERVQUAL dimension supporting service quality is responsiveness and this includes staff’s willingness to help students and to assist by making information easily obtainable.

Table 4.17.1 Staff makes information easily obtainable for the mature age students.

Perceptions				Race			Total	Total
				African	Indian	White		Percentage
10. Staff makes information easily obtainable for the mature age students.	Disagree	35	32	5	72	80%		
	Neutral	5	2	1	8	9%		
	Agree	6	3	0	9	10%		
	Moderately Agree	1	0	0	1	1%		
Total				47	37	6	90	100%

The results from the participants’ (80%) on their perceptions of the support service staff’s ability to make information available for mature aged students was negative. Only 10% were happy and agreed that support service staff make information available.

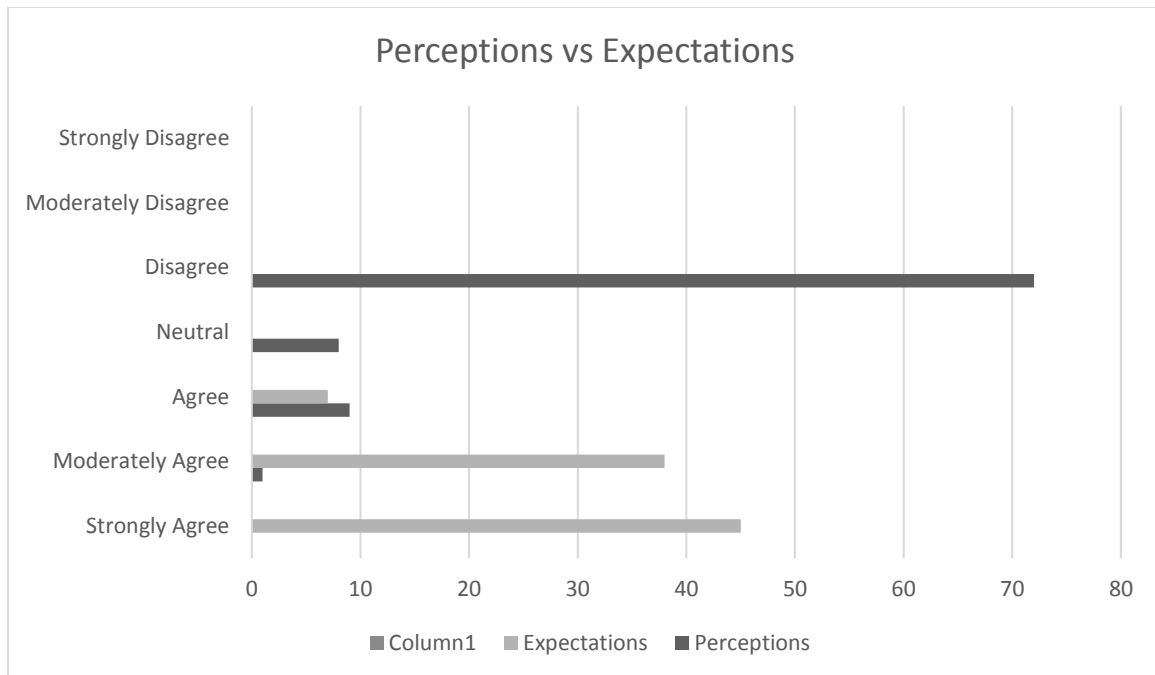
Table 4.17.2 Staff makes information easily obtainable by the mature age students.

Expectations				Race			Total	Total
				African	Indian	White		Percentage
10. Staff makes information easily obtainable by the mature age students.	Agree	3	3	1	7	8%		
	Moderately Agree	14	22	2	38	42%		
	Strongly Agree	30	12	3	45	50%		
Total				47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 8%”, “Moderately Agree 42%”and “Strongly Agree 50%” categories, which indicated that the support service staff ability to make information obtainable for mature aged students needs to be improved. Therefore it is fair to declare that all participants expect information to be easily obtainable from support service staff.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.10 INFORMATION IS EASILY OBTAINABLE



The above figure 1.10 shows that students’ perceptions were very high and it is assumed that staff currently does not make information easily available for mature- aged students. This means that all participants expect information to be easily obtainable from support service staff.

Table 4.18.1 Staff gives prompt service to students.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
11. Staff gives prompt service to students.	Moderately Disagree	0	1	0	1	1%
	Disagree	8	3	3	14	17%
	Neutral	31	23	3	57	61%
	Agree	7	10	0	17	20%
	Moderately Agree	1	0	0	1	1%
Total		47	37	6	90	100%

Responses were not clear as 17% disagreed while 20% agreed and the balance of the participants (63%) were unsure and therefore chose the neutral option.

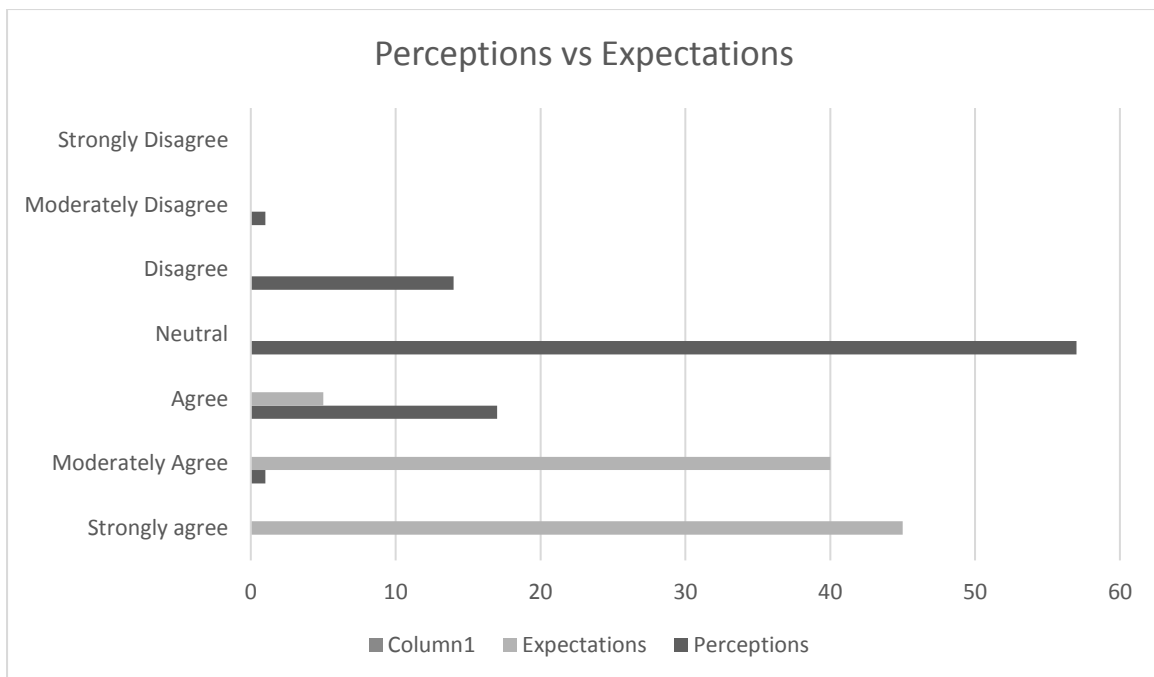
Table 4.18.2 Staff gives prompt service to students

Expectations		Race			Total	Total
		African	Indian	White		Percentage
11. Staff gives prompt service to students.	Agree	2	3	0	5	6%
	Moderately Agree	15	22	3	40	44%
	Strongly Agree	30	12	3	45	50%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 6%”, “Moderately Agree 44%”and “Strongly Agree 50%” categories, which indicated that the ability of support service staff to deliver prompt service to students, needs to be improved. Therefore it is fair to declare that all participants expect support service staff to offer quick services.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.11 STAFF GIVES PROMPT SERVICE TO STUDENTS



The above figure 1.11 shows that students’ perceptions were very high, which indicated that the support service staff ability to give students prompt service is of a satisfactory level. Their perceptions are very high on the neutral scale which also indicates that students were uncertain. Overall this means that all participants expect support service staff to give them prompt attention.

Table 4.19.1 Staff is always willing to help students.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
12. Staff is always willing to help students.	Disagree	11	1	2	14	16%
	Neutral	5	4	2	11	12%
	Agree	31	32	2	65	72%
Total		47	37	6	90	100%

A large number of participants (72%) agreed that support service staff are always willing to assist students. A small minority 16% disagreed and 12% were uncertain.

In this study, attributes to be measured include support service staff’s willingness to help students and to provide services.

Table 4.19.2 Staff is always willing to help students

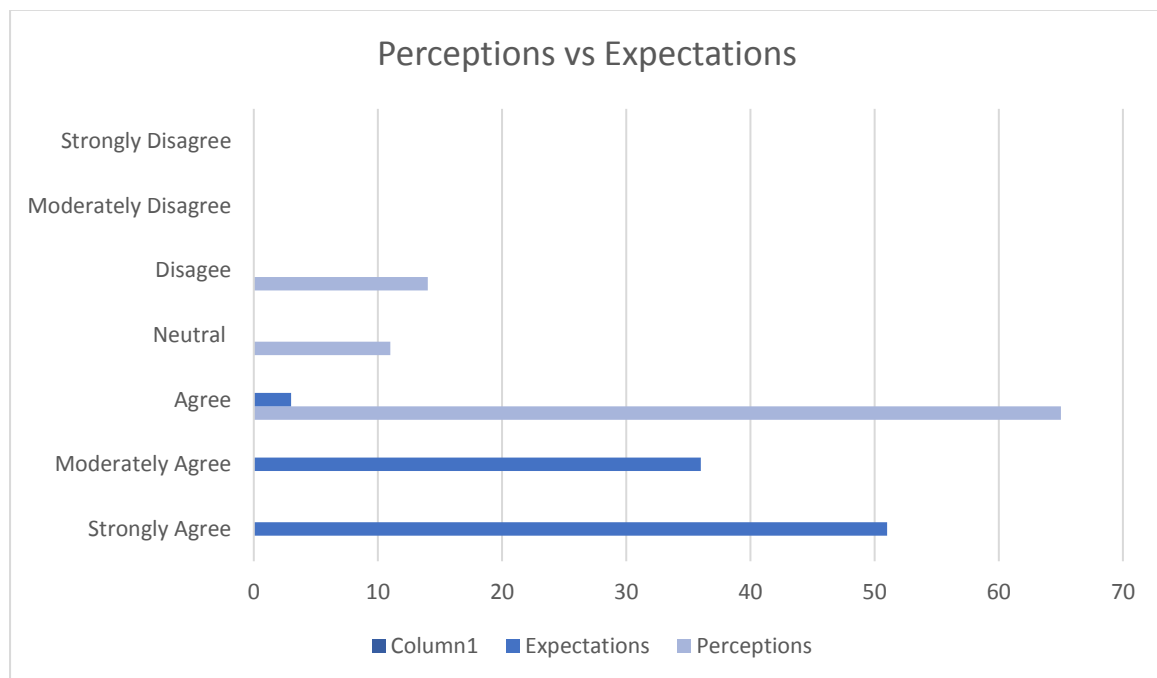
Expectations		Race			Total	Total
		African	Indian	White		Percentage
12. Staff is always willing to help students.	Agree	0	2	1	3	3%
	Moderately Agree	11	23	2	36	40%
	Strongly Agree	36	12	3	51	57%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 3%”, “Moderately Agree 40%”and “Strongly Agree 57%” categories, which indicated that the support service staff willingness to assist students needs to be improved. Therefore it is fair to declare that all participants expect support service staff to always be willing to assist.

Participant’s expectations regarding the willingness of staff to help and their ability to assist with request at all times are expected to be very high.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.12 STAFF IS ALWAYS WILLING TO HELP



The above figure 1.12 shows that students’ perceptions were very high which indicated that the support service staff are always willing to help. Overall, this means that all participants expect support service staff to always be available and willing to assist.

Table 4.20.1 Staff is never too busy to respond to students requests

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
13. Staff is never too busy to respond to students requests.	Moderately Disagree	0	2	0	2	2%
	Disagree	10	10	3	23	26%
	Neutral	10	3	1	14	16%
	Agree	27	22	2	51	56%
Total		47	37	6	90	100%

A large number of participants (56%) agreed that support service staff are never too busy to respond to their needs. A minority 26% disagreed and 16% were uncertain. This indicates that overall, students were satisfied with the capacity of support services staff to always respond to their requests.

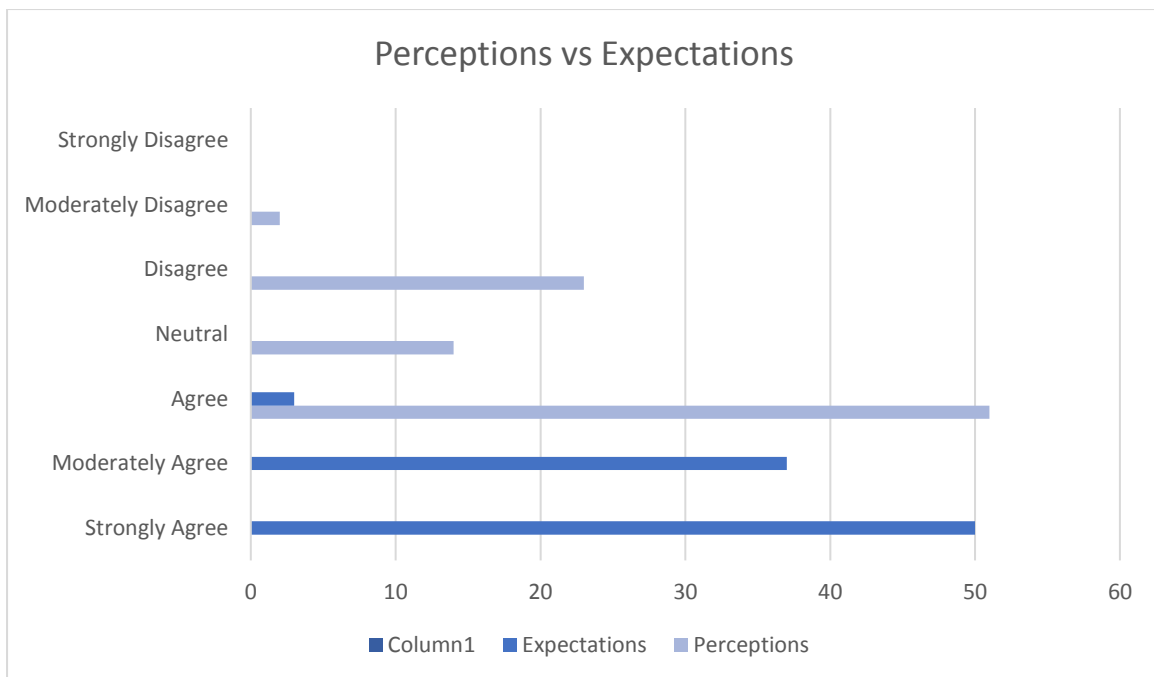
Table 4.20.2 Staff is never too busy to respond to student requests

Expectations		Race			Total	Total
		African	Indian	White		Percentage
13. Staff is never too busy to respond to students requests.	Agree	3	0	0	3	3%
	Moderately Agree	11	24	2	37	41%
	Strongly Agree	33	13	4	50	56%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 3%”, “Moderately Agree 41%”and “Strongly Agree 56%” categories, indicating that the willingness of the support service staff to assist students needs to be improved. This highlights that that there is always room for improvements.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.13 STAFF IS NEVER TOO BUSY TO RESPOND TO STUDENTS



The above figure 1.13 shows that student perceptions were very high, which indicated that the support service staff were never too busy to respond to students. However, a large number of students also indicated high levels of expectations ,indicating that overall participants expect support service staff to always respond to their needs.

The fourth SERVQUAL dimension supporting service quality relates to assurance which covers the safety of student-interaction with support service staff, the knowledge of staff to deal with requests, and politeness of staff.

Table 4.20.1 Professionalism of staff in the DUT support service unit instils confidence in students

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
14. Professionalism of staff in the DUT support service unit instils confidence in students.	Disagree	2	13	3	18	20%
	Neutral	30	12	1	43	48%
	Agree	15	12	2	29	32%
Total		47	37	6	90	100%

A small number of participants (32%) agreed that support service staff does instill confidence in students. In addition, a small minority (20%) disagreed and a large percentage (48%) was uncertain. This indicates that overall, students were satisfied with the behaviour of support services which instils confidence in students.

Table 4.20.2 Professionalism of staff in the DUT support service unit instils confidence in students

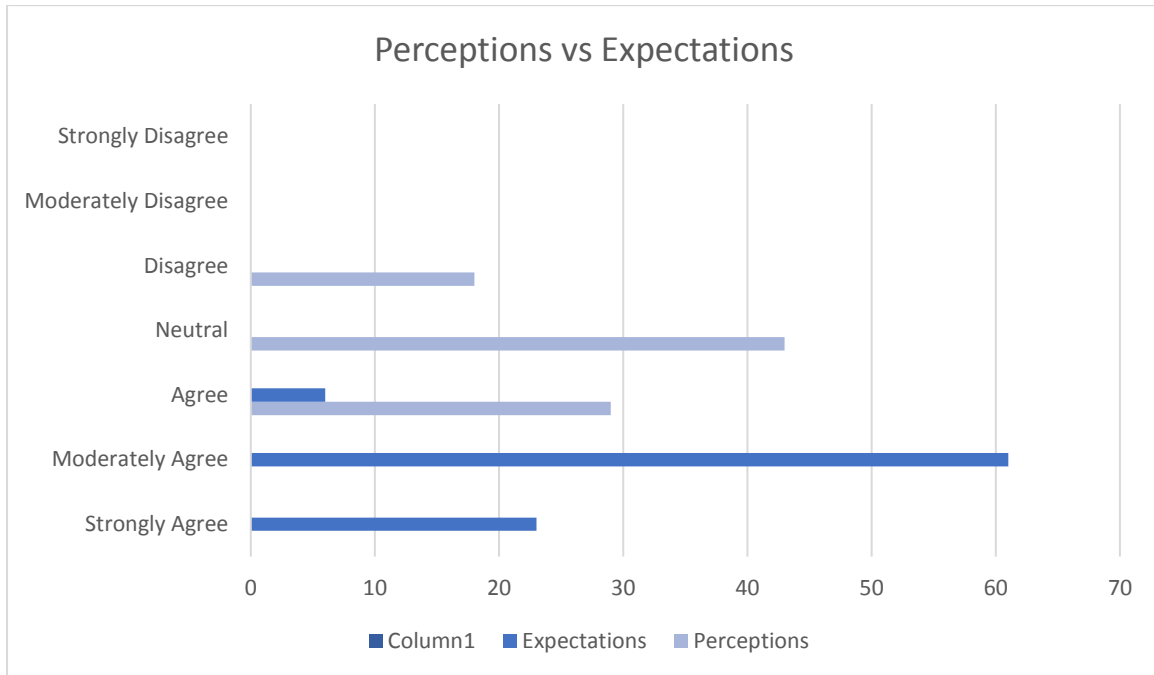
Expectations		Race			Total	Total
		African	Indian	White		Percentage
14. Professionalism of staff in the DUT support service unit instils confidence in students.	Agree	5	0	1	6	7%
	Moderately Agree	28	31	2	61	68%
	Strongly Agree	14	6	3	23	25%
Total		47	37	6	90	100%

The entire group of participants' responses fell within the "Agree 7%", "Moderately Agree 68%" and "Strongly Agree 25%" categories, which indicated that the ability of support service staff to instill confidence needs to be improved. Therefore it is fair to declare that all

participants expect support service staff to display behaviour which instills confidence in students.

The difference between student perceptions of SQ and their expectations of SQ

FIGURE 1.14 THE PROFESSIONAL BEHAVIOUR OF STAFF INSTILLS CONFIDENCE IN STUDENTS.



The above figure 1.14 shows that students expect staff to behave in a way that instills confidence in the students, as their expectations are slightly higher than their perceptions. This means that the university needs to ensure that staff always adhere to good behavior, which in turn will instill confidence in its students.

Table 4.21.1 Mature age students feel safe in their interactions with staff of the DUT support service unit.

Perceptions		Race			Total	Total Percentage
		African	Indian	White		
15. Mature age students feel safe in their interactions with staff of the DUT support service unit.	Disagree	5	12	4	21	23%
	Neutral	32	8	1	41	46%
	Agree	10	17	1	28	31%
Total		47	37	6	90	100%

A small number of participants (31%) agreed that they feel safe in their interactions with support service staff. In addition, a small minority (23%) disagreed and a large percent (46%) were uncertain. This indicates that overall students felt safe in their interactions with the support service staff.

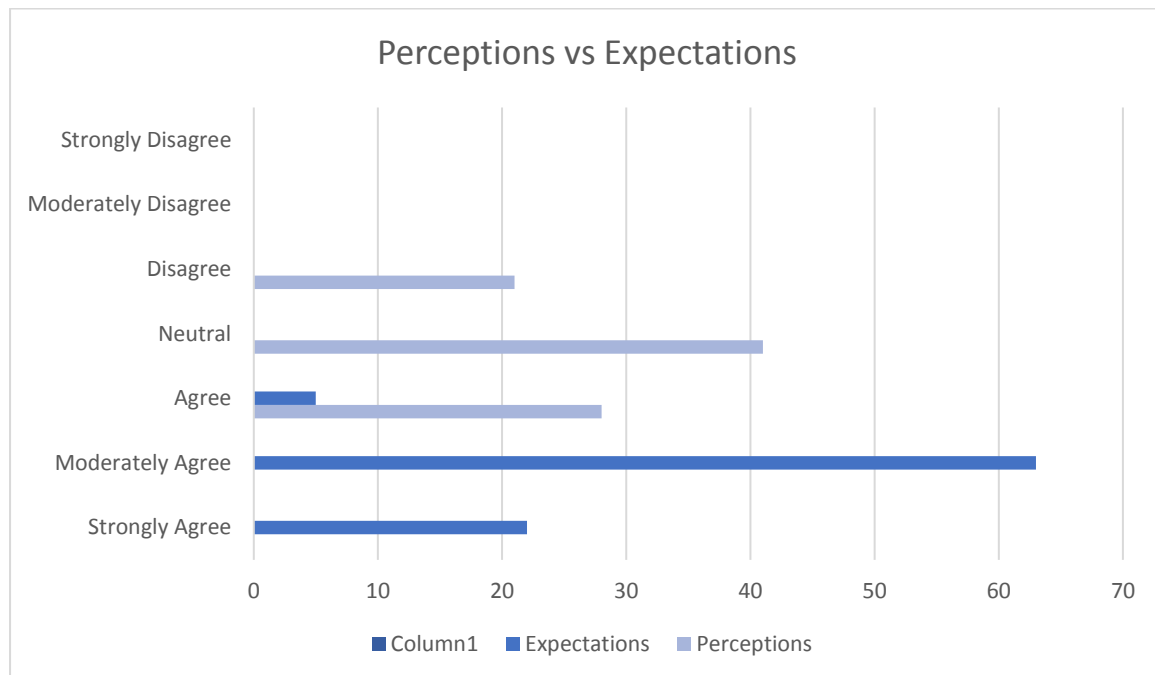
Table 4.21.2 Mature age students feel safe in their interactions with staff of the DUT support service unit

Expectations		Race			Total	Total Percentage
		African	Indian	White		
15. Mature age students feel safe in their interactions with staff of the DUT support service unit.	Agree	4	0	1	5	6%
	Moderately Agree	31	30	2	63	70%
	Strongly Agree	12	7	3	22	24%
Total		47	37	6	90	100%

The entire group of participants' responses fell within the "Agree 6%", "Moderately Agree 70%" and "Strongly Agree 24%" categories, which indicated that the support service staff needs to improve their interactions with mature aged students and to ensure that students are made to feel safe. Therefore it is fair to declare that all participants expect support service staff to display behaviour which promotes safety of students.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.15 MATURE AGE STUDENTS FEEL SAFE IN THEIR INTERACTIONS WITH STAFF



The above figure 1.15 shows that students expect staff to behave in a way that makes students feel safe during their interaction, as their expectations are slightly higher than their perceptions. This means that the university needs to ensure that staff should always display good behaviour which will ensure that students feel safe.

Table 4.22.1 All staff within the DUT support service unit are polite

Perceptions		Race			Total	Total Percentage
		African	Indian	White		
16. All staff within the DUT support service unit are polite.	Disagree	26	22	2	50	56%
	Neutral	5	1	3	9	10%
	Agree	15	13	1	29	32%
	Moderately Agree	1	1	0	2	2%
Total		47	37	6	90	100%

A large number of participants (56%) disagreed and indicated that support service staff are not polite when responding to mature aged students. A small minority of 32% agreed and 10% were uncertain. This indicates that overall, students were not satisfied with the support services staff’s ‘lack of ability to show politeness.

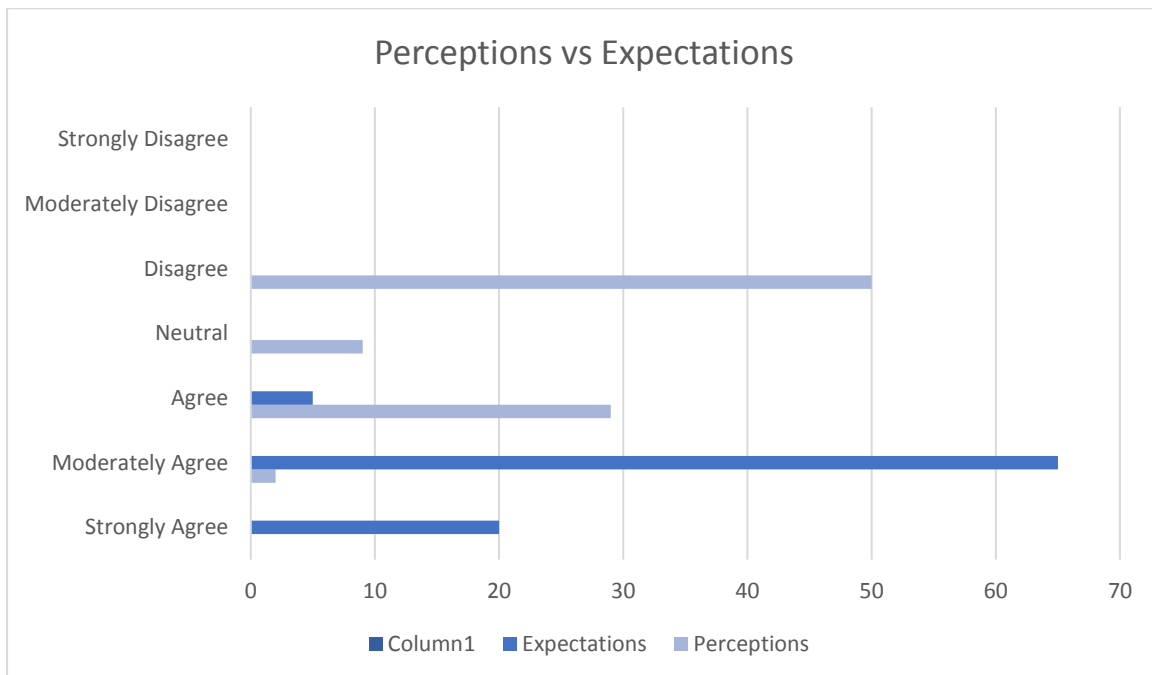
Table 4.22.2 All staff within the DUT support service unit are polite

Expectations		Race			Total	Total
		African	Indian	White		Percentage
16. All staff within the DUT support service unit are polite.	Agree	2	2	1	5	6%
	Moderately Agree	33	29	3	65	72%
	Strongly Agree	12	6	2	20	22%
Total		47	37	6	90	100%

The entire group of participants’ responses fell within the “Agree 6%”, “Moderately Agree 72%” and “Strongly Agree 22%” categories which indicated that the support service staff need to improve their manners when dealing with students. Therefore it is fair to declare that all participants expect support service staff to display behaviour which promotes politeness and courtesy.

The difference between student perceptions of SQ and their expectations of SQ

FIGURE 1.16 ALL STAFF ARE POLITE



The above figure 1.16 shows that students expect staff to behave in a polite manner as their expectations are slightly higher than their perceptions. This means that the university needs to ensure that support service staff are always polite during their interactions.

Table 4.23.1 Staff from the support service have adequate knowledge to answer mature age students queries.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
17. Staff from the support service have adequate knowledge to answer mature age students queries.	Moderately Disagree	1	0	0	1	1%
	Disagree	24	29	2	55	61%
	Neutral	10	3	2	15	17%
	Agree	12	5	2	19	21%
Total		47	37	6	90	100%

A large number of participants (61%) disagreed and indicated that support service staff have no knowledge when dealing with mature aged students requests. A small minority of 21% agreed and 17% were uncertain. This indicates that overall, students were not satisfied with the support services staff's 'lack of knowledge on issues pertaining to their needs.

"A high-quality and well-motivated teaching staff and a supportive professional culture are essential in building excellence." (Mowes 2002)

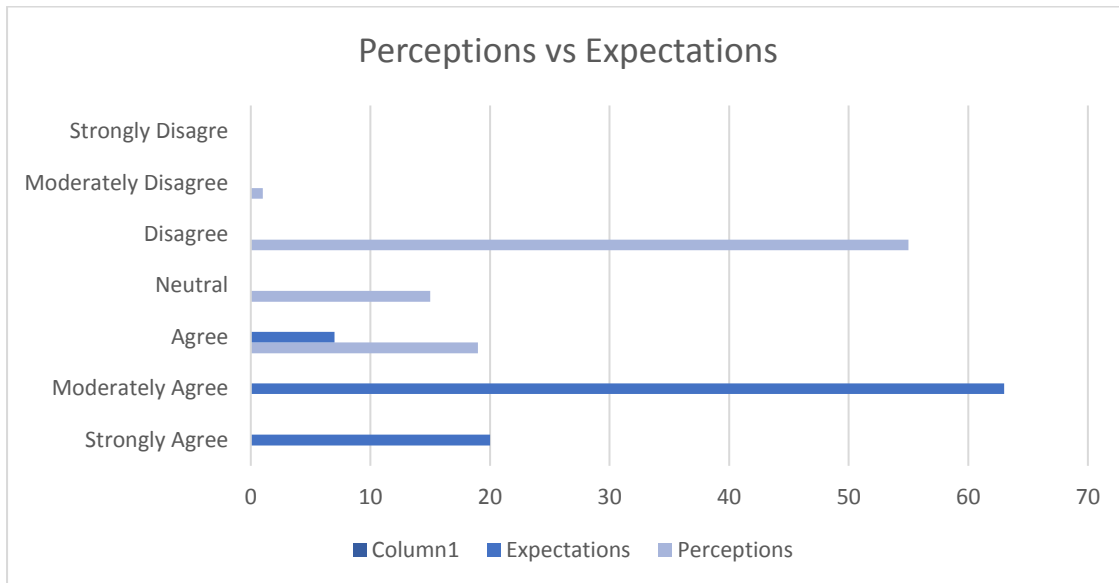
Table 4.23.2 Staff from the support service have the knowledge to answer mature age students questions.

Expectations		Race			Total	Total
		African	Indian	White		Percentage
17. Staff from the support service have the knowledge to answer mature age students questions.	Agree	5	2	0	7	8%
	Moderately Agree	30	29	4	63	70%
	Agree					
	Strongly Agree	12	6	2	20	22%
Total		47	37	6	90	100%

All participants' responses fell within the "Agree 8%", "Moderately Agree 70%" and "Strongly Agree 22%" categories which indicate that the support services ability to provide information to students needs to be improved. Therefore it is fair to declare that all participants expect better service delivery from support service staff.

The difference between students' perceptions of SQ and their expectations of SQ

FIGURE 1.17 STAFF HAVE ADEQUATE KNOWLEDGE TO ANSWER MATURE AGE STUDENT QUERIES



The above figure 1.17 shows that students expect staff to have knowledge on mature age student matters, as their expectations are higher than their perceptions. Students also indicated that staff do not have the knowledge to assist mature age related queries. This means that the university needs to ensure that support service staff are trained on all aspects related to mature age student.

The last SERVQUAL dimension supporting service quality is empathy and this includes operating hours, attending to students’ specific needs and having the students’ best interest at heart.

Table 4.24.1 DUT support service staff provides individual attention to mature age students

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
18. DUT support service staff provides individual attention to mature age students	Disagree	35	34	2	71	79%
	Neutral	8	2	3	13	14%
	Agree	4	1	1	6	7%
Total		47	37	6	90	100%

A large number of participants (79%) disagreed and indicated that support services staff do not show mature aged students individual attention when dealing with requests. A small minority of 7% that the staff did provide individual attention while 14% were uncertain. This indicates that overall students were not satisfied with the ability of support services staff to give mature aged students individual attention.

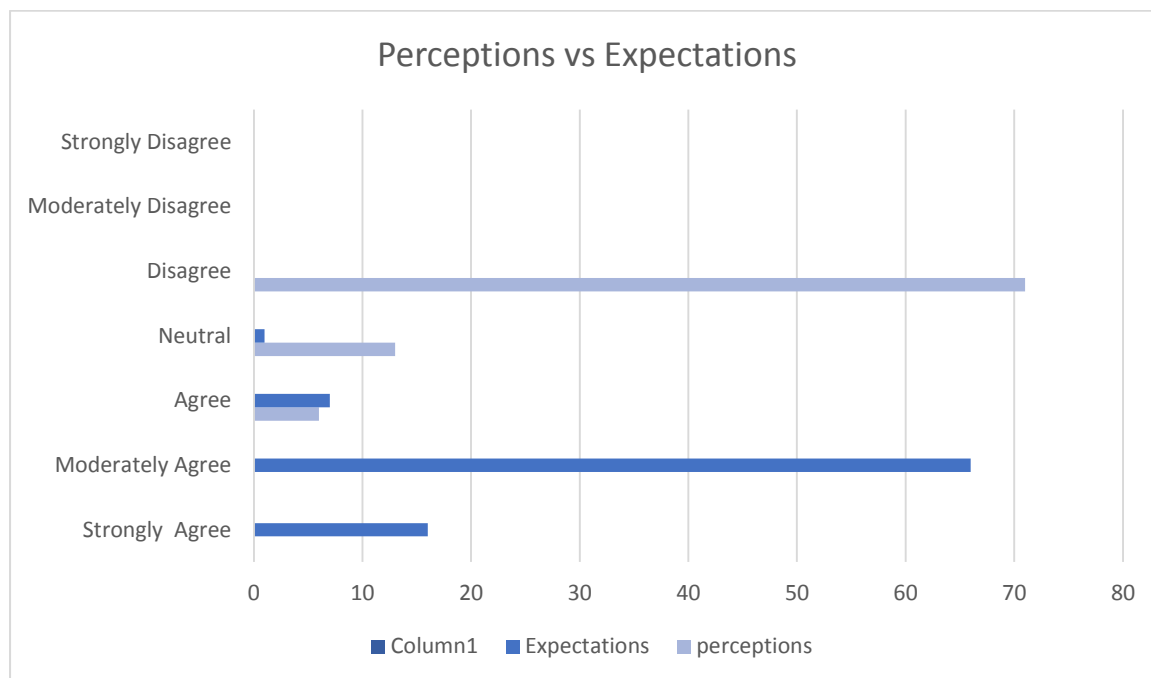
Table 4.24.2 DUT support service staff give mature age students individual attention

Expectations		Race			Total	Total
		African	Indian	White		Percentage
18. DUT support service staff provides individual attention to mature age students	Neutral	1	0	0	1	1%
	Agree	5	2	0	7	8%
	Moderately Agree	30	32	4	66	73%
	Strongly Agree	11	3	2	16	18%
Total		47	37	6	90	100%

All participants’ responses fell within the “Agree 8%”, “Moderately Agree 73%”and “Strongly Agree 18%” categories which indicate that the ability of the support services to give mature aged students individual attention needs to be improved. Therefore it is fair to declare that all participants expect better service delivery from support service staff.

The difference between students’ perceptions of SQ and their expectations of SQ

FIGURE 1.18 DUT SUPPORT SERVICE STAFF PROVIDE INDIVIDUAL ATTENTION TO MATURE AGE



The above figure 1.18 shows that a large number of students disagreed that support service staff show mature aged student individual attention when dealing with requests. Students also indicated that they expect staff to give them individual attention when dealing with mature aged related queries. This means that the university needs to ensure that support service staff are trained on all aspects related to mature age student.

Table 4.25.1 Their operating hours are convenient for the mature age students.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
19. Their operating hours are convenient for the mature age students.	Strongly Disagree	18	21	1	40	44%
	Moderately Disagree	14	11	1	26	29%
	Disagree	5	4	1	10	11%
	Neutral	7	1	2	10	11%
	Agree	3	0	1	4	5%
Total		47	37	6	90	100%

A large number of participants (84%) disagreed and indicated that support service units operating hours are not convenient for mature aged students. A small minority of 5% agreed

that the hours are convenient. This indicates that overall students were dissatisfied with the operating hours.

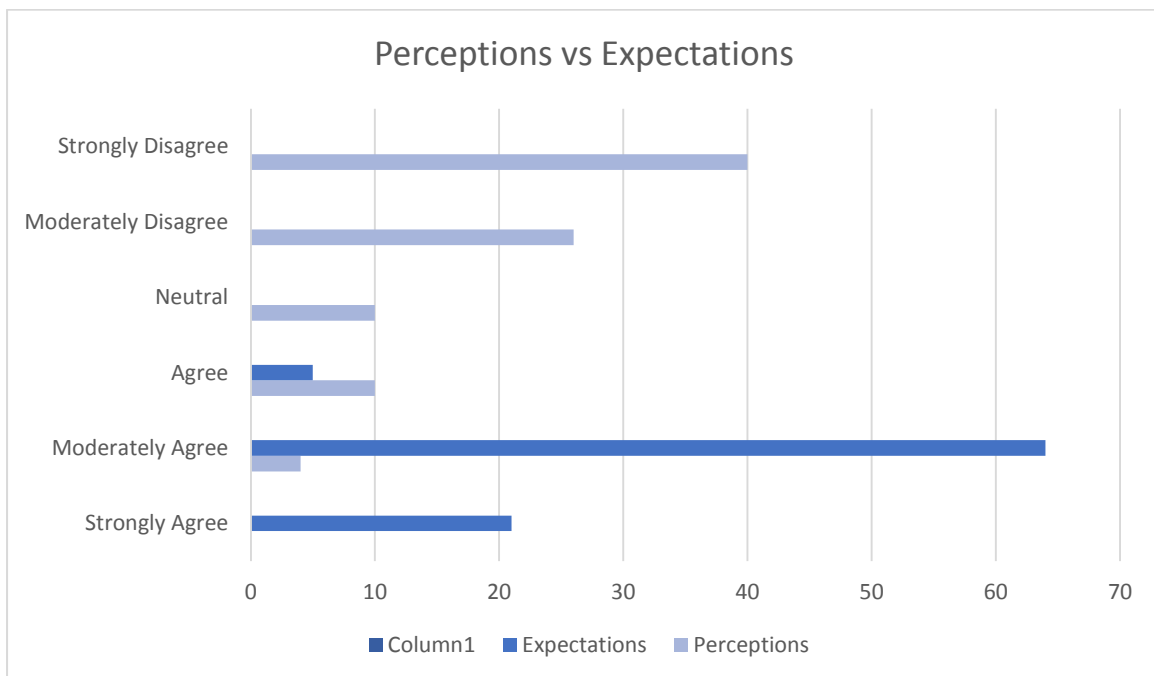
Table 4.25.2 Their operating hours are convenient for the mature age students.

Expectations		Race			Total	Total Percentage
		African	Indian	White		
19. Their operating hours are convenient for the mature age students.	Agree	3	2	0	5	6%
	Moderately Agree	28	32	4	64	71%
	Strongly Agree	16	3	2	21	23%
Total		47	37	6	90	100%

All participants' responses fell within the "Agree 6%", "Moderately Agree 71%" and "Strongly Agree 23%" category which indicated that the support service units operating hours are not convenient for mature aged students and needs to be improved. Therefore it is fair to declare that all participants expect better operating hours from support service units.

The difference between students' perceptions of SQ and their expectations of SQ

FIGURE 1.19 OPERATING HOURS ARE CONVENIENT



The above figure 1.19 shows that students are dissatisfied with the operating hours and expect staff to operate within more convenient times, as their expectations are higher than their

perceptions. This means that the university needs to ensure that the working hours of support staff are convenient for mature aged student.

Table 4.26.1 Staff provides personal services to mature age students

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
20. Staff provides personal services to mature age students	Moderately Disagree	0	1	1	2	2%
	Disagree	35	26	3	64	71%
	Neutral	7	8	1	16	18%
	Agree	5	2	0	7	8%
	Moderately Agree	0	0	1	1	1%
Total		47	37	6	90	100%

A large number of participants (73%) disagreed and indicated that support service staff does not provide mature aged students with personal services. A small minority (9%) agreed that support service staff give them personal services. This indicate that overall students were not satisfied with the service delivery from the support services staff.

Table 4.26.2 provides personal services to mature age students

Expectations		Race			Total	Total
		African	Indian	White		Percentage
20. Staff provides personal services to mature age students.	Agree	5	2	0	7	8%
	Moderately Agree	27	32	4	63	70%
	Strongly Agree	15	3	2	20	22%
Total		47	37	6	90	100%

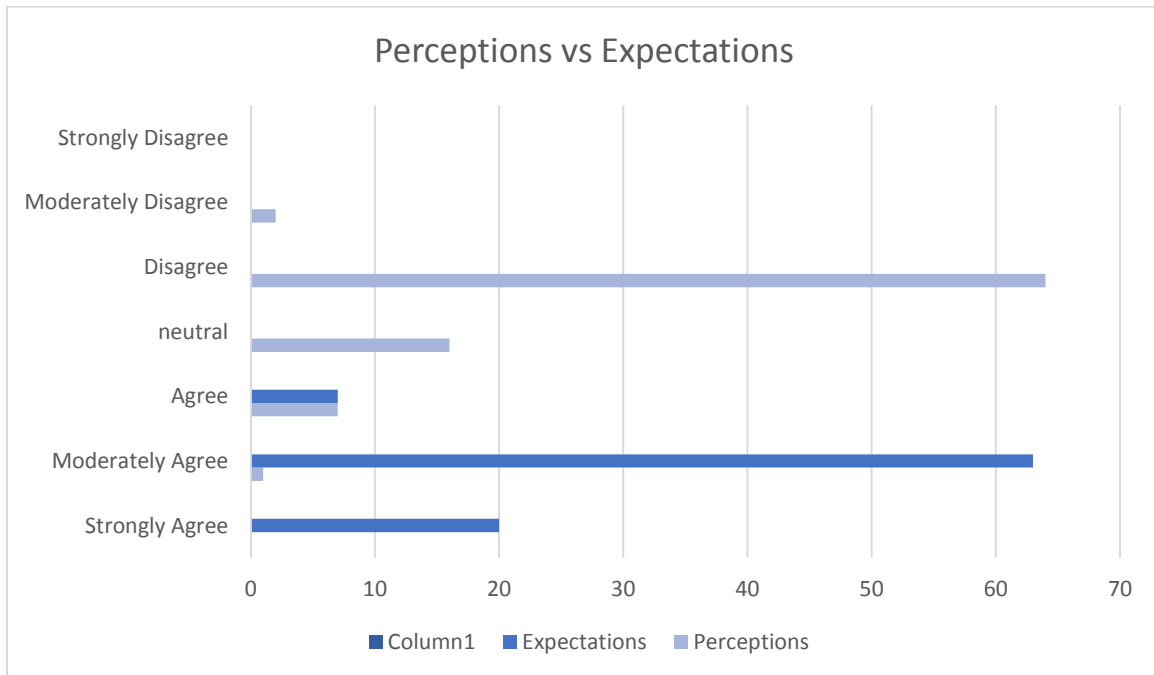
All participants' responses fell within the "Agree 8%", "Moderately Agree 70%" and "Strongly Agree 22%" categories which indicated that ability of the support services staff to offer personal services needs to be improved. Therefore it is fair to declare that all participants expect personal services from the support service units.

Authors Bryson and Hand (2007) determined that students are more likely to engage if they are supported individually by teachers who create inviting learning environments, demand high

standards, present challenges, and make themselves freely available to discuss academic progress.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.20 STAFF GIVE MATURE AGE STUDENTS PERSONAL SERVICES



The above figure 1.20 shows that students are dissatisfied, as a large number of students disagreed and indicated that support service staff does not provide mature aged students with sufficient personal services. This means that the university needs to ensure that support services staff need to give mature aged students personal services.

Table 4.27.1 Staff has their students’ best interest at heart.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
21. Staff has their students’ best interest at heart.	Moderately Disagree	0	1	1	2	2%
	Disagree	7	4	1	12	13%
	Neutral	18	9	3	30	34%
	Agree	22	23	1	46	51%
Total		47	37	6	90	100%

The support services unit is expected to understand the needs of its students and to have the students’ best interest at heart therefore a large group of participants (51%) agree, staff is

perceived to exhibit this attitude. A small minority of 15% does not agree that this attitude is evident. According to Mearns et al. (2007), if the lecturer is perceived to be approachable, well-prepared and sensitive to student needs, students dedicate themselves to work harder, to absorb more from the session and become more willing to express their own opinion. The results confirm that the majority of the participants believe that the support services staff has their best interest at heart.

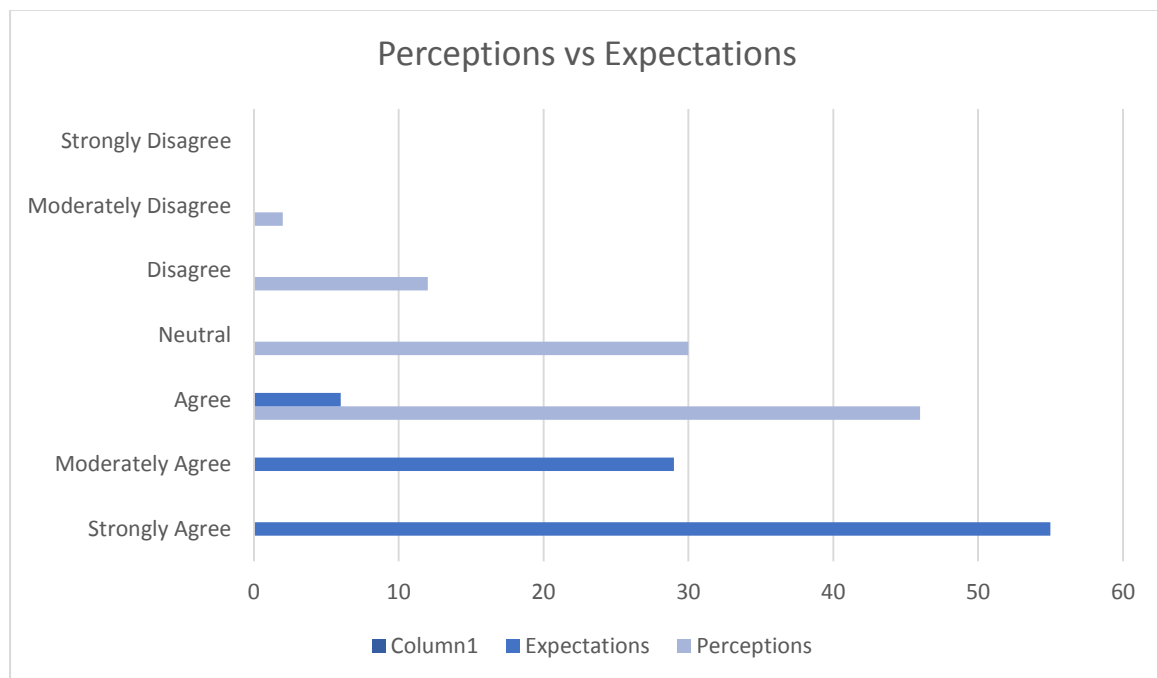
Table 4.27.2 Staff has their students’ best interest at heart.

Expectations		Race			Total	Total Percentage
		African	Indian	White		
21. Staff has their students’ best interest at heart.	Agree	5	1	0	6	7%
	Moderately Agree	10	16	3	29	32%
	Strongly Agree	32	20	3	55	61%
Total		47	37	6	90	100%

All participants’ responses fell within the “Agree 7%”, “Moderately Agree 32%” and “Strongly Agree 61%” categories which indicated that the support service staff’s ability to have the students best interest at heart needs to be improved.

The difference between student’s perceptions of SQ and their expectations of SQ

FIGURE 1.21 STAFF HAS THEIR STUDENTS’ BEST INTEREST AT HEART



The above figure 1.21 shows that students are generally satisfied with staff’s ability to have students’ interest at heart. Their expectations, however, indicate that they would like this aspect to be improved. This means that the university needs to ensure that support services staff need to have mature- aged students best interest at heart.

Table 4.28.1 The staff understand the specific needs of the mature age students.

Perceptions		Race			Total	Total
		African	Indian	White		Percentage
22. The staff understand the specific needs of the mature age students.	Moderately Disagree	0	1	0	1	1%
	Disagree	4	2	2	8	9%
	Neutral	29	13	3	45	50%
	Agree	14	21	1	36	40%
Total		47	37	6	90	100%

A large number of participants (40%) agreed and indicated that support service staff do understand the specific needs of mature aged students. A small minority of 10% disagreed that support service staff do not understand their specific needs. The other half (50%) of the respondents were neutral. This indicates that overall students were satisfied with the ability of the support service staff to understand the specific needs of mature aged students.

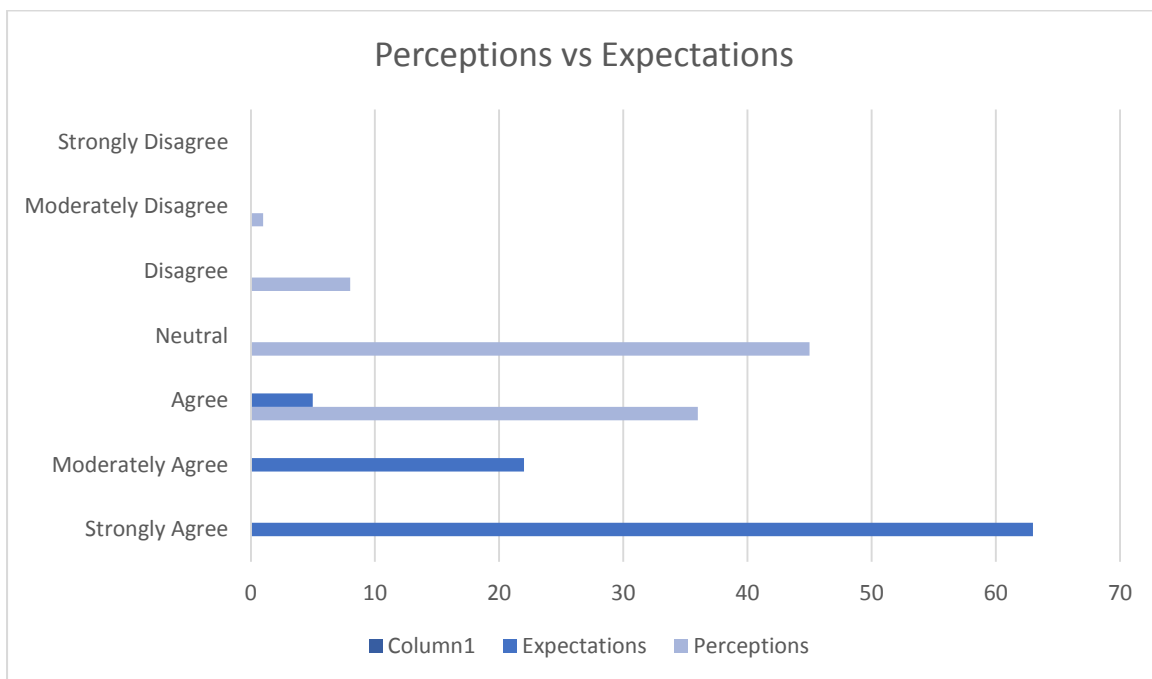
Table 4.28.2 The staff understands the specific needs of the mature age students.

		Race			Total	Total
		African	Indian	White		Percentage
22. The staff understands the specific needs of the mature age students.	Agree	4	1	0	5	6%
	Moderately Agree	10	9	3	22	24%
	Strongly Agree	33	27	3	63	70%
Total		47	37	6	90	100%

All participants’ responses fell within the “Agree 6%”, “Moderately Agree 24%” and “Strongly Agree 70%” categories which indicated that the ability of support services staff to understand specific needs of mature aged students needs to be improved.

The difference between student perceptions of SQ and their expectations of SQ

FIGURE 1.22 STAFF UNDERSTANDS THEIR SPECIFIC NEEDS OF THE MATURE AGED STUDENT



The above figure 1.22 shows that students on average are content with the ability of staff to understand their specific needs. However, their expectations indicate that they would like this aspect to be improved. This means that the university needs to ensure that support services staff needs to understand specific needs of mature aged students.

4.4.3 The GAP Analysis

In general, the students' expectations surpassed the perceived level of service shown by the perception score. This resulted in a negative GAP score which is reflected as Perceptions – Expectations.

According to Parasuraman, Zeithaml and Berry (1988:30) it is common for consumer's (students) expectations to outdo the actual service perceived, an indication that there is always room for improvement.

Table 4.29 The GAP analysis model and SERVQUAL dimensions.

Items of all dimensions	N=90			
	Dimensions	Gap score	Perceptions Mean	Expectations Mean
1. The DUT support services have modern-looking equipment.	Tangible	-0.38	3.99	4.37
2. The physical facilities at all DUT support services units are visually appealing.	Tangible	-0.32	4.02	4.34
3. Staff who work in the DUT support services are professionally attired.	Tangible	-0.39	4.04	4.43
4. The physical environment of the DUT support services units are clean.	Tangible	-0.48	4.12	4.60
5. DUT support services staff honour their promises timeously.	Reliability	-0.12	4.38	4.50
6. When a mature age student has a problem the DUT support service staff is invested in resolving the problems of mature age students.	Reliability	-0.61	3.98	4.59
7. Support service staff perform the service efficiently.	Reliability	-0.98	3.49	4.47
8. DUT support service staff provide the service at the time they promise to do so.	Reliability	-0.91	3.58	4.49
9. DUT support service staff keeps records accurately.	Reliability	0.32	4.68	4.36
10. Staff makes information easily obtainable by the mature age students.	Responsiveness	-1.15	3.32	4.47
11. Staff provides prompt service to students.	Responsiveness	-0.36	4.03	4.39

12. Staff is always willing to help students.	Responsiveness	-0.13	4.57	4.70
13. Staff is never too busy to respond to students requests.	Responsiveness	-0.22	4.27	4.49
14. The professionalism of staff of the DUT support services unit instills confidence in students.	Assurance	-0.55	4.12	4.67
15. Mature age students feel safe in their interactions with staff of the DUT support service unit.	Assurance	-0.42	4.08	4.50
16. All staff within the DUT support service unit is polite.	Assurance	-0.83	3.81	4.64
17. Staff from the support service has adequate knowledge to answer mature age students' queries.	Assurance	-0.88	3.58	4.46
18. DUT support service staff provides individual attention to mature age students.	Empathy	-1.28	3.28	4.56
19. Operating hours are convenient for the mature age students.	Empathy	-2.31	2.02	4.33
20. Staff provides personal services to mature age students	Empathy	-1.39	3.34	4.73
21. Staff has their students' best interest at heart.	Empathy	-0.76	4.33	5.09
22. The staff understands the specific needs of the mature age students.	Empathy	-0.55	4.29	4.84

The items with the highest expectation scores were: the ability of staff to understand the needs of the student, the willingness of staff to help and respond to students' needs, and staff's ability to instill confidence in and ensure the safety of students. These scores, however, are not very different from scores of other items and this implies that students expect very high standards from UOT's. The items rated highest for perceived services were: staff's willingness to help, having students' best interest at heart and keeping accurate records.

4.4.4 Mean score and rankings of SERVQUAL dimensions.

The SERVQUAL model is used to assess students' expectations and perceptions regarding service quality of support services at a UOT. Perceptions are based on the actual service they receive while expectations are based on past experiences and information received about the UOT.

Below is a table showing the overall rankings of all service quality dimensions.

Table 4.30 SERVQUAL dimension ranking

Dimensions	Mean		Ranking
	Perceptions	Expectations	
Tangible	4.042	6.052	-2.01
Reliability	4.022	6.122	-2.10
Assurance	3.897	6.172	-2.27
Responsiveness	4.047	6.477	-2.43
Empathy	3.452	6.316	-2.86

Service quality scores shown above are the difference between the perception and expectation scores (P-E) with a possible range of values. The quality score shows the service gap in which expectations exceed perceptions. Generally, the overall averages for the five dimensions at the scale of expectations are higher than averages for five dimensions on the scale of perceptions. The most negative gap is for dimension *empathy* (-2.86) and the least negative gap is for the dimension *tangible* (-2.01). Negative quality gap indicates that a systematic approach or a quality improvement program needs to be developed by the Faculty of Health Sciences. A similar study conducted by Donlagic (2015) shows that the results are very similar, with empathy accruing the highest negative gap score of (-2.684) and reliability the least negative gap score of (-2.275).

The more positive the P-E scores, the higher the level of service quality leading to a higher level of customer satisfaction. Satisfaction and service quality are both treated together as functions of a customer's perceptions and expectations. Parasuraman, Zeithaml and Berry (1988:2)

4.5 QUALITATIVE ANALYSIS

The following section highlights the qualitative analysis. The five major support service areas which emerged from the focus group interviews included: student admission services, financial aid services, academic services, library services and counselling services. These units will be linked to the SERVQUAL dimensions.

In this part of the research analysis, the researcher aims to make sense of the participants' feelings, experiences and social situations as they occur in the real world setting. Consequently, qualitative analysis becomes imperative, especially as the researcher studied the research phenomena in their normal setting (Blanche, Durrheim and Painter 2006:287). A central axiom of this part of the analysis is to analyse and to synthesise the research participants experiences in words and statements. Unlike part one, where the data gathered from the field was transformed into numerical data (numbers), the data in this part remain at the level of words and statements. These words and statements are those of the research participants. In certain parts the researcher used some words or statements of her own as a means of interpreting what the research participants have said. Such words or statements are used when necessary to further clarify and to add to those of the research participants (Blanche, Durrheim and Painter 2006:286).

The words or statements in italics are direct quotes of participants. The names of participants are also in italics. A full list of all participants per groups is attached in Annexure F.

4.5.1 Identified support services within the university

This section below highlights the respondents' understanding of support services as well as their availability and usefulness to mature aged students.

When students were asked to identify all the support services available at the university, a variety of responses emerged; these are illustrated below with explanations.

Many groups listed the same services using different names, for example, the finance department was identified by many groups and across many names, although the common understanding was that finance was listed as a support service.

Group A: Identified support services

Many students in the group were aware of the finance and library services, while a significant number noted the administrative and counselling services. Few students mentioned and knew about the orientation services and health centres.

These results show that students were not completing or attending orientation programmes. Orientation is vital in adjustment to higher education institutions, as these programmes assist mature age students to navigate the campus.

Group B: Identified support services

All students in the group were aware of the library services and a larger number of students were trying to obtain financial aid therefore they were very much aware of the services. Student administration and counselling were common to a few students.

Within this group many students did not make use of the counselling and student administrative services. Many were more familiar with the financial aid units which indicates that many students still require financial assistance.

Group C: Identified support services

The secretary and the NSFAS office were identified by majority of the participants as the most important form of support. A smaller number of students mentioned the student residence and career guidance support services.

This shows that the first line of communication between the university and the students are effective and that the secretary is viewed as an important support for mature aged students.

Since finances are of great concern for many students in general, it is important for them to know the financial offices. Residence for this group was a minor concern as many of them have families and homes.

Group D: Identified support services

Many students acknowledged that the administrative services and the finance department were the most important support services that they utilised, while a few mentioned the student

representative council (SRC), health and student residence. The online portal was identified as a service that many students did not use.

It was apparent from this group that many mature aged students did not require student accommodation and were not highly active in student forums such as the SRC.

Group E: Identified support services

This group identified support service as actual services offered and not the units or departments names by which they are known.

The majority of the students identified the fees remission and the library services, while only a few were aware of the student clubs and portal.

Mature aged students have very little time on campus to become part of campus activities therefore few students were aware that such services exists on the university campus.

Overall, students understood what a support service was and raised a concern that many services were not offered to them based on their inability to attend week day classes.

“Student support services is made up of many departments or units for students within universities which work to help students with academic needs.”

Although the responses listed above are quite brief, they capture the idea of what student support services are available. This is in line with Cliath (2000) who proffered that the principal aim of student support is to optimise the teaching and learning process in order to enable students with learning difficulties to achieve adequate levels of competencies in a learning area. This can be practiced only if students make use of the variety of services available to them. A concern for many mature-aged students, however, was their unavailability resulting in an inability to benefit from these support services. Universities will have to develop support services that are convenient for this group of students to attend and that target their specific needs.

Even though universities can furnish a long list of their student support services, this does not necessarily mean that these services are fully functioning and beneficial to mature students in particular. *“The purpose is for the university to provide us with all that we need like computers, tutors, books and study materials, it is their responsibility, (Group B:8).”*

This means that the universities needs to evaluate their support services to ensure that they are meeting their required outcomes. This process will enable high student satisfaction.

There may be discrepancies between the provision of services and the quality and accessibility of such support services.

Sometimes the gap between the provision and use of support services may be caused by the quality of service delivery. As explained in this study, many of the current support services were not attended to by the sample group due to inaccessibility during university working hours.

“Campus facilities were never open during the times we were on campus.”

“We pay the same monies why don't we have the same privileges that full time students have, we do not have access to financial aid.”

“ If you call the university during office hours you never get assistance but when you take a day off from work to come into the university you get stuff completed, this is not fair to us since we have other obligations that the universities should be aware of.”

Students have their own understanding of student support and their expectations of the support services which should be provided to them. Participants were able to explain what student support is and their expectation thereof. The responses are in line with Kaur (2016:127) who mentions that student support comprises a range of activities which include tutoring and teaching, counselling and advising, organisation of study and interactive teaching through online classrooms. The students know exactly what student support is and how it should possibly function. The researcher was impressed by students ability to mention some of the main student support activities within the university. This implies that they know what student support services entail.

All participants were in agreement that there are few support services on the ML Sultan campus compared to other campuses. The focus group interviews show that none of the students were aware of the faculty's academic unit which provides language and writing skills to students.

The researcher acknowledged that all part-time dental assisting classes were held on the M L Sultan campus, therefore restricting students from using all other campus facilities.

Many MA students believed in self-directed learning and found motivation from others in the class very fulfilling, the researcher found the following responses:

“ We arranged study groups.”

“Meeting during the study groups was a form of support and encouragement for students like myself who started studying very late in life.”

“Classmates offer greater support, since we share common difficulties.”

Student support services within the Durban University of Technology currently do not have a student service handbook outlining all services available to MA students. However, the university has an RPL (Recognition of Prior Learning) office, the function of which is mainly admission and exemptions. This is seen as a problem for MA students wanting assistance in various areas within the university.

“ We should have a center where only part time students can get assistance.”

“ A individual staff member should be available to deal with MA quires.”

4.5.2 FOCUS GROUP ANALYSIS

The section that follows analyses the responses of the participants per variable per SERVQUAL dimension. Results are categorised under Section A-E. This part of the analysis was guided by the SERVQUAL model as shown below, the support services units will form the sub-headings for the analysis.

Table 4.13 SERVQUAL’s Relation to the Focus group Measuring instrument

Dimension	Relation to Measuring Instrument
Tangibles	Describe your initial perceptions of the physical facilities of the support services. This can include staff, structures, equipment or anything that you noticed or did not see.
Reliability	How would you describe the ability of support service staff to perform the promised service? Identify some of the support services of which you are aware. Describe the support service staff’s level of reliability, efficiency, and accuracy when capturing information.
Responsiveness	Explain the staff’s willingness to help and the response rate. How quick or slow was the unit attending to your problems?
Assurance	Enlighten us on your perceptions of the support service staffs competency and their ability to inspire trust. What would you identify as the university’s gaps in the provision of support services?
Empathy	In what way would you describe the nature and attitude of support service staff?

4.5.2.1 SECTION A: Tangible

(Items listed under Tangible include physical facilities, equipment and appearance of staff personnel. Yarimoglu 2014:85)

4.5.2.1.1 Student administrative support unit.

All participants have mentioned that the student administration office spaces have well maintained equipment. . *“Area around the campus is clean, neat and visually appealing especially for new students.”*

Further respondents mentioned that access and the location was extremely influential as many of the transportation routes flow through the Steve Biko road which is where the student administration offices are situated. This student support services is located near the main entrance and was a well performing area.

“Good transportation links makes the campus location and layout accessible.”

The majority of students felt that the staff were always dressed professionally and this encouraged students to make enquires at their offices.

Students perceptions of the students’ services department at the Durban University of Technology does not differ much from their expectations. Nevertheless, students do feel that their physical environment does not play a major role in the academic achievements.

4.5.2.1.2 Academic Support unit

Almost all students did not make use of the student portal. This appears to be problematic as it is supposed to be the main student avenue for contacting lecturers, the university and fellow students. The participants felt that the student portal is not being used as effectively as expected. There could be many explanations as to why students are not comfortable with online interactions. Technophobia theory helps us understand why some students do not like computers. Older people and women are usually regarded as the most fearful when it comes to computers. This finding mirrors findings by Bird and Morgan (2003) who noted that adults entering university without prerequisite information on technology skills are considerably disadvantaged, *“Having access to computers does not make using the computers easy, we need training from a very basic level, since I never used a computer.”*

Several students stated that classroom and other lecture or practical venues are kept clean but are not visually appealing since the environment is dull and boring.

The students' perceptions of the academic programme did not exceed their expectations drastically.

4.5.2.1.3 Library Support unit

There were a few students who responded that the library services were not effective because prescribed and recommended textbooks were not available "*I never used a library, so this was all new to me.*" (Group A:4) "*Full time students borrowed all the prescribed books and I never could find a copy, to complete my assignments.*" (Group E:23)

The entire group found the library services to be very modern and visually appealing. This finding corresponds with findings from Crawford and Gorman (1995:34) who reported that using modern libraries was a concern for many adults returning to study, since they battled with the practicalities of returning to study, coming to grips with open learning, and issues such as referencing.

A large number of participants observed the library staff as always being professionally dressed.

"The librarian is always dressed neat."

The participants' expectations exceed their perceptions and this shows dissatisfaction. However, the gap between the two is not extensively vast therefore there is always a need for companies to improve their services.

4.5.2.1.4 Financial Support Unit

The financial aid offices were very difficult to find for many of the students. There seemed to be confusion regarding the financial aid department and the finance department.

The researcher clarified the difference between the two departments.

From the results, it was clear that students perceived the financial offices as difficult to find, with a few participants also mentioning that they would stand in lines for hours before being told they were in the wrong department. The majority of the students stated that the facilities at both departments were not clean and were very untidy: "*Bins are outside the offices and are overflowing.*"

A popular response from students on the staff dress code was that staff was neatly dressed at all times.

The participants' expectations exceed their perceptions and this shows dissatisfaction.

4.5.2.1.5 Counselling Support Unit

For the majority of the participants, the counselling unit is by the far the most detached unit and students found the unit to be too far from different campuses. A small number of students agreed that the counselling unit is not visually appealing and facilities are old and outdated.

The area around the counselling unit is neat whilst the environment itself is not welcoming.

Findings reflect that the majority of students indicated that since the counselling unit is a profession on its own, they expected staff to be more professionally dressed.

The participant's expectations exceed their perceptions and this shows dissatisfaction.

4.5.2.2 SECTION B: Empathy

(Items listed under empathy include the caring nature of staff and their ability to provide individual attention to customers. Yarimoglu, 2014:85)

4.5.2.2.1 Student Administrative Support Unit

All students revealed their disappointment with the operating hours of the student administrative offices. The majority of the respondents mentioned that staff do not give them individual attention and do not have their best interest at heart.

“As a part-time student, you don't receive the attention you desire from administrative staff and the student support services are not open on weekends.” “... Nobody available.”(Group A: 2)

Respondent's responses indicate that there is dissatisfaction among mature students.

The overall efficiency of the student administrative services is perceived as high and many students commended the speedy response of the support units.

4.5.2.2.2 Academic Support Unit

From the focus group interviews it came out clearly that staff within the programme provides mature aged students with the individual attention they require.

Majority of the respondents also mentioned that staff is always willing to go out of their way to assist and to accommodate the students by adopting flexible working hours.

“I had a personal problem and was assisted by the department staff.”

From a large number of responses it came out strongly that staff understands mature aged students’ specific needs and have their best interest at heart.

4.5.2.2.3 Library Support Unit

Those students who used the library facilities were satisfied with the individual attention they received from the subject librarian.

“Having a subject librarian was very useful as he would help find similar books that I had required” (Group B:7).

Findings reflect that majority of the participants were treated well during their visits to the library.

When the results were analysed, a common response to staff understanding of mature aged students specific needs was that the staff possessed adequate knowledge on specific tasks.

All students were pleased with the library operating hours and responses included *“after lecturers on Saturday I can walk into the library”, “staff always have our best interest at heart”, “I feel comfortable.*

4.5.2.2.4 Finance Support Unit

Majority of the respondents indicated that staff did not give them individual attention, a few of the responses included: *“We were treated as if we were young children.”*

“The finance department staff were always in a hurry and would never help find a solution to our problems” (Group E:26).

All students were dissatisfied with the operating hours.

“The only way to get the individual attention I required was to take a day off from work and personally come to the office for assistance and to sort the problem out”. (Group B:8)

4.5.2.2.5 Counselling support unit

A majority of the respondents indicated that they were happy with the individual attention given to them by the counselling unit.

“We go into a private room and you feel safe”.

Many respondents also mentioned that they were displeased with the operating hours and found it difficult to attend sessions. On the other hand, they all felt that their best interest was always put first.

All respondents felt that the counselling unit did not understand their profession but understood them as mature –aged students, these responses included, “ *She knew I had to come in on Saturdays*”, “*I feel as if they understand me*” .

The participants’ perceptions are slightly lower than their expectations.

4.5.2.3 SECTION C: Assurance

(Items listed under assurance include staff’s courteous nature and ability to inspire trust and confidence. Yarimoglu, 2014:85)

4.5.2.3.1 Student Administrative support unit

Majority of the responses indicated that support service administrative staff is able to instill confidence when dealing with the needs of mature aged. Further respondents stated that support service staff “*understand the diverse needs among mature aged students*”.

However, participants also mentioned that the student administrative staff does not show any sympathy towards mature aged students; students also felt there the staff exhibited no willingness to assist or to extend themselves for students “*I went to the student admin department to query about the course prior to applying and was told upfront that I did not meet the programme requirements and that I could not be accepted, I was so scared but when I contacted the Dental Assisting department I was told that I could enter the programme as a mature student. I explained this to the lady assisting me and she told me she had never heard of such an entrance.*” (Group E:28)

All participants indicated that support service staff needs to be well trained when dealing with mature aged students, since these students bring with them a range of diverse characteristics and expectations.

The need for proper induction of staff is emphasised by Hayes (2006) who argues that financial advice and support, examination/assessment and preparation and study skills must be in place in all student support programmes. A study by Daweti (2003) indicates that students found the administrative staff of their institution very unreliable and poor organisers. Furthermore, Daweti's (2003:8) observation was that the support staff needed opportunities to acquire specific competencies to support students in a variety of ways.

4.5.2.3.2 Academic support Unit

The majority of the respondents mentioned that all academic staff within the programme are polite and supportive towards the mature aged students, whilst the minority indicated that they were not satisfied with the staff's behaviour. These responses include, "*They only see the students they want to*", "*We are not the favourites*".

All agreed, however, that during their interactions they all are treated well and feel safe.

A group of responses indicated that the academic programme staff is well trained in dealing with the queries of mature aged students, and are very knowledgeable.

4.5.2.3.3 Financial support unit

Findings revealed that a major constraint within the finance unit is that students do not feel safe. Their responses include, "*not knowing if I will get my results*", "*my boss has paid for my fees or not*", "*will I graduate or not?*", "*what my current fees is owing*".

All students were in agreement that staff within the financial sector is not polite. A response from one of the students was, "*I was told to get the hell out the office because it was the lady's lunch time*"

A minority of these responses indicated that the financial department has the knowledge needed to assist mature aged students but lack the ability to instill confidence. The following response provides evidence for this analysis: "*They just told me to wait and everything will be sorted, that wasn't convincing for me but my financial situation was fixed after about two months of waiting.*"

Perceptions regarding the financial offices were low and participants' expectations were very high.

4.5.2.3.4 Library support unit

Majority of the responses indicated that the library service staff is very courteous and respectful towards them as mature aged students. "*The librarian got out his office to assist me without me asking for help*".

The responses also included staff ability to instill confidence during their interaction with students whilst a small minority indicated that they did not feel safe in the library. Their responses included "*We sit alone till such late hours*" and "*The security is only at the entrance*".

Those who had good interactions with library staff also indicated that the staff knew answers to all their questions.

4.5.2.3.5 Counselling support unit

Majority of the participants were in agreement that the staff of the counselling unit were very polite and knew how to deal with problems faced by mature aged students while a minority indicated that they did not feel safe in their interactions. Their responses included "*We were disturbed during our sessions*", "*Staff were always rushing and one time I was asked to come back because the receptionist had double booked an appointment.*"

The responses affirm that although many viewed the counselling unit as empathic, a few felt it was ineffective.

4.5.2.4 SECTION D: Reliability

(Items listed under reliability included the ability for staff to perform the service accurately. Yaromoglu, 2014:85)

4.5.2.4.1 Student administrative support unit

The majority of the participants' revealed that student administrative staff is not reliable when it comes to completing a certain task within the promised time. Their response included "*They promise you things and nothing gets done*".

The same participants indicated that staff does not show an interest in solving the problems of mature aged student and neither do they perform the service correctly the first time.

Nevertheless, the same group also mentioned that records are kept accurately.

Some responses included: "*My documents are always up to date*"; "*They contact me regarding my new contact details*".

4.5.2.4.2 Academic support unit

Majority of the participants were in agreement that the 'organisation and management of the course' was another area in which the department performed well. The responses included "*The timetables, lectures, module choices were very well organized*". A minority of the participants identified positive incidents with academic staff, where they had completed promised tasks and had shown a keen interest in solving problems for mature aged students.

All participants agreed that staff keeps all assessment records correct and up to date. Responses included: "*My marks were always correct*", "*I always had access to my results*", "*And assessments were given back timeously*".

4.5.2.4.3 Library support unit

The focus group interviews show that more than half of the respondents made use of the library services. These findings were supported by students' responses to focus group questions whereby the majority were of the opinion that the library services were one of the most effective in performing the service correct the first time.

The responses included: *“The library staff and subject librarian were very helpful and resourceful.” “We were informed as to who our subject librarian was and he was very helpful, he came into campus on many Saturdays to assist us.”*

All participants shared the same response to the staff’s ability to solve problems satisfactorily and records were all kept accurately.

4.5.2.4.4 Finance support unit

Majority of the participants indicated that the financial unit staff does not complete requests at the time they promised to do so. This is evident in the following responses *“I have been waiting for my fees statement for over two weeks”*.

The majority also agreed that staff do not have the students’ best interest when solving their financial problems.

A large percentage of the groups did indicate that many staff members were, in fact, very effective in executing their tasks competently.

4.5.2.4.5 Counselling support unit

Findings from the focus group interviews show that the majority of the students were unhappy with the staff’s ability to complete a promised task by a certain time.

“The guidance and counselling service in the Steve Biko campus is very poor. When you come here and meet a person today he will tell you this but when you come the next time and meet another person on the same issue he will give a different story.”(Group B:6)

Although all students agreed that the staff within the counselling unit Incomplete sentence

All participants also mentioned that staff does not complete tasks at the time they promise to. This is evident in the following responses, *“ lines at the finance department are too long”* , *“staff take too long with queries”*.

4.5.2.5 SECTION E: Responsiveness

(Items listed under reliability included the ability to help students and to provide prompt services. Yaromoglu, 2014:85)

4.5.2.5.1 Student Administrative support unit

The majority of the participants indicated that staff from the student administrative unit made information available to them during all encounters. A small minority disagreed with this and felt that the student administrative unit never made vital information available to them.

A small group of participant also mentioned that student administrative staff were always willing to help and gave them prompt service delivery. Their responses included: *“When I got there I was seen to immediately”, “books were given to me “.*

4.5.2.5.2 Academic support unit

When participants were asked to describe the responsiveness of the student administrative unit, a majority of the participants indicated that the academic unit, including the secretary, was very helpful in making information available. Some of their responses included, *“Reports were always printed for me”, “I was given notes and past papers”,* although the same group also mentioned that services were not prompt.

Participants were dissatisfied with being required to submit assignments as part of their assessment, while the marking was slow and inadequate feedback was given. This finding supports the suggestion by Mowes (2002) that issues such as turn-around time and quality feedback can enhance student accomplishment and need careful attention, since these can be critical in supporting students in their studies.

4.5.2.5.3 Library support unit

All participants were in agreement that the library staff always makes information available to them and they are given prompt responses and assistance. Their responses included: *“We never wait too long”, “Staff always direct us to important information”.*

Analysis of the SERVQUAL surveys identified reliability, responsiveness, assurance and empathy as the areas in which service quality was low. These findings are in agreement with what Berry (1988), found. “The students message to the UOT is clear: “Be responsive, be reassuring, be empathetic, and most of all, be reliable – do what you say you are going to do (Parasuraman, Zeithaml and Berry 1988:37). The tangible dimension had a higher gap score than empathy, which indicates that students expected more from the tangible aspects than empathy or that the empathy dimension is performing within accepted standards.

4.5.2.5.4 Finance support unit

The majority of participants indicated that the financial unit does not make information easily available and services are never prompt. Their responses included “*We wait in lines for hours*”, “*Staff are ever ready to transfer you*”.

These responses give evidence to the fact that staff is always too busy to assist.

4.5.2.5.5 Counselling support unit

Majority of the participants reported that they did not make use of counselling services, compared to a few participants who often used the service.

The focus group interviews revealed that almost half of the respondents did not make use of counselling services indicating reasons such as: “*Don’t know who is responsible for this service*” “*Not aware of such a service, service is poor*”; “*Staff do not have time to attend to us*”; and “*Staff do not have answers to our questions for not making use of counselling services*”.

4.5.3 BARRIERS EFFECTING MATURE AGED STUDENTS

The following paragraphs highlight the participants' responses related to barriers and or support services shortfalls within the university.

Educational institutions all over the world have been challenged to transform their policies and procedures to accommodate the ever-growing number of students. At the same time, the growing number of students is putting more pressure on institutions to provide more services. Fundamental to these services is the provision of student support and thus the objectives of the institutions are not solely focused on the production of highly acclaimed course materials only, but also on the production of support to students. (Mowes,2002:95).

Overall, the outcomes of this study are very positive, with students showing good overall adjustment. No item emerges as a particular area for concern at this university, and in several areas the vast majority of students are clearly making a very smooth transition. In several cases, however, a significant minority of students show a poor level of adjustment in relation to one particular aspect related to student life and adjustment to technology.

Zeithaml, Gremler and Bitner (2009) suggests that customers (students) have many service requirements and characteristics that are not of equal importance and that some customers (students) may consider one characteristic to be relatively unimportant, while a different customer regards the same factor as being crucial.

It must be borne in mind that the Durban University of Technology is the only university in Kwa Zulu Natal that is accredited by the Health Professions Council of South Africa to teach dental assisting.

“Not having much of a choice as to where I can study was not a big concern since transport to DUT was easy for me” (Group A: 3)

“When I called HPCSA to find out where I can do the course they informed me that the DUT was the only place in Kwa Zulu Natal to study dental assisting part time. As I had a family to support I could not study full time.”(Group C:19)

Edwards (2003:227) classified barriers to participation into three categories: situational, institutional, and dispositional.

A few of the barriers identified from the focus group interviews are identified below:

4.5.3.1. Situational barriers

Situational barriers are described as barriers that are found in an individual's situation, for example, a lack of transport, a lack of child care support, lack of family support, and a lack of money.

4.5.3.1.1 Financial constraints effecting MA students

The high tax rates, the state of the economy and high levels of unemployment in South Africa were concerns raised. Some participants also expressed a concern about their inability to save and plan for the future. Factors relating to participants' personal finances were also strong factors.

Participants' inability to provide the basic needs for themselves and their dependents, the inability to pay for their children's education, and the inability to improve living conditions or plan for the future were identified as major financial reasons influencing their decisions to study.

According to Cloete et al. (2005), one of the main reasons for the high dropout rate in South African higher education is because of financial constraints. Although past research has shown that financial difficulties are a major contributor to students leaving college prematurely (Kaur, 2016:128), financial difficulties did not appear to be a factor in this study.

4.5.3.1.2 Non availability of Child Care facilities

For these students, the need for child care was a paramount issue. All students shared their struggle to find an affordable, secure, and convenient solution to child care.

Students acknowledged that there was a child development centre on campus, but struggled to find a connection with staff that could explain the resource. A student parent said: *"Child care is important, I tried looking up information over weekends, I wanted to bring the little ones with me to spend more time with them, but I could never get any information. I think that is a big issue for those of us that have small children. I realize we are a small percentage of students, but we count, too."* (Group E:27)

4.5.3.2 Institutional barriers

Institutional barriers refers to high fees, a lack of skilled facilitators, difficult language of instruction, and awkward times of instruction.

4.5.3.2.1 Lack of relevant orientation programmes for MA students

The programme lacks an orientation session dedicated to MA dental assisting students. There are no clear guidelines communicated to students on how to connect to university resources. This lack of service leaves the student feeling disconnected.

“It has been a really hard transition and I think I would have liked some help to know what to expect.”

“The university has an orientation for the full time students. I wish they would have done something for adult students”; “There was no effort made to refer me to resources that could help with my transition.”(Group A, D)

Having an orientation session dedicated to MA students is the universities responsibility to ensure that students’ expectations are met and that their flow through university is seamless. This demonstrates the need for the university to focus its limited resources and improve the more important service quality features that have a greater impact on students.

This falls in line with Zeithaml, Gremler and Bitner (2009) who suggest that a common mistake for managers is to try and improve the quality of services by spending resources on the wrong initiatives, only to become discouraged because students perceptions of the university’s service do not improve.

4.5.3.2.2 Counselling Service and Social Services offered to MA students

When the researcher asked participants to identify what they expect from the student counselling and guidance services, their responses included:

“To train and advise students on study skills and examination preparation techniques..”

“To orient students to the university mode of operation, programmes and processes.”

“To conduct an evaluation on mature part time students counselling needs and the general effectiveness and appropriateness of the counselling services offered by the DUT to mature aged students.”

According to Okopi (2008), counsellors are generally expected to be consistently empathic, genuine, accepting and respectful. They should be able to develop a more open and trusting relationship with students and facilitate the opportunity for students to develop more open and trusting relationship with each other. This beneficial relationship could only be established through effective and efficient communication. The need for proper induction is emphasised by Hayes (2006) who argues that financial advice and support, examination/assessment and preparation and study skills must be in place in all student support programmes. The lack of proper guidance and counselling increases the distance between an institution and its students, which learner support is supposed to bridge.

Moreover, Kangai, Rupande and Rugonye (2011) conducted a mixed methods study on the quality of student support services, to examine the perceptions of 200 students on the quality and effectiveness of guidance and counselling learning support services provided by the UOT. The results showed that the majority of the students found counselling on tutorials, assignment and delivery of study material ineffective. However, communication and individual counselling on modules were found to be effective. The link between the two studies shows the need for universities to aid in these support services.

4.5.3.3 Dispositional barriers

Dispositional barriers are barriers within the learner self, for example, the attitude the learner has towards learning about peer-learners or facilitators. This category is also related to the learner's health, living conditions and lack of confidence.

4.5.3.3.1 Technological advancements effects on MA students

For the majority of the mature age students, computer literacy is perhaps the greatest immediate impediment to successfully progress.

“Almost all correspondence are conducted on-line all of which we do not have any formal training on.”

“In addition, many study units incorporate a fair amount of information technology (IT) literacy, e.g., communication with staff electronically via e-mail, on-line lectures, submission

of work via file attachment, discussions forums and group presentations. I have never done IT when I was in school”(Group E: 26)

These demands appear to be particularly problematic for mature age students, many of whom have not had the exposure to information technology that school-leaver students have had.

“Our practice management subject has a little IT within the subject but it’s difficult to learn software if we don’t even know the components of a computer. I had to learn how to use the computer and the student portal from full time students I found in the library after my classes”(Group D:27)

Currently, little allowance is made by teaching and administrative staff for MA students who do not have basic computer skills; they must find their own means in their own time to learn how to work around their IT problems.

This is in line with Cliath (2000) who proffered that the principal aim of students’ support is to optimise the teaching and learning process in order to enable students with learning difficulties to achieve adequate levels of competencies in a learning area.

4.6 SUMMARY OF FINDINGS

Linking the survey analysis and the focus group analysis will allow the researcher to determine if the research objectives were met. Each research question is further explained under the research questions in chapter 5.

The data found in this study supports the idea that mature aged part-time students feel that they are treated differently from full- time students.

Research Question one sought to determine what support services are offered to mature students at the Durban University of Technology. When comparing the findings between the six focus groups and the survey questionnaires, it is clear that support services are available to students but students fail to access them, due to their inability to be on campus during normal working hours.

Research Question Two sought to examine how mature age students feel about the quality of support services offered at the Durban University of Technology. There are very few services that assist mature aged part-time students and for this reason they view support services quality as low.

Research Question Three sought to answer what the university's gaps are in the provision of support services for mature age students. The main gap area is accessibility of the various support services, along with financial, child care and campus security.

4.7 CONCLUSION

In summary, participants agreed that multiple role demands (i.e. spouse, parent, and employee), together with the lack of a social support network at school, and financial concerns are dispositional barriers to achieving their educational objectives. The findings of the focus group interview indicate that students are very aware of what student support services are. They have expectations of DUT which are not being met to a large extent, thereby creating frustrations and tensions. Some of the specific challenges that were mentioned by the participants include inadequate facilities and infrastructure, inadequate face-to-face as well as mediated support systems and the element of human and administrative structure. Additionally, participants identified paying for higher education as a situational barrier to attrition. Lastly, the only institutional barrier recognised by participants was the lack of a student orientation programme for **non-traditional** students at DUT.

The study has provided a composite profile of the mature aged students at the Durban University of Technology. The results show interesting similarities and differences from previous studies and add-considerably to our understanding of these MA students perceptions.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

In chapter 4, the results of the findings were analysed and discussed. This final chapter sets out to summarise the main findings, and to provide a final conclusion based on the interpretation of the data. Although this study was confined to the Durban University of Technology KwaZulu-Natal, the findings are of general importance to all universities in South Africa that offer mature age students the opportunity to study. The chapter will conclude with recommendations deduced from the investigation.

5.2 SUMMARY OF THE THEORETICAL ORIENTATION

Chapter 2 established that the higher education sector has grown and changed substantially since its origins, with the introduction to a varied student population. This change has also prompted universities to introduce a student-centered environment, which includes several services. This chapter provided an overview of the role of support services within the university, quality systems and models as well as the SERVQUAL theory and model which can aid in assisting the management of these services, thereby promoting quality. The institution, as well as its students who enrol in part-time learning, are both faced with the challenges that part-time learning presents.

Evaluations carried out to determine quality standards are carried out in many learning institutions. These evaluations deal with a broad range of items Tangible measurements, however, are most commonly used. This is clearly identified in the quality criteria developed by South Africa's Higher Education Quality Council (HEQC). These evaluations are not a 'one size fits all' type of criteria but are tailored to understanding what students in different learning institutions expect and want with regard to their support services. Attention was particularly focused on the SERVQUAL model. This model has been widely used and tested in various sectors. The model describes various dimensions necessary for ensuring optimum service quality delivery. Some of these dimensions include tangibility, responsiveness, reliability, assurance and empathy. The performance (quality) of services can only be assessed by the users because of the unique characteristics of services, namely: intangibility, inseparability, heterogeneity and perishability.

Educational institutions all over the world have been challenged to transform their policies and procedures to accommodate the ever-growing number of students. At the same time, the growing number of students is putting more pressure on institutions to provide more services. Fundamental to these services is the provision of student support and thus the objectives of the institutions are not focused on the production of highly acclaimed course materials only, but also on the production of support to students (Mowes,2002:95).

Overall, the outcomes are very positive, with students showing good overall adjustment. No item emerges as a particular area for concern at this university, and in several areas the vast majority of students are clearly making a very smooth transition. However, in several cases a significant minority of students show a poor level of adjustment in relation to one particular aspect related to student life and adjustment to technology.

Zeithaml, Gremler and Bitner (2009), suggests that customers (students) have many service requirements and characteristics that are not of equal importance and that some customers (students) may consider one characteristic to be relatively unimportant, while a different customer regards the same factor as being crucial.

Bearing in mind that the Durban University of Technology is the only university that is accredited by the Health Professions Council of South Africa to teach dental assisting, students do not have much choice regarding where to study.

A concern found while carrying out quality evaluations was that the HE institutions evaluate the quality of student support services from an institutional perspective and do not use a student's perspective. Students are the customers of the institution and they understand the level of performance expected from these service units. These students who are the customers of the institution are not given the opportunity to evaluate the quality of the institutions support services. The performance of service staff can only be measured by the customers who, in this study, are the students. The unique features of services are, namely: intangibility, inseparability and heterogeneity.

5.3 DISCUSSIONS OF THE FINDINGS

Presented below is a summary of the quantitative and qualitative data analyses.

From the results, it seems that many mature aged students are left to their own devices to deal with the unique challenges they encounter during their times at the institution. The purpose of this study was to determine the institutional gaps and support systems that MA students need while pursuing their studies at the Durban University of Technology. A secondary purpose was to determine MA student perceptions of the quality of support services offered to assist them in their pursuit towards their studies.

5.3.1 Summary of qualitative data

The qualitative data was presented using the themes identified from the literature review.

The study has discovered that students' support services do not fully meet the requests of many mature aged students in this university. This means that the level of service quality is unsatisfactory to the students. The relevance of quality student support services in HE has been emphasised by many researchers (Kangai 2012; Aluko and Hendrikz 2012; Belawati and Zuhairi 2007; Mowes 2005).

If students are displeased, they will drop out and if they are satisfied, they will complete their courses. It is hoped that the recommendations proposed in this study will help many educational institutions evaluate and manage the quality of their students' support services. It is the responsibility of student support services unit to address some of these challenges and to reduce barriers. The aim of this study was to make a contribution to the understanding behind the pivotal role the student support service unit plays while ensuring high quality student services delivery.

It became evident that most of the services for student support are in place at the DUT but that students are, to a large extent, not able to access them.

The study also found a need to raise wider awareness of the MA student programme among staff within the support services departments. Awareness should include the different entry routes into undergraduate study for the MA student and the constraints MA students face in combining academic demands with other responsibilities.

A relatively high number of students state that they sometimes lack motivation which includes: lack of interest, lack of confidence in their own abilities, time pressures, unclear or undefined priorities and poor study habits. Students who are also parents face great difficulty in completing their course because of the unavailability of child care facilities available. Most students are satisfied and have enjoyed their university experience; students feel fairly well adjusted to their academic and social lives at university.

The UOT maintains a clean and welcoming learning environment for students on campus.

The findings of this research show that perceived value does hold value in the overall relationship between perceived service quality and customer satisfaction. The findings of this study should be used as a guideline for management to improve the quality of support service programs in their institution. Specifically, the design and management of service quality may be improved.

5.3.2 Summary of quantitative data

The results of the summary indicated that participants felt that multiple role demands (i.e. spouse, parent, and employee), coupled with the lack of a supportive network at institutions, as well as financial concerns are barriers to achieving their educational objectives. Surprisingly, the common institutional barrier identified by participants involved the lack of a MA student orientation program.

The model selected to guide this study was the SERVQUAL model (Parasuraman, Zeithaml and Berry 1985, 1988) which measures the users' expectations and perceptions in order to understand service quality from their perspective. This SERVQUAL model was modified so that it could measure expectations and perceptions of part-time MA students in HE environments.

Mature aged students' lives and obligations, as well as their alternative entry route into higher education, often affects the different support needs they may require. Adequate support systems and structures are, however, rarely in place.

5.4 ACHIEVEMENT OF RESEARCH OBJECTIVES

In order to solve the research problem, three objectives were set. These objectives are described below:

5.4.1 Research Objective One: To determine what support services are offered to mature students.

Participants were asked to identify all the support services available to them in the university. During the focus group interviews a variety of responses emerged. These are listed in chapter 4 of the analysis. Objective One was achieved through the focus group interviews and the findings of the current study has pointed to all support services offered to the mature aged students by the university. Many students explained that support services were present and many of the services were highly important to mature age students, although access was difficult.

This objective has been met. This objective was achieved based on the results within the table in chapter 4.

5.4.2 Research Objective Two: To examine how mature age students feel about the quality of support services offered.

To achieve the second objective, a more comprehensive evaluation needs to be done from a student's perspective since quality evaluations carried out in many institutions are done from a broad perspective and tangible measurements are mostly used. This is illustrated by the quality criteria developed by South Africa's HEQC and those developed by full name first (NADEOSA). These criteria are not tailored to understanding what students expect and want with regard to their support services.

Objective Two was reached through the analysis of the measuring instrument (the SERVQUAL). The findings of the current study point out that students' expectations are much higher than their perceptions in all five dimensions.

This objective was achieved.

5.4.3 Research Objective Three: To identify the university's gaps in the provision of support services for mature age students.

To achieve the third objective, a gap analysis was conducted. A census study using questionnaires was used to collect quantitative data and qualitative data was collected using a focus group interview with the identified respondents. A summary of the gap analysis results was presented in chapter 4. As a result research Objective Three was achieved.

5.5 RECOMMENDATIONS

Recommendations arising from this study include:

High Education institutions usually implement several support services depending on their offerings. It is, however, crucial for HE institutions to identify and plan for student support services that are relevant to their student population. This means that institutions should understand students' expectations and learning needs in order to provide the required support services within the limits of the available resources. It is pointless to offer support services that are not beneficial or needed by students or cannot be used by students for various reasons.

It is recommended that systems are put into place to monitor and continuously evaluate the effectiveness of the support services in learner achievement learning experiences.

Measuring service quality from the perspective of students might not be a familiar approach in higher education in general. Nonetheless, it is an appropriate method to understand the quality of student support services because of a services' unique characteristics. Therefore the quality of HE support services should be evaluated by the MA students who use those services.

It is recommended that DUT increases its computer laboratories at the ML Sultan campus to enable more mature aged students to use the facilities at a time.

Within student services it is becoming common to establish a "student house", which brings together many different "functions" of the support service unit. Internationally one speaks of "one-stop shops", places either physical or virtual, where students can find all relevant information in one place. This would be a good point of departure, especially for MA part-time students; however, training sessions and workshops need to be carried out first.

A mature age student survey should be administered on an annual basis through the quality promotion department for the institution to assess the needs and satisfaction of its customers. The university needs to offer at least a semester long university orientation program where MA students can learn study skills; identify their learning style and become informed about the available resources on campus or in the online classroom.

Orientation must include a tour of the campus, an introduction to all campus services and a meeting of key university personnel.

The university should look at starting an on-site crèche or find a child care facility in the immediate area.

The programme needs to benchmark service levels with a comparable institution or larger entity to ensure that service level is at high and congruent levels appropriate to meet students' developmental and other needs.

Higher education leaders must be intentional in seeking out students to monitor their progress and to ascertain how they can be aided in advancing their studies and preparedness for the workforce.

Staff needs to listen to students; let them know that they have a voice to express concerns on campus. Students should be co-opted onto varied committees so they can learn from those experiences and represent other students in responsible ways.

5.6 FUTURE STUDY

This study needs to be tested against the findings of the staff in order to present a just conclusion on the overall quality of support services offered by the UOT.

5.7 CONCLUSIONS

This is the final chapter on how mature aged students studying through part time classes perceived the quality of support services. The study found that there are a variety of support systems that the DUT has in place to support its students but there is no evidence that the programmes are reaching many of the MA students. A few barriers were identified through the findings, and recommendations were offered on how the services can be improved.

It is evident from the analysis and discussions that mature aged students and potential mature students are dedicated to receiving high educational services. Adjustments and improvements must be made to all support services to enable students to access these services. It is believed that this study will enable universities to develop better suited quality systems to ensure that support services will offer greater value to their student's university experience.

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Annexure A: Letter of Information and Consent



LETTER OF INFORMATION

Title of the Research Study:

Perceptions of the Quality of Support Services among mature age dental assisting students: A Higher Education case study.

Principal Investigator/s/researcher:

Kerusha Pillay,

Co-Investigator/s/supervisor/s:

Dr T S Pillay and Prof V P Rawjee

Brief Introduction and Purpose of the Study:

The researcher will undertake an in- depth, qualitative descriptive case study. The aim of this study is to evaluate perceptions of mature age dental assisting students with regard to the quality of support services offered. The research will be used towards the completion of a Master's degree.

Outline of the Procedures:

Data will be collected through semi-structured focus group interviews. These participants will be contacted in person (Annexure A) by the researcher, requesting them to be a part of this study. The information sheet (Annexure A) with the interview questions (Annexure C) will be sent to them before they can be interviewed. They will be told that they may withdraw at any stage from the research project if they wished to do so. After a brief discussion of the background and purpose of the study, the interviewees will be asked semi-structured and open-ended questions as listed in Annexure C.

Each participant was asked to complete, read and sign the waiver shown in Annexure A, and will be informed that the interview would be audio recorded.

Risks or Discomforts to the Participant:

Should the interviewee feel uncomfortable at any stage of the interview, he/she may discuss it with the researcher. If the participant is still perturbed, the interview may be terminated without prejudice.

Benefits:

At the end of the study I envisage that an academic paper, jointly authored with my supervisor will be published to serve as literature for future work. This research would benefit future mature part-time dental assisting students within the institution. The researcher wishes to advocate that various support structures be put into place to assist and enhance the academic journey of the mature age student. It is further hoped that other interested parties would take these findings further so that other institutions will give more support to this unique group of students.

Reason/s why the Participant May Be Withdrawn from the Study: Non-compliance, illness, adverse reactions. It must be stated that there will be no adverse consequences for participants choosing to withdraw.

Remuneration:

Research subjects will not be paid for their participation in this study.

Costs of the Study:

There will be no cost to participants to take part in the study.

Confidentiality:

Any information that is obtained in connection with this study and that can be identified with the participant will remain confidential and will be disclosed only with the permission of the participant or as required by law. Confidentiality will be maintained by means of:

- Interviews will be erased from the digital voice recorder once transcribed.
- The researcher can only access transcriptions by using a password.

Persons to Contact in the Event of Any Problems or Queries:

Should the participant wish to discuss this further, I may be contacted on 031 373 5356 or my supervisor Dr T S Pillay, telephone: 031 373 2550 or teru@dut.ac.za, or the IREC Administrator, Lavisha Deonarian: 031 373 2900 or LavishaD@dut.ac.za. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvctip@dut.ac.za.

1. General:

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.



CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Ms Kerusha Pillay, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number:REC7/16,
- I have also received, read and understood the above written information (Annexure A) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant Date Time Signature / Right Thumbprint

I, Ms Kerusha Pillay herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher Date Signature

Full Name of Witness (If applicable) Date Signature

Full Name of Legal Guardian (If applicable) Date Signature

Please note the following:

Research details must be provided in a clear, simple and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level - use Flesch Reading Ease Scores on Microsoft Word), selecting of a non- threatening environment for interaction and the availability of peer counselling (Department of Health, 2004)

If the potential participant is unable to read or is illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g. parent, sibling, friend, pastor, etc. should verify in writing, duly signed, that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document, for example, the wrong date or a spelling error, a new document has to be completed. The incomplete original document has to be kept in the participant file and not thrown away and copies thereof must be issued to the participant.

1. References:

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes*
<http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

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http://www.nhrec.org.za/?page_id=14

Annexure B Ethics permission

IREC Reference Number.

REC 7116

Ms K Pillay

P O Box 74053

Rochdale Park

4037

Dear Ms Pillay

Perceptions of the Quality of Support Services among mature age dental assisting students: A Higher Education case study

I am pleased to inform you that Provisional Approval has been granted to your proposal REC 7/16 subject to:

- Piloting of the data collection tools and
- Obtaining and submitting the necessary gatekeeper permission/s to the REC.

Full approval is subject to meeting the above conditions.


The Proposal has been allocated the following Ethical Clearance number IREC 068/16. Please use this number in all communication with this office.

Approval has been granted for a period of two years, before the expiry of which you are required to apply for safety monitoring and annual recertification. Please use the Safety Monitoring and Annual Recertification Report form which can be found in the Standard Operating Procedures [SOP's] of the IREC. This form must be submitted to the IREC at least 3 months before the ethics approval for the study expires. Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC SOP's. Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Please note that you may continue with validity testing and piloting of the data collection tools. Research on the proposed project may not proceed until IREC reviews and approves the final documents. If there are no changes to the data collection tools, kindly notify the IREC in writing.


Professor C E Napier

Chairperson: IREC (Acting)

 2016 25 INSITUTIONAL RESEARCH ETHICS COMMITTEE.
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Annexure C SERVQUAL Survey

Support Services for Mature Students.

The goal of student services is to increase the university retention and graduation rates of its participants and help students make the transition from one level of higher education to the next.

Directions: Based upon your experience as a mature age student who has received support from any of the Durban University of Technology Support Services, please visualize what the ideal services would look like, the excellent types of services that it would provide and what you would consider to be good quality service delivery. As you answer each of the questions below, please indicate the extent to which you agree with each statement. If you neither agree nor disagree that a feature is essential for an ideal support service to function tick level 4. If you feel that a service is absolutely essential tick level 7. If you feel that a feature is not at all essential tick level 1. You make tick any of the in between numbers if your feelings are less strong.

Use your educational experience at DUT and the mission of student's services as a base for answering the following questions, as well as your personal experiences during the programme.

The questionnaire is in three parts, demographics, perceptions and expectations.

Demographic information Section 1

Gender

Male

Female

Age Group

25-30

31-39

41-50

51-60

Marital Status

Single

Married

Divorced

Widow

Dependents

Yes

No

Employment Status

- Employed Full-time
- Employed Part-time
- Unemployed

Level of education

- School
- Matric
- Tertiary

Reason for return to school

- Personal life transition
- Proactive life planning
- Job-skill requirement
- Other _____

Years of experience

- 3-5
- 6-10
- 11-15
- 16-20
- 21 >

Students Perceptions: **Section 2**

Perceptions: The following statements deal with the perceptions of service experienced in the DUT support services units. Please show the extent to which these statements reflect your perception of services within the DUT support services unit.

Strongly Disagree							Strongly Agree	
1	2	3	4	5	6	7		

Students Expectations: **Section 3**

Expectations: Based upon your experience as a student who has received support from the DUT support service unit, please visualise what the ideal support service would look like, the excellent types of services that it would provide, and what you would consider to be an excellent customer service. Please show the extent to which these statements reflect your expectations of services within the DUT support service unit.

Strongly Disagree

Strongly Agree

1	2	Perceptions			4	5	Likert Scale						
							6	7	8	9	10	11	12
1. The DUT support services have modern-looking equipment.							1	2	3	4	5	6	7
2. The physical facilities at all DUT support services units are visually appealing.							1	2	3	4	5	6	7
3. Staff who work in the DUT support services is professionally attired.							1	2	3	4	5	6	7
4. The physical environment of the DUT support services units is clean.							1	2	3	4	5	6	7
5. When DUT support services staff honour their promises timeously, to do something by a certain time, they should do so.							1	2	3	4	5	6	7
6. Staff who work in the DUT support services units are professionally attired.							1	2	3	4	5	6	7
7. Support service staff performs the service efficiently.							1	2	3	4	5	6	7
8. DUT support service staff provides the service at the time they promise to do so.							1	2	3	4	5	6	7
9. DUT support service staff keeps records accurately.							1	2	3	4	5	6	7
10. Staff make information easily obtainable by the mature age students.							1	2	3	4	5	6	7
11. Staff provides prompt service to students.							1	2	3	4	5	6	7
12. Staff is always willing to help students.							1	2	3	4	5	6	7
13. Staff is never too busy to respond to student's requests.							1	2	3	4	5	6	7
14. Staff professional prompt staff in the DUT support services unit instils confidence in students.							1	2	3	4	5	6	7
15. Mature age students should be able to feel safe in their interactions with staff in the DUT support services unit.							1	2	3	4	5	6	7
16. All staff in the DUT support services unit should be polite.							1	2	3	4	5	6	7
17. Staff of the support services have adequate knowledge to answer mature age students queries.							1	2	3	4	5	6	7
18. DUT support services staff provides mature age students individual attention to queries.							1	2	3	4	5	6	7
19. Operating hours are convenient for the mature age students.							1	2	3	4	5	6	7
20. Staff provides personal services to mature age students, personal services.							1	2	3	4	5	6	7
21. Staff should have their students' best interest at heart.							1	2	3	4	5	6	7

22. The staff should understand the specific needs of their mature age students.	1	2	3	4	5	6	7
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Annexure D: Focus group Interview questions.

The researcher sets ground rules for the interviews.

Intro

Good day and welcome to our session. Thank you for taking the time to join us to talk about your views on the support services offered to you by the Durban University of Technology.

My name is Kerusha Pillay. The aim of this study is to find out what you like, what you dislike, and how support services delivery might be improved. We are having discussions like this with several other groups in your class.

Overview

There are no wrong answers but rather differing points of view. Please feel free to share your point of view even if it differs from what others are saying. Keep in mind that we are just as interested in negative comments as in positive comments, and at times the negative comments are the most helpful.

Rules

We are tape recording the session because we do not want to miss any of your comments. People often say very helpful things in these discussions and we can not write fast enough to get them all down. We will be on a first name basis today, and we won't use any names in our reports. You may be assured of complete confidentiality.

Question

Let's begin. I have placed name cards on the table in front of you to help us remember each other's names. Say your name and how many years of experience you have in the dental field.

I would like to hear your opinion on each of the support services I identify, What are your expectations, Are you happy, What would you like to see differently.

Let us start with:

1. Describe your initial perceptions of the physical facilities of the support services?

This can include staff, structures, equipment, anything you noticed or did not see.

2. How would you describe the support service staff's ability to perform the promised service?

Take into account their level of reliable, efficiency, and accurately capturing information.

3. Explain the staff's willingness to help and the response rate.

How quick or slow was the unit in attending to your problems?

4. Enlighten us on your perceptions of the competence of the support services staffs and their ability to inspire trust.

5. In what way would you describe the nature and attitude of support service staff?

8. What do you identify as a support service at DUT?

9. I would like to know how to make our campus more welcoming to mature age students, and want to hear your thoughts on how we could do that.

Probe: This can be a wide range of services – new student orientation, testing, career advising, transportation services, assistance with accessing financial aid, or anything else you can think of.

Annexure E: Gate keeper’s permission Letter



Directorate for Research and Postgraduate

Support

Durban University of Technology

Tromso Annexe, Steve Biko Campus

P.O. Box 1334, Durban 4000

Tel.: 031-3732576/7

Fax: 031-3732946 E-mail: moyos@dut.ac.za

15th August 2016

Ms Kerusha Pillay

c/o Department of Quality and Operations Management

Faculty of Management Sciences

Durban University of Technology

Dear Ms Pillay

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers.

I am pleased to inform you that the Institutional Research Committee (IRC) has granted full permission for you to conduct your research “Perceptions of the Quality of Support Services among mature age dental assisting students: A Higher Education case study” at the Durban University of Technology.

We would be grateful if a summary of your key research findings can be submitted to the IRC on completion of your studies.

Kindest regards.

Yours sincerely

PROF. S. MOYO
DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT

Annexure F: Demographic profile of participants

No	Year of study	Name	Race	Gender	Age	Marital Status	Dependents	Employment Status	Level of education
1	2016/2017	Mpanza	1	Female	25	Single	None	Unemployed	Tertiary
2	2016/2017	Sewpersadh	2	Female	26	Single	None	Employed	Matric
3	2016/2017	Mnguni	1	Female	31	Single	None	Employed	Matric
4	2016/2017	Pieterse	3	Female	52	Married	Two	Employed	Matric
5	2016/2017	Soobramony	2	Female	32	Married	One	Employed	Matric
6	2016/2017	Ntlokwana	1	Female	30	Married	Two	Employed	Matric
7	2016/2017	Mayeza	1	Female	36	Single	Two	Employed	Matric
8	2015/2016	Van tonder	3	Female	30	Single	None	Employed	Matric
9	2015/2016	Radebe	1	Female	31	Married	One	Employed	Matric
10	2015/2016	Ngcobo	1	Female	27	Single	One	Employed	Matric
11	2015/2016	Reddy	2	Female	31	Married	One	Employed	Matric
12	2015/2016	Dladla	1	Female	28	Single	One	Employed	Matric
13	2015/2016	Vonromburg	3	Female	29	Married	One	Employed	Matric
14	2015/2016	Mkhize	1	Female	48	Married	Two	Employed	Matric
15	2015/2016	Dlamini	1	Female	47	Married	Three	Employed	Matric
16	2014/2015	Mbatha	1	Female	55	Married	Three	Employed	Tertiary
17	2014/2015	Sibiya	1	Female	40	Married	Two	Employed	Tertiary
18	2014/2015	Chetty	2	Female	40	Married	One	Employed	Matric
19	2014/2015	Sefatsa	1	Female	49	Married	Two	Employed	Matric
20	2014/2015	Mthembu	1	Female	44	Married	One	Employed	Matric
21	2014/2015	Gwala	1	Female	33	Married	Two	Employed	Matric
22	2014/2015	Tolbadi	1	Female	31	Single	Two	Employed	Grade 11
23	2014/2015	Ncume	1	Female	39	Married	One	Employed	Matric
24	2015/2016	Murdoch	3	Female	40	Single	None	Employed	Matric
25	2015/2016	Majeke	1	Female	39	Married	Two	Employed	Matric
26	2014/2015	Ruth	1	Female	39	Married	Three	Employed	Matric

27	2014/2015	Maya	2	Female	48	Married	Two	Employed	Matric
28	2016/2017	Sam	2	Female	30	Married	Two	Employed	Matric
29	2016/2017	Naidoo	2	Female	31	Married	Three	Employed	Matric
30	2016/2017	Cele	1	Female	33	Single	One	Employed	Matric
31	2016/2017	Naidoo	2	Female	42	Married	One	Employed	Matric
32	2016/2017	Naidoo	2	Female	31	Married	One	Employed	Matric
33	2016/2017	Singh	2	Female	32	Married	One	Employed	Matric
34	2016/2017	Paul	2	Female	36	Married	One	Employed	Matric
35	2016/2017	Smith	2	Female	37	Married	One	Employed	Matric
36	2016/2017	Pillai	2	Female	30	Married	One	Employed	Matric
37	2016/2017	Hector	2	Female	30	Married	One	Employed	Matric
38	2016/2017	Pillay	2	Female	29	Married	One	Employed	Matric
39	2016/2017	Indira	2	Female	27	Married	One	Employed	Matric
40	2014/2015	Radebe	1	Female	34	Married	Three	Employed	Matric
41	2014/2015	Mnguni	1	Female	42	Married	Two	Employed	Matric
42	2014/2015	Jali	1	Female	41	Married	One	Employed	Matric
43	2014/2015	Jele	1	Female	40	Married	One	Employed	Matric
44	2014/2015	Buthelezi	1	Female	38	Married	One	Employed	Matric
No	Year of study	Name	Race	Gender	Age	Marital Status	Dependents	Employment Status	Matric
45	2014/2015	Ottino	3	Female	39	Married	One	Employed	Matric
46	2014/2015	Buthelezi	1	Female	28	Single	One	Employed	Matric
47	2014/2015	Zulu	1	Female	41	Married	Two	Employed	Matric
48	2015/2016	Zwane	1	Female	40	Married	Two	Employed	Matric
49	2015/2016	Ndebele	1	Female	42	Married	Two	Employed	Matric
50	2014/2015	Nkosi	1	Female	31	Single	Two	Employed	Matric
51	2014/2015	Gumede	1	Female	45	Married	Two	Employed	Matric
52	2014/2015	Nxumalo	1	Female	40	Married	Two	Employed	Matric
53	2014/2015	Mkhize	1	Female	47	Married	Three	Employed	Matric
54	2014/2015	Khanyile	1	Female	34	Married	Three	Employed	Matric
55	2014/2015	Mahlaba	1	Female	35	Single	Two	Employed	Matric
56	2014/2015	Sibiya	1	Female	34	Married	Two	Employed	Matric
57	2014/2015	Khoza	1	Female	39	Married	Two	Employed	Matric
58	2014/2015	Shezi	1	Female	35	Married	Two	Employed	Matric
59	2015/2016	Ndlovu	1	Female	38	Married	Two	Employed	Matric

60	2015/2016	Mthiyane	1	Female	40	Married	Two	Employed	Matric
61	2015/2016	Zulu	1	Female	42	Married	Two	Employed	Matric
62	2015/2016	Mbambo	1	Female	46	Married	Two	Employed	Matric
63	2015/2016	Sithathu	1	Female	27	Single	None	Employed	Matric
64	2015/2016	Radebe	1	Female	42	Single	Two	Employed	Matric
65	2015/2016	Khumalo	1	Female	43	Single	Two	Employed	Matric
66	2015/2016	Freedi	3	Female	42	Single	Two	Employed	Matric
67	2016/2017	Msomi	1	Female	30	Single	None	Employed	Matric
68	2016/2017	Biyela	1	Female	25	Single	None	Employed	Matric
69	2016/2017	Gumbi	1	Female	27	Single	One	Employed	Matric
70	2016/2017	Ahmed	2	Female	28	Single	One	Employed	Matric
71	2016/2017	Naidu	2	Female	26	Single	One	Employed	Matric
72	2016/2017	Khan	2	Female	24	Single	One	Employed	Matric
73	2016/2017	Alan	2	Female	25	Single	One	Employed	Matric
74	2016/2017	Albert	2	Female	25	Single	One	Employed	Matric
75	2016/2017	Perumal	2	Female	34	Married	Two	Employed	Matric
76	2014/2015	Singh	2	Female	28	Married	None	Employed	Matric
77	2014/2015	Sewpal	2	Female	31	Married	None	Employed	Matric
78	2014/2015	Naicker	2	Female	27	Married	None	Employed	Matric
79	2014/2015	Jacks	2	Female	41	Married	One	Employed	Matric
80	2014/2015	Carey	2	Female	33	Married	Two	Employed	Matric
81	2014/2015	Moodley	2	Female	29	Married	Two	Employed	Matric
82	2014/2015	Pillay	2	Female	36	Married	Two	Employed	Matric
83	2014/2015	Naidoo	2	Female	34	Married	Two	Employed	Matric
84	2014/2015	Singh	2	Female	38	Single	Two	Employed	Matric
85	2014/2015	Collins	2	Female	40	Single	Two	Employed	Matric
86	2014/2015	Karim	2	Female	45	Married	Two	Employed	Matric
87	2014/2015	Kumar	2	Female	41	Married	Two	Employed	Matric
88	2014/2015	Rajilal	2	Female	36	Married	Two	Employed	Matric
89	2014/2015	Chetty	2	Female	38	Married	Two	Employed	Matric
90	2014/2015	Mungal	2	Female	34	Married	Two	Employed	Matric

Annexure G Focus Group Details

Group A

No	Year of Study	Name	Race	Gender	Age	Marital Status	Dependants	Employment Status	Education
1	2016/2017	Mpanza	1	Female	25	Single	None	Unemployed	Tertiary
2	2016/2017	Sewpersadh	2	Female	26	Single	None	Employed	Matric
3	2016/2017	Mnguni	1	Female	31	Single	None	Employed	Matric
4	2016/2017	Pieterse	3	Female	52	Married	Two	Employed	Matric
5	2016/2017	Soobramony	2	Female	32	Married	One	Employed	Matric
6	2016/2017	Ntlokwana	1	Female	30	Married	Two	Employed	Matric
7	2016/2017	Mayeza	1	Female	36	Single	Two	Employed	Matric

Group B

No	Year of Study	Name	Race	Gender	Age	Marital Status	Dependants	Employment Status	Education
8	2015/2016	Van tonder	3	Female	30	Single	None	Employed	Matric
9	2015/2016	Radebe	1	Female	31	Married	One	Employed	Matric
10	2015/2016	Ngcobo	1	Female	27	Single	One	Employed	Matric
11	2015/2016	Reddy	2	Female	31	Married	One	Employed	Matric
12	2015/2016	Dladla	1	Female	28	Single	One	Employed	Matric
13	2015/2016	Vonromburg	3	Female	29	Married	One	Employed	Matric
14	2015/2016	Mkhize	1	Female	48	Married	Two	Employed	Matric
15	2015/2016	Dlamini	1	Female	47	Married	Three	Employed	Matric

Group C

No	Year of Study	Name	Race	Gender	Age	Marital Status	Dependants	Employment Status	Education
16	2014/2015	Mbatha	1	Female	55	Married	Three	Employed	Tertiary
17	2014/2015	Sibiya	1	Female	40	Married	Two	Employed	Tertiary
18	2014/2015	Chetty	2	Female	40	Married	One	Employed	Matric

19	2014/2015	Sefatsa	1	Female	49	Married	Two	Employed	Matric
20	2014/2015	Mthembu	1	Female	44	Married	One	Employed	Matric
21	2014/2015	Gwala	1	Female	33	Married	Two	Employed	Matric
22	2014/2015	Tolbadi	1	Female	31	Single	Two	Employed	Grade 11
23	2014/2015	Ncume	1	Female	39	Married	One	Employed	Matric

Group D

No	Year of Study	Name	Race	Gender	Age	Marital Status	Dependants	Employment Status	Education
24	2015/2016	Murdoch	3	Female	40	Single	None	Employed	Matric
25	2015/2016	Majeke	1	Female	39	Married	Two	Employed	Matric
26	2014/2015	Ruth	1	Female	39	Married	Three	Employed	Martic
27	2014/2015	Maya	2	Female	48	Married	Two	Employed	Martic
28	2016/2017	Sam	2	Female	30	Married	Two	Employed	
29	2016/2017	Naidoo	2	Female	31	Married	Three	Employed	Matric
30	2016/2017	Cele	1	Female	33	Single	One	Employed	Matric

Annexure H: Proof reading and Editing

Proofreading and Correcting

This letter serves to state that I have proofread a copy of the following Dissertation and have made suggestions to the researcher in terms of corrections which she may choose/choose not to put into effect in the final copy.

Name of student: Kerusha Pillay

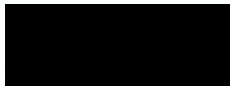
Title of Dissertation: The perceptions of mature aged dental assisting students on the quality of support services offered: A higher education case study.

Qualification: M Phil: Management Sciences

Proofreader: Derna Fynn (BA: English Unisa)

The general areas covered in this proofreading include:

- Spelling – with special reference to English UK spellings of specific words.
- Correction of grammatical errors: syntax, concord etc.
- General editing to improve the language and vocabulary used and to, where necessary, adjust to make the work more academic in tone and style.
- Comments and corrections of the reference list entries.



Derna Fynn (Mrs) (BA English: UNISA)

Date: 30.11.18